ENERGY — 1984

JANUARY — DEC,

following the conflict in the team. See story on page 2.

Soweto still owes R2-m in power bills

Sowetan 4/1/84

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36

By LEN MASEKO

THE Soweto Council is still faced with a huge electricity deficit of over R2-million — all owed by township householders in power bills.

And there is fear that this figure could rise dramatically within the next few months considering that all of Soweto's 105 000 housing stock should be having electricity later this year. At present 36 000 houses are receiving electricity while the rest have been wired and inspected by the complex's engineer.

This was disclosed yesterday by the council's director of finance, Mr Irwin Florence, who added that however, scores of defaulters had started paying to update their accounts. Some were facing arrears of up to eight months and records showed that Orlando East had the highest figure of unpaid accounts.

According to the council's statistics the areas contributing to the R2-million deficit were: Mofolo (R199 000), Zola (R109 000), Tladi (R75 000), Senaoane (R92 000), Dube (R136 000), Pimville (R272 000), Tshiawelo (R41 000), White City Jabavu (R55 000), Moroka (R242 000), Orlando West (R483 000) and Orlando East (R710 000).

By the end of 1982, the electricity payment backlog had reached R2,5-million.

Mr Florence could not indicate what action his council would take to retrieve the money but said the matter would be discussed at a council meeting later this month. Last year, hundreds of Soweto residents appeared in the Commissioner's Court for failing to pay their electricity accounts.

Meanwhile Mr John Knoetze, chairman of the West Rand Administration Board, said yesterday that Greater Soweto received its electricity from Escom, at 4 cents per unit. "Some people may think that the Board is making a profit out of the charge, all this money is paid to Escom for the supply," he added.

Khumalo (30), N S Khumalo (18), and A Z Sibiya (27), all stationed at Mapumulo, near Greytown.

The dead civilian is Mr Maqiya Ngema (40) also of Mapumulo, who was one of the complainants in the case.

The police spokesman said the shooting occured on the border of Mapumulo and Kranskop, some 30 km from Greytown, at about 9.30 am, while the five policemen, accompanied by two complainants, were investigating the alleged theft of the goats.

The two policemen who survived are Constables E M Zuma, and J N Ngubane, while the third survivor is Mr George Manqele (36), also of Mapumulo.

Meanwile a "large number" of men had been arrested, police said in Pretoria yesterday.

A spokesman said the exact number of people held was not immediately available. He added that police had also seized two automatic rifles. — Sapa.

Electricity cost rose by 28% in 18 months

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E. Post

4/1/84

Post Reporter

The cost of electricity to Port Elizabeth consumers increased by 28,18% between January, 1982, and June, 1983, according to the City Electrical Engineer's annual report.

The increase was a result of an overall increase of 39,9% in Escom tariffs and price increases of 20,5% for coal and 40,5% for railage rates.

The total revenue from sales of electricity was R125 541 561. But after making a contribution of R11 684 000 to the rate and general service account and R1 689 000 to the electricity service capital fund, the electricity service account showed an operating deficit of R2 529 147.

The operating results showed a distribution loss of 4,68% on electricity sent out.

The gas service account showed a deficit of R2 110 764, with an operating result showing a loss of 11% on gas sent out.

The gas loss, which is higher than the previous period, can be attributed to an increase in gas pressures at the outlet of the boosters. The increase in pressure is the outcome of steps to resolve the low pressure complaints from consumers particularily in the Paterson Road area.

According to the report, there were five Escom supply failures between January, 1982, and June, 1983.

Underground electricity mains have been completed to Booysen Park and Bethelsdorp 21. And two major substations were completed at Greenacres and Tembani.

As a result of increasing fuel costs, oil and the cost of maintaining alternative supplies of power, the number of rural consumers supplied with electricity increased, with 103 new consumers being connected.

A total of 1 148 new street lights were erected and 11[illegible] street lighting poles and 58 traffic bollards had to be replaced due to damage by motor vehicles.

Sportsfield lights were installed at the Malabar, Moor-Dyke and Marock Road sports fields and lighting was installed at the Joorst Park Caravan Park.

A total of 8,054 kilometres of underground street lighting cable was installed.

At the Swartkops power station the overall staff turnover was reduced to 45,6% compared with 81% in 1981.

Security measures at all installations had been increased and a trained security force had been created.

57

Star 5/11/84

Conmen's fake tests fooled Government and engineers

Oil swindlers cost SA R19-m

PARIS — The South African Government was a victim of the century's biggest oil swindle, a French Government report has revealed in Paris.

Two confidence men, who also defrauded the French, tricked the South African Government out of nearly R19 million.

Using a phony "sniffer plane" invention, the conmen defrauded the French oil firm Elf-erap of more than R76 million between 1976 and 1980.

The report said that the two men — Belgian Count Alain de Villegas and Italian scientist Aldo Bonassoli — also fooled South African engineers and scientists when using the "sniffer plane" in tests for oil.

By James Tomlins of The Star's Foreign News Service

The South Africans accepted the tests as authentic. This led Pretoria to grant concession rights in Zululand and to pay R18 900 000 for the use of the "sniffer plane" — which did not find a drop of oil.

Work on the concession started on May 10 1977 near St Lucia, Zululand, and ended on December 13 1978 when drills reached a depth of 6 083 m without success.

The drilling teams used data and photographs supplied by the "sniffer plane" with its "Omega" and "Delta" oil prospecting equipment. This equipment was described in the report as being useless.

The report said that, in the tests, the "sniffer plane" was flown over oil storage areas in South Africa whose whereabouts were known only to government officials. SA experts considered the tests to be conclusive.

The tests were carried out from 1974 to 1975, the report said. As a result the "sniffer plane" provided data for the drilling teams — data which was based on sheer guesswork.

The "Omega" and "Delta" equipment, which had a television screen, was fed cassettes in advance.

This means that the "sniffer plane" was using equipment which had been fed information provided in advance by a South African official.

In South Africa the search for oil fell within the framework of Defence secrets, as it did in France. It was in this world of secrecy that the oil swindle flourished.

The swindle could work only with top-level contacts and, for this, a lawyer from the French Riviera, Maitre Jean Violet, was used. He claimed to be the spokesman for a shadowy right-wing group which had the support of State leaders such as Mr John Vorster who was South African Prime Minister at the time.

The report said that Mr Violet and former French Premier Mr Antoine Pinay went on a "mission" to South Africa in January 1979 and that their hotel bills were paid by Elf-erap.

Payments

De Villegas was particularly active in visiting South Africa between December 1977 and February 1978 judging by payments made to him by the "European Research Company" (CER) whose receipts are recorded in the report.

Former French Premier Mr Raymond Barre, involved in trying to hush up the scandal, said in Paris that, although the payments were made in a rather unorthodox way, they were no more unusual than methods used in paying for arms deals.

Pretorians escape Escom thunderbolt

5/1/94 R001 55

WHILE Verwoerdburg residents have to foot the bill, Pretoria householders will probably escape one of the steepest electricity price increases yet imposed by Escom.

The 6% tariff increase, effective from January 1, will not be absorbed by the Verwoerdburg Town Council, which has decided to pass it on to the residents.

Verwoerdburg householders will pay more than 6%, as the Town Council is expecting a higher Escom account due to Escom's increased "coal costs".

Electro-technical town engineer, Mr Dolf Krige, said this increase would also be passed on to consumers. He expected the increase would not exceed 1%.

Mr Krige said the higher tariff would be reflected in residents' February accounts, payable in March.

A spokesman for Pretoria City Council, Mr Jan Bezuidenhout, said the city's electricity rates "were not expected to be increased now".

It was the City Council's policy not to adjust rates between budgets, he said. Escom's new rates would be taken into account in June.

Rates would not be increased before October 1984.

Johannesburg City Council will have to pay more than the 6% increase because of the higher coal costs.

Half of the effective 8% increase will be passed on to consumers. — Sapa.

Business Day

Cahora Bassa power finally fizzles out

55

RDM 11/1/84

By SIMON WILLSON
Industrial Editor

POWER supplies to South Africa from Cahora Bassa hydroelectric project in Mozambique have been cut off for nearly three months and may have ceased altogether.

The total breakdown in the expensive and carefully-planned transmission network, linking the R435m dam on the Zambesi River with South Africa, highlights the importance of next week's government-level talks between Pretoria and Maputo.

Bringing the Cahora Bassa scheme back on stream is the goal of one of the four working groups in the talks.

The group discussing the dam will be chaired by the Director-General of the Department of Mineral and Energy Affairs, Dr Sarel du Plessis, and will include representatives of the Electricity Supply Commission (Escom).

Escom said yesterday it had received no power from Cahora Bassa since October 28.

"Over the last three years the Cahora Bassa power supply has been very unreliable and may now have ceased altogether," an Escom spokesman said.

Escom originally signed a contract with the project's owners — a consortium based in Lisbon — under which the SA grid was allocated 1 373 MW.

The contract was suspended two years ago when serious interruptions occurred to the dam's own power supply.

"For the first three years of operation the Cahora Bassa power supply came through on a regular and firm basis. But since 1980 it has been unreliable," the Escom spokesman said.

In 1981 the rate of availability of Cahora Bassa power to the Escom grid stood at only 21,1%. In 1982 it fell to 16,4%. The 1983 figure is unlikely to reach double figures.

Figures issued by the Central Statistical Services show that, after buying 708 gigawatt hours (1bn watts) outside SA in October no power was bought externally in November.

Nearly all electricity bought outside SA comes from Cahora Bassa.

Although Escom has expanded its domestic generating capacity since the Cahora Bassa supply came on stream, the dam's contribution to SA's power supply next year could still be important.

With the task of meeting next winter's peak electricity demand in SA now demanding Escom's urgent attention, the inclusion of the Cahora Bassa scheme in the SA-Mozambique talks is timely.

Escom only just met last year's record demand of 15 639 MW without power cuts.

A full Cahora Bassa contribution of 1 373 MW to the Escom grid next winter would meet nearly 10% of peak demand.

Death throes of a white elephant

By SIMON WILLSON

BUILDING the Cahora Bassa hydroelectric project was a triumph of research, technology, political co-operation and economic foresight. Operating it turned out to be a five-year headache.

Construction of the R435m dam and power station started in 1969 and eight years later power from the project was fed into the South African national electricity grid.

The 1 414km power line from the dam runs south from Songo, where the Zambesi River enters Mozambique, down its western border and into SA at Pafuri and then to Irene near Pretoria.

The length and vulnerability of the line proved to be a major weakness. It was frequently sabotaged in the civil war that has raged since Mozambique's independence from Portugal in 1975.

Safeguarding the power line is one of the main objectives of next week's Pretoria-Maputo talks.

Cahora Bassa's only hope of viability lies in supplying power to SA. No other country in the region has the demand to be a customer on the same scale.

With a generating capacity of 2 075 MW its output is 15 times more than Mozambique can use.

Power output from the project could yet be doubled by the addition of another 2 000-MW power station for which plans have been drawn up.

The dam was financed jointly by loans and export credits from South Africa, Portugal, West Germany and France.

The international Zamco consortium, which tendered for the project, beat worldwide political opposition, difficult terrain and political chaos to complete the dam acceptably close to schedule and budget.

SA's financial stake comprises the power line, Government loans of R42m and the R100m sub-station at Irene.

Next week's top-level SA-Mozambique talks could be the last chance the dam has of avoiding the status of white elephant.

Business Day

Escom sends its big guns to Cahora talks

55 [illegible] RDM 12/1/84

By SIMON WILLSON
Industrial Editor

THE ELECTRICITY Supply Commission (Escom) will be represented at top level at talks next week between South Africa and Mozambique on the future of the Cahora Bassa hydroelectric project.

The commission has named its chief executive and senior general manager, Mr Dave van der Walt, as head of its delegation at the working group set up to discuss the dam's power supply.

The group, will be chaired by the Director-General of Mineral and Energy Affairs, Mr Sarel du Plessis.

Mr Van der Walt said yesterday he welcomed the SA Government's initiative to restore the power supply from Cahora Bassa.

Escom would give its full cooperation in the working group's deliberations.

"We look forward to the time when Cahora Bassa will again be a reliable source of electricity, as this will be to the advantage of all parties concerned."

The incentives for both sides in a return to normal operations at Cahora Bassa are considerable.

Escom estimates that earnings from the hydroelectric scheme when delivering its full contracted supply on a reliable basis to SA could amount to R50m a year.

For cash-strapped Mozambique, such foreign earnings would be welcome.

From South Africa's point of view, the Cahora Bassa power supply, if fully operational, would comprise about 9% of SA's maximum electricity demand — a contribution that could yet be useful next winter.

Escom will also need the Cahora Bassa power supply to help the commission operate within its 6% tariff increase this year — an increase only just over half the inflation rate.

As the commission's chairman, Mr Jan Smith, pointed out in his last annual statement: "Escom's rising fuel and interest costs, the need for additional security and environmental expenditure and the replacement of Cahora Bassa power at present-day cost levels make Escom's task of overcoming inflation even more difficult."

● Although the hydroelectric scheme was originally dubbed "Cabora Bassa" when construction started in 1969, the name of the dam was officially changed to "Cahora Bassa" when Mozambique gained independence from Portugal in 1975.

The official Mozambican news agency, AIM, said yesterday the dam's name had always been Cahora Bassa, but had been "corrupted" into Cabora Bassa by the Portuguese colonial authorities.

The dam gained its name from local people's references to the point in the Zambesi river where the 160m dam wall now stands.

Canoeists and boatmen on the river knew that part of the Zambesi as the part "where work stops" (the literal translation of Cahora Bassa), as the river's current was sufficiently strong to carry vessels without propulsion.

CGSMIT

By PATRICK McLOUG

C G SMITH was performi ly ahead of budget in the f ter of its September finan the chairman, Mr Bas Ka the annual meeting in burg yesterday.

His statement, made in meeting as chairman afte motion of Mr Warren Cl chief operating officer o Rand, follows a cautious st en by the food group in th review.

Mr Clewlow, in his va review as chairman, said try could not afford to r combined efforts of public vate sectors to combat in

He said slower profit g the group could come from campaign but it would be a able price to pay for the be lower inflation.

Last year earnings ros and Mr Clewlow indicated ity of earnings also impr abling a 5c higher dividen to be paid.

Mr Kardol said yesterda no reason to change the a port forecast of a further g

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Trust Ba

TRUST Bank has increased i rates on notice deposits second time this year. The fo rates on amounts from R9 999 are now being paid. T vious rates appear in brack

● Call rate unchanged at 9

Practical seminars

Financial Reporter

NATIONAL Consultancy Services, a subsidiary of National Acceptances, has been formed to present specialised seminars on taxation, marketing and business finance.

The chairman, Mr James Anderson, said yesterday the seminars would be designed to provide not only a theoretical approach but to deal with practical solutions to business problems.

Seminars would be held to deal with particular problems as they arose.

They would not be confined to main centres.

The new company has assembled a panel which includes three experts on tax: Mr Keith Huxham, head of the tax section in the department of accountancy at the University of Cape Town; and two tax consultants in major accountancy practices, Mr Patrick Quarmby and Mr Brian Kent.

The marketing component will include Mr Ian Byers, of Marplan, and Miss Lynne Ward, of the Wits Business School.

Mr Roy Anderson, managing partner of Ernst & Whinney, Mr Ridge Riley, a management consultant and corporate financier with many years of merchant bankling experience, and Mr Richard Anderson, a management consultant with wide academic and business experience, will lecture on business management and finance.

Other specialists will be invited to take part.

Mr Anderson agreed there had been a tendency for business seminars to be overdone but he felt the NCS programme would establish a place in the market because of its emphasis on the South African scene.

The first tax seminars will be held next month in Durban, Cape Town, Port Elizabeth, Pretoria and Johannesburg.

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~~378~~

SA will get Cahora Bassa power soon

Star

13/1/84

Pretoria Bureau

All is now ready for the early resumption of power supplies from the Cahora Bassa scheme on the Zambezi and final details are likely to be settled at the high-level talks between South Africa and Mozambique which start on Monday.

Mr I D van der Walt, senior general manager of Escom, said in Johannesburg that the 1 400 megawatts for which Escom contracted in 1969 would soon be available to the South African power grid at an economical price.

This would free the SA grid from the financial burden of high-cost peak period generating equipment.

Mozambican earnings from the expected power flow through the 1 300 km, 500 000-volt DC transmission line could reach R50 million a year.

For South Africa, the Cahora Bassa power supply would amount to about nine percent of maximum demand, Mr van der Walt said.

The managing director of the Industrial Development Corporation, Mr Marius de Wall, said that the corporation had been instrumental in providing credit of more than R50 millior to the Portuguese Goverment for building the Cahora Bassa hydro-electric power scheme, which was completed in 1974.

The supply was interrupted soon after completion but Portugal had never defaulted on its obligations and contractors had been paid punctually.

Directly and indirectly the entire scheme was built with South African credit.

Diplomatic sources said that this was why Portugal was so anxious to see good relations between South Africa and Mozambique.

Mozambique could refund Portugal only when Cahora Bassa resumed production and, for its own part, wanted to restore the cash flow it could obtain from the sale of power.

NATIONAL/INTERNATIONAL

Cabora Bassa power to be supplied to SA again

ARGUS 23/1/84

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Argus Correspondent

PRETORIA. — All is set for the early resumption of power supplies from the Cabora Bassa scheme on the Zambesi in Mozambique.

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Interrupted

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Contractors had also been paid punctually.

Directly and indirectly the entire scheme was built with South African credit.

Sniffer loss was 'risk capital'

53

S.Times 15/11/84

By ANGELA GILCHRIST

THE R5-million lost by the South African government in its employment of 'oil sniffer' planes in Zululand was "not a scandal, but risk capital spent".

The Deputy Director-General of Mineral and Energy Affairs, Dr W L van Wyk, said his department lost R4 969 716 after an unnamed European group offered the government use of sniffer planes which, it claimed, could detect oil beneath the earth's surface.

It has since emerged that the French state-run oil company Elf sank tens of millions of rands into the plan with the backing of the government of former President Giscard d'Estaing before finding it to be a hoax.

Dr van Wyk said this week: "It wasn't a scandal. It was money spent on exploration.

"Any government and any mining company spends risk capital in trying out new techniques that may or may not come up to expectations."

Dr van Wyk said Soekor — the government oil exploration concern — spent up to R100-million a year on exploration.

His department was expecting a French government report soon on the sniffer planes.

He would not name the government officials who were aware of the tests at the time, saying: "It's not easy to deduce this from the files (compiled by Soekor) ... I think we must let the matter lie.

"We have decided not to make any further statements about this until we have received the French report. It will probably be raised in Parliament."

Dr van Wyk said he could not name the people on board the sniffer plane at the time of the tests. "They were from a European company," he said, but would not elaborate.

As far as he knew money had not passed from the men responsible for the hoax to any South African official.

"It was a scientific method that was offered to us. Everything was above board and I don't think anything was done under the table. There is no scandal as far as we are concerned."

Asked about reports that the phoney equipment included a TV screen fed by pre-recorded cassettes containing details of South Africa's underground oil stocks, Dr van Wyk replied: "I don't know anything about it. Nothing can be gathered from the (Soekor) file."

Dr van Wyk said the file was a collection of correspondence and results gathered over many years. The file was "not open to the Press at this stage".

According to a statement issued this week by the Director-General of the department, Mr S J du Plessis, the sniffer-plane technique was used under Soekor's management in 1974/75 in the St Lucia-Somkele area.

"At the time this area was considered to have oil potential and it was hoped that further stratigraphic (specific geological) information could be obtained."

"The total cost of the project amounted to R4 969 716 after various technical drilling problems had been encountered. As far as can be ascertained, there was no further government financial involvement in the application of this technique.

"The department is aware that a foreign firm after 1975 apparently employed the same technique to sink another hole in the same area."

The foreign firm was acting under a right acquired from the leaseholders, the Zululand Oil Exploration Company. This company is managed by Soekor and is a joint venture with Anglo-Vaal.

An Anglo-Vaal spokesman said: "Soekor put down the hole under the agreement that if oil was struck, they would get the equity. If South Africa lost out financially, then it's to Soekor's account. I don't know anything else about it."

Salem oil fraud report secret

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From Page 1

report, or parts of it, could be released later — but he said he could give no guarantee this would be done. The American agencies to whom the report will be offered include the FBI and the Department of Justice in Washington.

Top FBI agents recently visited South Africa and questioned several people and witnesses, including officials at Sasol.

Meanwhile, informed sources say that, in addition to law enforcement agencies, other intertested parties, such as insurance and oil companies and individuals who may have been defrauded, would also be offered copies of the report.

Mr. Steyn, through a department spokesman, said the reason the investigation was conducted, and the report compiled, was to provide information on a reciprocal basis to law enforcement agencies of countries which had a legitimate interest in the affair.

The aim of the report, he said, was to assist these organisations in the legal process, and it would be offered to them on condition they did not disclose the contents.

The reason the report could not be made available, said Mr Steyn, was because the information it contained was untested and not yet verified.

If it was made available before it was tested in court, some parties could take action and perhaps sue for damages.

It was a sensitive matter and, as far as he was concerned, the report was part of a departmental investigation.

As for the insurance aspects, these were dealt with in the report, and it was not possible to say if any claims had been lodged.

When the fraud took place in December 1979, the government placed a clamp on publication, and the Salem story remained untold.

It was only in March last year — almost four years later — that Mr Pietie du Plessis, then Minister of Mineral and Energy Affairs, disclosed publicly the circumstances behind the Salem deal.

He did so after a major row in which the PFP opposition accused the government of covering up the scandal.

The government disclosed that it was only in September, 1982 that South African officials were appointed by the Prime Minister, Mr P W Botha, to investigate.

● See also PAGE 5

(55)

SA Salem man comes back to the oil business

By KITT KATZIN

MR JIM Shorrock, the Houghton businessmen who played a key role in the Salem oil fraud, is back in the oil business — in Holland.

He claims he was "financially ruined" by the international gang of swindlers who also took the government for a R32-million ride. He has made a fresh start abroad after the liquidation of his South African company, Haven International (Pty).

Speaking from De Liere in the Netherlands where he is now an oil broker, Mr Shorrock said: "The whole thing was a nightmare. To this day I cannot believe I was involved with a Mafia-type operation."

He said Haven received R350 000 for its part in the Salem deal in which he helped to raise R12-million in bridging finance from Mercabank to enable an American company to buy the Salem.

The tanker's cargo was sold twice, once to South Africa's Strategic Fuel Fund (SFF) and once to Shell International. The tanker itself was scuttled after the oil had been unloaded at Durban.

According to Mr Shorrock, his company's function — apart from the bridging finance — was to arrange for the arrival of the tanker in Durban, in December 1979, to ensure the cargo was discharged, and to handle queries by the shipping agents.

Speaking for the first time about the personal consequences, Mr Shorrock said he had lost everything, and claimed that he and his associates in South Africa had been defrauded all the way down the line.

"I never believed it was possible to pull off a swindle of this dimension," he said. "But it happened and it was catastrophic for me."

Haven International, he said, was paid its fee (R350 000) by Dutch businessman Mr Anton Reidel, whose company Beets Trading, chartered the vessel, and claimed to be the owners of the oil. Beets received R32-million in payment from SFF after the cargo was discharged.

According to Mr Shorrock, Haven International ended up in the red after covering port costs, chandler costs, shipping fees and bunker charges during the time the Salem was docked at Durban.

He submitted a claim of R92 000 to Mr Reidel which, he said, had not been met.

He explained how he became involved.

He met an American businessman, Frederick Soudan, at about the time Mr Reidel asked Soudan to provide a tanker for a shipment of oil to South Africa.

The tanker was needed in a hurry, and that was how he (Mr Shorrock), his partner, Jack Austin, Soudan, and Mr Johan Janse van Vuuren, an Alberton businessman, became involved in arranging finance through Mercabank to enable Soudan to purchase a vessel.

At the time the deal was clinched, R10-million, intended for the international conspirators, was paid into Mr Van Vuuren's bank account in Johannesburg. Of this money, R80 000 was paid out in commission to Mr Van Vuuren and two others.

Two years later, Mr Van Vuuren's company, Safoil, went into liquidation.

Mr Shorrock said that at the time of the Salem transaction, he was negotiating a series of complex oil shipment deals with other suppliers, which would have put him on his feet.

"But all of these collapsed in the wake of the Salem scandal. I was forced to pull out of these commitments, Haven International was liquidated, and my business interests in South Africa came to an end."

Estranged from his wife, Shirley, who lives in Port Elizabeth, he left South Africa in September 1980 and went to the United States and England "to pick up the remnants of my business dealings".

"Now I'm in Holland, the centre of the world's free oil market, and things are a little brighter."

Mr Shorrock, educated at St Andrews in Grahamstown, was at one time president of Lions International at Algoa Bay.

He was also connected with companies associated with Holiday Magic, the pyramid-type marketing cosmetics empire that collapsed in a blaze of controversy.

● Oil tanker: double-dealing on the high seas

NET CLOSING ON TANKER 'CONSPIRATORS'

LAW enforcement officers are closing in on the alleged Salem swindlers — and one more has been arrested in Greece.

He is Mr Nicholas Mitakis, a shipping agent from Piraeus, who was arrested in Lausanne, Switzerland in 1979 on charges of fraud not related to the Salem incident. He is alleged to have recruited the tanker's captain and crew and to have played a role in finding the oil, through the Swiss-registered Pontoil SA company.

A second alleged conspirator, Mr Anton Reidel, was arrested in Holland in March, 1981. He was released on bail and is expected to stand trial soon on charges relating to his role in the swindle. Scotland Yard has a warrant for his arrest.

The captain of the Salem, Mr Dimitrios Georgoulis, who was under police investigation at the time he took command of the tanker for master-minding a similar fraud, has been questioned as well. He is also wanted by Scotland Yard.

Mr Frederick Soudan, whose company in the US purchased the tanker, is also wanted by the British police for conspiracy to defraud. Investigations in the US into the role both he and his lawyer, Mr Wahib Attar, played in the conspiracy are continuing.

A sixth alleged conspirator, Mr Johannes Jurgen Locks, of Frankfurt, West Germany, is also wanted by British police. He allegedly set up an office in Zurich to handle the financial side of the swindle.

The cost Factor may slash air fares to Israel

OPEC

ARGUS 17/1/84 (55)

Oil price: Down, down, down, say the experts

The world has been learning to live without oil or to reduce its use dramatically, reports HOBART ROWEN from Washington

A DIPLOMAT recently back from Saudi Arabia remarks that his Saudi friends were praying last winter for a sharp economic recovery in the United States. Surely, they calculated, a rising tide of American prosperity would pick up the demand for crude oil — and strengthen prices.

But, while the pace and the scope of recovery here have surpassed most projections, the oil market continues in the doldrums. And the Opec cartel — or what's left of it — is struggling to maintain a $29 price, $5 a barrel below the level that prevailed in March 1983 before Opec's first formal price cutback.

What is difficult for the Saudis to accept (and indeed, what many oil "experts" and investors in America do not want to accept) is that there has been a fundamental change in the pattern of energy consumption — economic recovery can proceed without a one-to-one ratio in increased demand for oil.

Total energy consumption for every unit of output in the United States has been sliding since the first oil shock. Increasingly, the world has been learning to live without oil or to reduce its use dramatically through efficiencies, as Saudi oil Minister Sheikh Ahmed Zaki Yamani worriedly foresaw a long time ago.

At a recent conference in Paris, Energy Secretary Donald P Hodel said that the American economy could grow by 2,5 percent annually to the end of the century, with a mere 1,8 percent annual increase in the use of all energy. And oil would be a shrinking percentage of total energy requirements.

"We have unhooked for the long term what we used to call the lockstep relationship between energy consumption growth and growth of the economy," Hodel said.

Oil expert Philip Verleger of Drexel Brunham Lambert points out that in the early 1970s, many experts had predicted that oil use in the free world would soar from what was then its peak — 60 million barrels a day — to 85 million barrels.

"Today, as 1985 approaches," Verleger says, "the question has become: 'Will consumption in 1985 reach 45 million barrels a day ?' The answer is: 'Probably not'."

Rhetorical exercise

That explains why the real price of crude oil and of oil products must decline, and why there is little that Opec can do about it. Yamani would be happy to get a freeze on prices through 1985. Iran's effort at the recent Geneva Opec meeting to boost the price back to March's $34 level was just a rhetorical exercise.

But it's far from certain that Yamani can hold prices at $29. As things now stand, when Saudi production tops 6-million barrels a day (it used to exceed 10 million at the peak of Opec's power) prices start to weaken. Overall, Opec is struggling to market 17,5-million barrels a day, against a peak two years ago of 30-million. The result has been a devastating cut in the cartel's revenues.

Saudi Arabia's Minister responsible for oil, Sheikh Ahmed Zaki Yamani . . . he foresaw long ago that the use of oil would be reduced dramatically.

Oil market sources report that the Saudis have charatered as many as 15 oil supertankers, supposedly as a favour to the West because a reserve supply of oil is being put out of the reach of hostile Iran. But Verleger suspects that the Saudis' true motive is to try to keep production as high as 5,5-million barrels a day — even if they can't sell that much at the moment — in the hopes that there will be a pick-up in demand late in 1984.

But against declining consumption, it is hard to see how there is any way for prices to go except down. According to Abdullah A Saudi, chief executive of the Arab Banking Corporation of Bahrain, the oil and financial community in the Gulf realises that the big boom in oil prices and the growth of revenues has come to an end for the foreseeable future. There may even be, he said, a wave of takeovers and mergers of private Arab banks.

A bit more cautiously, as befits an international civil servant, IMF Managing Director Jacques de Larosiere recently hinted that at best, real oil prices would be maintained over the next two or three years. This would mean that Opec countries no longer would have massive financial surpluses for their own industrialisation, to say nothing of loans to Third World countries.

On the whole, then, it looks as if the scope of Opec's combined oil and financial clout will continue to diminish for the next couple of years. Even a Persian Gulf crisis would not have the devastating effect on the West it would have had a few years back.

Unkind fates

"The fates have been unkind to producers of crude oil, refiners and marketers," says Verleger. "The 1980s (were) to be a banquet decade. Instead, a soup kitchen replaced the banquet hall."

In this corner, considering the havoc that Opec's policies wreaked on the rest of the world, it's hard to shed a tear.

The Washington Post

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E. Post

18/1/84

Escom plans for growing demands

By **MARTIN STRYDOM**

MAJOR reinforcements to existing power lines in the Eastern Cape, costing "tens of millions of rands", will be undertaken by Escom in the next few years.

According to the head of power sales for Escom in the Eastern Cape, Mr Martin Opperman, the reinforcements are necessary because of the steady growth in electricity users over the past decade.

"We are still in the planning stages and lines routes are being surveyed," he said.

He said the capital for the reinforcements would be supported by revenue received from consumers and would not affect electricity tariffs.

He said the last major reinforcements had taken place 10 years ago, but now Escom was supplying 10 163 direct consumers — municiplalities being regarded as individual consumers — and had a waiting list of 815 consumers.

He said many on the waiting list were farmers, indicating the increase in electricity consumers in the rural areas.

He attributed the growth to the high cost of readily available alternative energy sources and to technological advancements in farming methods.

The rural areas awaiting connection include:

Langkloof extensions, extensions to Tsitsikama from Humansdorp to Stormsriver, extensions to Cambria and Baviaanskloof near Patensie, extensions to Kleinrivier near Uitenhage, Hayes near Bathurst, Gardener's Gate and Fort Brown near Grahamstown, Bailey near Queenstown, Rietrivier near Tarkastad, Mortimer near Cradock, Koega-West, Koega-South and Mortimer near Van Reddersburg, Kafferrivier near Bloemfontein and the Colesburg area.

These extensions would cost about R15 million and involve about 1 500 kilometres of line, Mr Opperman said.

Cape Times 19/1/84

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Talks on rural fuel in City

Environment Reporter

THE energy crisis in underdeveloped areas will receive international attention early next month when scientists from all over Southern African and Britain meet at a conference in Cape Town.

Organized by the Energy Research Institute of the University of Cape Town, the conference aims to evaluate the limited research undertaken in this field and establish strategies to overcome the problem.

A spokesman for the institute said the enormity of the problem could be understood if one realized that more than half of South Africa's population depended, not on electricity, but on traditional renewable energy resources such as firewood, dung and crop residues for their household energy needs.

Deforestation

He said the amount of energy consumed comprised more than 10 percent of the total net energy consumption in South Africa. Nearly one ton of firewood was consumed per capita annually.

This overwhelming dependence on firewood and agricultural residues coupled with increased pressure on the land by a growing population in confined homeland areas, had led to deforestation and severe firewood shortages.

Receding woodland had led to a number of environmental, social and economic consequences, including soil erosion, increasingly arduous trips to collect firewood and the growing commercialization of firewood, with a consequent drain on limited incomes of households.

He said this was particularly evident in peri-urban areas which did not have access to electricity and were forced to consider alternative energy supply strategies.

Oil crisis

"The real 'energy crisis' for the people in underdeveloped rural regions is not unforeseen fluctuations in the oil price, but growing scarcity of firewood which is their principal source of energy for cooking and heating.

"However until now energy analysis and policy implementation in South Africa has revolved almost exclusively around the needs of urban and industrial centres, and little account has been taken of energy usage patterns and problems in these areas," he said.

He said it was hoped that the conference would promote new research interest in energy for underdeveloped areas and place these problems on the agenda for energy policy making, investment and project implementation.

● The keynote speaker at the conference will be Professor P D Dunn, of Reading University in England. Participants in research, development and demonstration projects in neighbouring Southern African countries will also present papers.

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Law keeps Sasol case under wraps

Mail Reporter

AN OVERSEAS syndicate has sued Sasol for an undisclosed amount — believed to run into millions of rands.

However, Sasol claims it is indemnified by the South African Government.

But the public may never know any details because the allegations fall under the Petroleum Products and the National Supplies Procurement Acts, which prevents publication of information about these products.

The claim is believed to arise from transactions between Sasol and SFF Association.

A Sasol spokesman said the case is to come before the Rand Supreme Court on March 12.

Cape Times 31/1/84

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Public concern over Koeberg 'justified'

Staff Reporter

THE public would be justified in associating the Koeberg nuclear power station with events in the nuclear holocaust film, The Day After, as long as the government refused to sign the nuclear non-proliferation treaty or to categorically deny any wish to develop nuclear weapons now or in the future.

This is the view of the anti-nuclear lobbying group, Koeberg Alert.

Reacting to the plea by the Atomic Energy Corporation's press liaison officer, Mr Dries Sonnekus, for the public not to allow the film to "prejudice" them against civilian applications of nuclear energy, Koeberg Alert said the line between military and peaceful uses of nuclear science had always been extremely vague.

"The civilian use of nuclear power grew out of military application and even today there is little or no distinction between the two.

"In 1974 India surprised the world when it exploded a nuclear device which had been built from materials obtained ostensibly for a civilian research reactor.

"In 1979 the Israeli Air Force bombed and destroyed an Iraqi civilian reactor, allegedly built to produce weapons material for an Iraqi bomb.

"More recently there has been widespread alarm about a reported Argentine nuclear weapons capability, again obtained under the guise of a civilian nuclear programme.

"With very few exceptions, most Western countries with well-developed civilian nuclear power programmes are known or suspected to possess a nuclear weapons capability. It is undeniable that a nuclear reactor which produces electricity can be linked to nuclear weapons."

In response to Mr Sonnekus's claim that "no death can be directly blamed on the application of nuclear power", Koeberg Alert cited two cases where workers at plants had died after radioactive contamination.

"In 1961 three workers died at the Idaho Falls test reactor, while two workers died at the Jaslovske Bohunice reactor in Czechoslovakia in 1976. In both cases the deaths were acknowledged by the authorities only after a considerable interval."

Koeberg Alert said that the scene after a major accident at a nuclear power station would bear a close resemblance to those showing delayed radiation sickness in The Day After.

"Such an accident could potentially release hundreds of times the radiation released during the Hiroshima or Nagasaki bombings."

SA will play it safe, US is assured

2204

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31/1/84

SOUTH AFRICA has given the United States government the assurance it will not supply nuclear technology, materials and equipment to other countries without International Atomic Energy Agency or Euratom safeguards.

Nor will it supply such items without a guarantee that they will not be used for nuclear explosives.

That was disclosed in Pretoria last night by the executive chairman of the Atomic Energy Corporation Dr J W L de Villiers.

Dr De Villiers said in a statement that local development in the field of nuclear technology, such as the establishment of uranium enrichment and attendant facilities in South Africa, has been causing concern among the international nuclear community.

This had led to allegations that South Africa might become a supplier of nuclear technology, materials and equipment outside the Non Proliferation Treaty (NPT)regime, he said.

US concern, in particular, about South Africa's intentions was made apparent during discussions on nuclear policy and safeguards between the two countries recently.

"The South African Government has given the assurance to the US government that South Africa will conduct and administer its nuclear affairs in a manner which is in line with the spirit, principles and goals of the Nuclear Suppliers Group Guidelines (Infcirc 254)," Dr De Villiers said.

Although South Africa was not a signatory to NPT, and it had not agreed to a full scope of safeguards on all its nuclear facilities, it was prepared to resume discussions with the IAEA secretariat on safeguards.

This in respect of its semi-commercial enrichment plant, but not its pilot enrichment plant.

"South Africa cannot, of course, agree to IAEA safeguards before greater clarity has been obtained on what would be expected of South Africa," he added.

While resuming discussions with the IAEA secretariat, South Africa was prepared to resume "at any time" discussions with the US, and to send a delegation to the US or receive a US delegation, Dr De Villiers said. — Sapa.

NATIONAL/INTERNATIONAL

First Koeberg unit operational in mid-July

Argus 3/2/84

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THE first unit of the Koeberg nuclear power station should be fully operational in mid-July.

The Minister of Mineral and Energy Affairs, Mr Danie Steyn, said yesterday that synchronisation with the Escom grid of the second unit was planned for December.

The first 920 mw unit would be ready for commissioning in mid-March, while synchronisation with the Escom grid was planned for mid-April.

Mr Steyn said much of last year had been taken up by repairs, re-testing and inspection of the plant after it was sabotaged in December 1982.

Method

The nuclear steam supply system and turbo-generator circuit had been tested at the pressure and temperature the reactor and generator would be subjected to when in operation.

Loading of fuel was completed last November, and more tests and inspections were conducted before commissioning of the plant.

"Operating personnel were trained over six years and licensed by the Atomic Energy Commission. The emergency plan was developed over four years and was demonstrated to the satisfaction of the commission," Mr Steyn said.

Licensing requirements and rules governing physical security had been "drastically intensified" with the introduction of additional security and safety measures.

"The delay caused by this is, however, considered to be in the interest of the safety of the public," Mr Steyn said. — Sapa.

ELECTRICITY WOES

(55) Fm 3/2/84

Electricity is a major item in many Soweto budgets, and arrear payments already total R2,3m. However, the township tariffs are higher than those in Johannesburg and Soweto residents are charged 4,7c a unit, while their Johannesburg counterparts pay 0,45c less.

In addition, Soweto householders have to pay R2 a month — whether they have electricity or not. This charge is to defray the cost of the total Soweto electrification scheme. But there are fears that electricity payment arrears will escalate further as the scheme is completed.

Irwin Florence, Soweto Council's director of finance, says local residents owe R2,3m for electricity. A total of 36 000 homes now receive electricity and a further 5 000 are due to be connected up in the next few months.

Tough action has been taken against non-payers. Some have lost their homes, some have been locked out for days and some have had their supply disconnected.

†The MINISTER OF CONSTITUTIONAL DEVELOPMENT AND PLANNING:

(1) For guide plan purposes the Republic has not been divided into regions. Guide plan actions are undertaken according to a priority list for urban areas where guide planning is deemed necessary and which is revised regularly. In this regard the hon member is referred to the 1982 annual report of the Department of Constitutional Development and Planning which was tabled during 1983.

(2) Yes. A draft guide plan for the East Rand/Far East Rand is being prepared at present.

(a) Hopefully in the middle of 1984.

(b) Sixty days.

(3) All representations received are considered and are heard, if necessary.

(4) (a) and (b) Yes. The draft guide plan will be furnished to them at the time of the release of the document.

238 Hansard Q. 61.43 3/2/84

Mixed marriages

*12. Dr F A H VAN STADEN asked the Minister of Internal Affairs:†

Whether his Department registered any mixed marriages during 1983; if so, (a) how many and (b) between members of which population groups were these marriages concluded?

†The MINISTER OF INTERNAL AFFAIRS:

No. However, the Department received registration documents from marriage officers in respect of marriages solemnized by them that are apparently in conflict with the Prohibition of Mixed Marriages Act, 1949. In 8 cases marriages between members of the White and the Coloured population groups were solemnized and in one case the parties belong to the White and Indian population groups. There is as yet no evidence that in any of the nine cases the marriages were deliberately solemnized in contravention of the Act.

55 Hansard Q.61.44 3/2/84

Oil pipeline

*13. Mr D J N MALCOMESS asked the Minister of Transport Affairs:

(1) Whether a pipeline for transporting oil is being or is to be built in the Republic; if so, (a) where, (b) at what cost, (c) by whom has it been commissioned and (d) by whom will it be (i) financed and (ii) administered;

(2) whether a charge will be levied for the use of the pipeline; if so, (a) what charge and (b) who will receive the proceeds?

The MINISTER OF TRANSPORT AFFAIRS:

(1) and (2) A pipeline for the conveyance of oil in the Republic is being planned by the private sector. The divulgence of any further information concerning the matter is prohibited in terms of the provisions of section 4A of the Petroleum Products Act, 1977 (Act 120 of 1977).

Tanker *Salem*

*14. Mr D J N MALCOMESS asked the Minister of Law and Order:

(1) Whether the South African Police have investigated or are investigating any matter arising from the Purchase of a shipment of oil which was landed in Durban from the tanker *Salem*; if so,

(2) whether any progress has been made in the investigation; if so, what progress;

(3) whether any persons have been charged; if so, who are they?

†The MINISTER OF LAW AND ORDER:

(1) No.

(2) and (3) Fall away.

Mr D J N MALCOMESS: Mr Speaker, arising out of the reply of the hon the Minister, can we assume from his reply that neither the Department of Mineral and Energy Affairs nor the State Oil Fund nor Sasol has in fact laid any charge with the Police or asked for any investigation of this matter?

†The MINISTER: Mr Speaker, the hon member's question only asks whether the South African Police made an investigation, hence the reply which I gave the hon member. I am aware of other investigations that were made. I cannot say whether these include all the organizations to which the hon member is referring, but there are investigations that are being made by certain bodies or persons at Government level. I am not personally aware of the extent thereof; I only know about them, but I cannot inform the hon. member about them because they do not fall within my field.

Mr D J N MALCOMESS: Mr Speaker, further arising out of the reply of hon the Minister, can he inform the House whether, had any body or organization laid a charge or asked the Police to investigate, the answer to my question would have been "yes"?

†The MINISTER: Mr Speaker, if any prejudiced person lays any charge with the South African Police which suggests that a crime of any kind has been committed, such charge will be duly investigated.

257 258 11A Hansard Q.61.45 3/2/84

Indian voters

*15. Mr S S VAN DER MERWE asked the Minister of Internal Affairs:†

(1) How many Indians are registered as voters at present;

(2) whether his Department envisages attaining a higher registration figure; if not, why not; if so, (a) what steps are contemplated in this regard and (b) when will the steps be taken?

The MINISTER OF INTERNAL AFFAIRS:

(1) 295 482 on 31 December 1983.

(2) (a) and (b) This is a matter in which political parties normally take the initiative and the indications are that there is considerable interest to register as voters.

Maj R SIVE: Mr Speaker, arising out of the reply of the hon the Minister, I should like to know whether he is going to utilize the population register as a basis for registering Asian voters.

The MINISTER: Mr Speaker, consideration is at present being given to this, and I plan to introduce legislation quite early in the session. At that stage we shall be able to debate the issue fully. At the moment it does not look as if we shall be able to use the population register in the same way as we have been able to use it for the purpose of the referendum. We shall therefore in all probability rely solely on registration and the act of registration.

Population register

*16. Mr S S VAN DER MERWE asked the Minister of Internal Affairs:†

How many (a) Coloured persons and (b) Indians over the age of 18 years are included in the population register at present?

†The MINISTER OF INTERNAL AFFAIRS:

(a) and (b) On 31 January 1984 1 043 490 and 335 671 respectively.

Indian community: referendum

*17. Mr S S VAN DER MERWE asked the Minister of Constitutional Development and Planning:†

Whether his Department received any representations from institutions and/or organizations in the Indian community regarding the holding of a referendum on

(55) D. Despatch 4/2/84

Govt secrecy over oil pipeline attacked

THE ASSEMBLY — An opposition spokesman yesterday descibed as "ridiculous" the government-imposed secrecy about a new oil pipeline being built in South Africa.

The Minister of Transport, Mr Hendrik Schoeman, refused at question time yesterday to divulge any particulars about the pipeline beyond saying that one was being planned by the private sector.

He told Mr John Malcomes (PFP PE Central) that he could not say where, when, by whom or at what cost the pipeline would be built because the 1977 Petroleum Products Act prohibited divulgence of any further information.


MR SCHOEMAN

Mr Malcomess, former opposition energy spokesman, said later that it was ridiculous to make such a matter subject to the act, which prohibits the publication of oil supplies and movements.

"When any pipeline is built over any distance, hundreds and possibly thousands of people must be aware from seeing the work going on that a pipeline is being built.

"It must pass over land belonging to private individuals, companies and perhaps local authorities.

"I do not really believe that the cause of secrecy is being served by hiding behind this section of the Petroleum Products Act," Mr Malcomess said. — DDC.

(55)

W.E. Argus 4/2/84

Wealth of experience behind building of Koeberg

By MELISSA LANGERMAN and CHRIS ERASMUS
Weekend Argus Reporters

IT MAY be easy to question the wisdom of siting the R2-billion Koeberg nuclear power station quite so close to Cape Town and Atlantis, but the scientific know-how that gave it birth is drawn from world-wide experience.

And so is the emergency planning that would swing into operation in event of a nuclear-related accident at the plant — the risk of which has been estimated to be less than one in a billion — which might threaten Koeberg's personnel or the surrounding population.

Media representatives were taken this week on a guided tour of the now heavily guarded plant as part of a two-day information seminar.

Escom, Atomic Energy Corporation representatives and other scientists concerned with Koeberg claimed that the station was "the safest of its kind in the world", largely as a result of learning from others' mistakes.

"The only thing we could do to make it safer would be to build it and then immediately close it down", said one of the speakers during the seminar.

Impervious

On the face of the information presented this week, the station appeared almost impervious to a wide spectrum of possible threats.

Unusually forthcoming, the scientists and Escom personnel explained in great detail the principles of nuclear fission, the mechanisms of this French-built power station and the many-levelled safety features built into it.

Visitors encountered at first hand the almost-completed station's increasingly intense security checks — including a couple of thorough body searches — as they approached the bowels of the beast, the No 2 Reactor's containment building.

The organised tour and seminar were a sincere attempt to inform the public of the principles, operation and safety features of South Africa's first commercial atomic reactor.

Inside the tall domed building, which boasts a thick protective hide of reinforced concrete and steel, the only visible parts of the reactor itself were the top sections of the control rods — used to dampen the nuclear reaction — and a few of the enormous bolts which fasten the reactor vessel head to the reactor.

The rest of the reactor vessel was hidden beneath a steel floor several metres below the viewing platform. The hole in which the reactor head sits is flooded during the delicate fuel loading and reloading operations but was dry during our inspection.

Also in the containment building are the three steam generators, the steam pressuriser and other assorted nuclear hardware and instrumentation.

Impressive

Said Escom's head of reactor physics, Mr R C Hagger: "Even if the containment building is breached, it would not necessarily mean that the reactor would be damaged."

But even more impressive than the containment building is the generator building which houses the six huge low-pressure generators, two smaller high-pressure generators and support equipment.

This structure could easily accommodate a couple of jet airliners beneath its soaring roof.

Breath-taking it all may be, and convincing are the arguments, but still one wonders why they had to put it right on our doorstep.

Other apparently suitable sites were too far up the coast for Escom's power supply, maintenance and manpower specifications, we were told.

Cape Times 9/2/84

(55) [illegible]

Koeberg has cost R1 827-million so far

Political Correspondent

HOUSE OF ASSEMBLY. — The current estimated cost of the Koeberg nuclear-power station is R1 827-million, excluding escalation until the project is completed.

This was said yesterday by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, in reply to a question from Mr Roger Hulley (PFP Constantia).

"The cost regarding the sabotage damage is not yet quantifiable, as negotiations with the contractor and insurer are still progressing," he said.

Mr Steyn said all major construction work at the plant was complete.

There were now only about 450 construction personnel on the site, mainly concerned with commissioning of the plant. Of these, less than 50 were Escom construction supervisory staff.

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Star 14/2/84

Talks on Cabora Bassa begin

Talks on the Cabora Bassa hydro-electric project began in Lisbon today.

Deputy Foreign Minister Mr Louis Nel heads the South African delegation, which left for Portugal last night. The talks, with representatives of the Portuguese and Mozambique governments, will last two days.

Mozambique wants South Africa to use more power from the scheme. Portugal, which built the dam before Mozambique's independance, also draws revenue from it.

Before committing the country to power from across the border, South Africa needs assurances that the electricity will not be subject to boycotts. — Pretoria Correspondent.

Cahora Bassa boosts power supplies to SA

SS

RDM 14/2/84

By SIMON WILLSON

CAHORA BASSA power supplies last year were the best since 1981 despite continual transmission interruptions from the Northern Mozambique hydroelectric scheme.

Central Statistical Services' figures show foreign power purchases by the Electricity Supply Commission (Escom) rose by more than 130% last year against 1982.

Nearly all the electricity bought outside the country comes from the Cahora Bassa so last year's imported power figure is a substantial improvement in supplies from the project.

Statistics also show the scope for improvement and greater efficiency in the link with Cahora Bassa. The project's wasted potential was instrumental in bringing government officials from Pretoria and Maputo to the conference table last month to discuss greater co-operation between South Africa and Mozambique.

Escom bought a total of 5 041 gigawatt/hours (a gigawatt is 1bn watts) of electricity last year from neighbouring countries.

The bulk came from the R435m Zambezi River hydroelectric dam which is connected to Irene, near Pretoria, by a 1 400km power line that has been frequently sabotaged during Mozambique's post-independence guerrilla war.

One of the four working groups set up during the Pretoria-Maputo talks dealt specifically with restoring the dam's operations to normal. Escom was represented at a high level.

The 5 000 GW/h supply from the dam last year is a significant improvement on the supply of the two preceding years. In 1982 the feed dropped to 2 111 GW/h — its lowest point since South Africa officially contracted as a customer of the dam's power.

No power was received at all for the first four months of 1982 and the feed was cut for a total of six months during the year.

Although the 1983 total is more than double that of the previous year, no power at all was available for three months last year, and the supply has been completely cut since October. In 1979, before the line was sabotaged, total imported power was more than twice last year's level.

Escom has given no indication of whether any progress was made in the talks with Mozambique, saying information on the *rapprochement* between the two governments can be released only by the Department of Foreign Affairs.

In public statements Escom has said Cahora Bassa's maximum contribution to the SA grid would represent only 8%-9% of national power demand at peak load and that this percentage would diminish as domestic generating capacity increased.

The dam's power is relatively cheap, a factor that will loom larger this year since Escom has committed itself to a tariff increase of only 6% while the inflation rate remains in double figures.

Also, shelved plans show that the dam's power output can be expanded for a much lower cost than a comparable increase in output from a thermal power station.

These incentives for the SA negotiators, combined with the R45m-R50m a year the Mozambique Government stands to make from a fully-operational power supply scheme to SA, should provide sufficient impetus to make the talks a success.

Talks on Cahora Bassa resume today in Lisbon where a South African delegation, led by the Deputy Minister of Foreign Affairs, Mr Louis Nel, will meet government representatives of Mozambique and Portugal.

Escom's total power generation during 1983 rose 0,5% from the previous year to 109 250 GW/h, the official statistics show.

RDM 15/2/84

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Cahora Bassa talks open

LISBON. — South Africa, Portugal and Mozambique began two days of "delicate" talks yesterday on future operations of the huge Cahora Bassa hydrolectric plant, a constant target for sabotage by the Mozambican National Resistance Movement.

The Lisbon conference follows intensive diplomatic activity and talks between Mozambique and South Africa in January, aimed at improving relations and economic co-operation.

The Portuguese Secretary of State for Co-operation, Mr Gaspar da Silva, hailed recent talks between Maputo and Pretoria delegates as encouraging a climate of peace and understanding in Southern Africa.

Portugal, which built the Cahora Bassa Dam on the Zambezi River in northern Mozambique, is eager to see a solution to problems caused by repeated sabotage.

The project aimed to export electricity but sabotage is depriving Portugal of an estimated R40-million a year in revenue.

Meanwhile, the Rightwing MNR, fighting for control in Mozambique, has said tripartite talks are a waste of time. — Sapa-Reuter.

58

Hansard

Escom: increase in cost

Q. Col. 184 15/2/84

85. Mr C UYS asked the Minister of Mineral and Energy Affairs:†

(1) (a) What was the average increase in the cost per kWh to Escom of generating electricity in 1982 and 1983, respectively, and (b) what were the average announced tariff adjustments in 1982, 1983 and 1984, respectively;

(2) What were Escom's operating surpluses and/or deficits in 1981, 1982 and 1983, respectively?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) 1982: 0,417 cents per kWh.
1983: Not yet available.

(b) January 1982: 13,1 per cent.
July 1982: 6,6 per cent.
January 1983: 14,5 per cent.
January 1984: 6,0 per cent.

(2) A deficit of R77 million and R58 million, after provision has been made for the Capital Development Fund, for 1981 and 1982 respectively. The figure for 1983 is not yet available.

FUEL ARGUS 16/2/84

Wood for fuel becoming scarce

SC

MELISSA LANGERMAN
Environment Reporter

WOOD, the major fuel source for 10-million South Africans — almost half the population — is becoming increasingly scarce and could be in danger of running out as an energy source.

According to the Department of Environment Affairs wood is in critically short supply and few trees are being planted in South African rural areas to replace those being felled.

Many conservationists feel the increasing demand for firewood could lead to the large-scale removal of South African forests and have a long term effect on the population even more horrific than the present drought.

THE CENTRAL ISSUES

The demand for fuel-wood was one of the central issues at the first Southern African conference on Energy for Underdeveloped Areas held this week at the University of Cape Town.

According to the Mr P J le Roux, Director of Forestry for the Department of Environment Affairs whose paper on fuel-wood requirements of the rural population was presented at the conference, the amount of timber used anually as fuel in South Africa is estimated at about 7,2 million cubic metres.

This means that every year timber which would cover about 1 000 rugby fields piled 1 m high with wood is burnt and a large amount comes from rapidly decreasing indigenous forests.

Once these forests have gone erosion which drains the land of precious topsoil occurs and the chance to re-establish the forests or even to grow crops is permanently lost. In many areas in the world this erosion has led to the start of desert areas.

WALK LONG DISTANCES

Once wood supplies close to rural communities have gone people have to walk long distances to collect fire-wood.

A speaker at the conference, Dr A A Eberhard of UCT's Energy Research Institute, said a group of women in Kwazulu had walked a round trip of 19 km taking nine and a half hours to collect bundles of firewood each weighing about 40 kg. In Kwazulu an estimated 2 million tons of wood are burnt annually for fuel.

Conference delegates said wood collecting had become increasily commercialised and the high cost of such wood made obtaining fuel even more difficult for low-income rural inhabitants.

Several speakers noted that the supply of electricity to rural areas at a low cost was not economically viable today and stressed studies of ways to grow wood in local woodlots or to develop stoves which needed a minimum amount of fuel and conserved a maximum amount of energy were needed.

ENERGY

ARGUS 17/2/84 (55)

Real crisis: fuel wood in underdeveloped areas

With many millions of people still using wood to generate heat, the demand is exceeding the dead-branch supply and growing trees are having to be felled, writes DR ANTON EBERHARD of the Energy Research Institute of the University of Cape Town

After tramping many kilometres in search of firewood a woman and her children return across the impoverished land to Oxton in Ciskei.

WITH the recent softening of international oil markets, it has become fashionable to dismiss any notion of the existence of an "energy crisis." There is another "energy crisis," however, which is deepening inexorably, irrespective of the short or long term effects of fluctuations in oil prices.

It is a situation which has received little public or media attention, mainly because it affects an impoverished and powerless group of people in underdeveloped regions, who are generally without a voice in government or in the institutions which determine energy policy and allocate resources.

For a large proportion of the world's population, the real "energy crisis" is the growing scarcity of fuel wood, which is their principal source of energy for cooking, space heating and other rural household needs.

It has been estimated that no less than 1 500-million people in the third world — about one third of the world's population — derive at least 90 percent of their energy requirements from wood, dung and crop residues and that a further 1 000-million people rely on those fuels for at least half of their energy needs.

The energy demanded in most areas in Southern Africa is met, not by fossil fuels, such as oil or coal, but by these traditional, renewable energy sources. South Africa produces nearly 60 percent of the total electricity supplies in Africa, but the majority of its population is still dependent on fuel wood.

In many areas of the world, the demand for fuel wood, collected round villages in peri-urban areas, is outstripping supply so that the gathering of dead branch wood no longer suffices and growing trees are felled. It has been estimated that in the higher grassland areas of KwaZulu, between half and three-quarters of the wood gathered is from growing vegetation, and hillslopes are rapidly being denuded of trees, with a consequent loss of top soil.

Scarcity of fuel wood has led to increased use of crop residues and animal dung for fuel — thus diverting them from use as livestock feed and as soil nutrient, with a consequent decline in crop and livestock yields.

Receding woodland has meant longer trips for fuel wood collection, a task which has become increasingly arduous and time-consuming for women and children. The search for wood, once a simple chore, has become, in some places a day's labour. In the Herschel District in the Transkei, it has been observed that the average journey to fetch bundles of wood, weighing up to 34 kg each, is four hours and that about 15 hours a week can be spent on this task.

In an extreme case in KwaZulu, a group of women were observed to have walked a round trip of 19 km, taking nine and a half hours to collect bundles of fuel wood weighing about 40 kg each.

Finally, the scarcity of fuel wood has led to growing commercialism of this resource, higher prices and an increased drain on household incomes. This is particularly true in peri-urban areas, where, on average, a fifth of the household income is spent on fuel.

Unlike the populations of the industrialised nations, the rural poor of the third world use fuel wood almost exclusively for life-sustaining activities and their energy needs cannot be contracted without adversely affecting health and welfare. It is this irreducibility of energy demand, coupled with growing populations with limited and depleting resources, which constitutes a real energy crisis.

KOEBERG

ARGUS 23/2/84

56

Emergency blueprint

Staff Reporter ADA STUIJT sets out the steps to protect the public

CAPE TOWN City Council's information campaign on its Koeberg emergency plan starts with full-page advertisements in newspapers at the weekend.

Information pamphlets will be mailed with electricity accounts during the first two weeks of March.

The pamphlets tell Cape Town residents what they need to know about the emergency plan which will be put into action in "the very unlikely event of a radioactive release from Koeberg".

Free tablets

Potassium iodate tablets — an antidote to radioactive iodine — are available free of charge to anyone who wants them and are obtainable at city health department poly-clinics.

At a Press conference to launch the campaign yesterday Dr Reg Coogan, the Medical Officer of Health, said that about 15 percent the time the wind blew from Koeberg towards Cape Town.

"That would be a bad luck factor which would enter into any accident before it would be of interest to Cape Town.

"If all the fail-safe measures which have been built into the Koeberg nuclear reactor were to fail and if radioactive steam were to escape into the atmosphere, it was felt that the public should be fully informed as to the measures they should take."

"It is probably a million-to-one chance that such an accident would ever take place, however."

When drawing up the emergency plans, the city had to consider what it could do to protect inhabitants from medical injuries — radiation injuries and burns from gas and dust clouds, he said.

The steps

The internationally-recognised steps, as outlined in the pamphlet, are:

- ● If a release of radioactive material occurs everyone will be advised by radio (SABC stations), television or public address systems.
- ● People are advised to keep calm and listen carefully to the instructions.
- ● People might be advised to take shelter, which means gathering family and household pets and going indoors. Calmly close all doors and windows, switch off fans and air conditioners and seal air bricks or vents.
- ● If in a motor vehicle, close its doors and windows, switch off the air conditioning and fresh air vents. Such a closed vehicle is also a shelter.
- ● Education authorities will be requested to take the children under their care during school hours, shelter them and look after them in every way until any danger has passed.
- ● Stay where you are, await further instructions from the radio and/or television and do not use the telephone except in an emergency as this will block telephone lines needed for important communication.
- ● Potassium iodate tablets, the only known antidote against radiation's 40 known dangerous elements, protect the thyroid from collecting radioactive iodine.

MOH hits at control

CAPE TOWN Medical Officer of Health Dr Reg Coogan has clashed with the Town Clerk, Dr S Evans, about whether Escom should be the central emergency controller in the event of a Koeberg power station radiation leak.

During a Press conference yesterday Dr Coogan said he felt strongly that the operators of nuclear power stations should not be in charge of the civil defence measures which would have to be taken in the case of a nuclear accident.

Not Escom

He said: "I must make it clear that I am opposed to Escom being responsible for the information to be given out about matters which concern the safety and health of the population. I feel the State Health Department should carry the ultimate control in such a case and not Koeberg's central emergency controller."

"In all the overseas studies on this, not one of them has recommended that the management of the power station responsible for the radiation leak should be put in charge of the population's safety," he said.

Disagree

Dr Evans, who called the conference to launch the information pamphlet outlining emergency measures, disagreed with him at the conference.

He said: "I completely disagree with Dr Coogan on that. I am satisfied with our Koeberg emergency plan as it now stands.

"In case of expenses which may have to be incurred due to a nuclear emergency from Koeberg power station, Escom would have to pay the damages — that is the law. Therefore they should be giving the instructions on what to do, as well."

Evacuation

The City of Cape Town had undertaken to co-ordinate directly with Koeberg power station's central civil defence controller in case of a nuclear accident at the plant, he said.

Dr Coogan said quick evacuation of the huge population of Cape Town would be impossible — that's why the pamphlet concentrated on how to take shelter.

"What you are trying for when protecting such a large population is to do what you can to afford them some protection against nuclear radiation.

US attitude

"Cape Town, with its two main highways out of the city, would be in an impossible situation trying to get a million and half of people out."

"That is why the American attitude has been adopted in Cape Town. They view sheltering as protection against radiation as 50 percent effective inside the basement of a ten-storey concrete building and 20 percent effective in a bungalow-type building, and more desirable than evacuation in most cases."

Koeberg: Shock cost disclosure

CAPE TIMES 24/2/84

55'

By ROBIN PARKER

THE cost of generating power at Koeberg nuclear station has been estimated at 300 percent higher than the present cost of power from the country's coal-fired stations.

This shock disclosure was made in the House of Assembly by the Minister of Mineral and Energy Affairs, Mr P T C du Plessis, in reply to questions by Mr Roger Hulley (PFP Constantia).

The disclosures raise new doubts about the economic viability of South Africa's only nuclear plant.

In his reply, Mr Du Plessis quotes figures which show that the average cost per kilowatt hour of electricity generated at South Africa's coal-fired power stations was 1,97c during 1983. Koeberg's estimated costs when it goes "on stream" will be a massive 5,6c per kilowatt.

Capital costs

Mr Du Plessis qualified his reply by saying: "Attention is drawn to the fact that the capital related costs of the older coal-fired power stations are relatively low compared to newer power stations. For a coal-fired power station newly commissioned in 1984, the generating cost would be nearly 3c per kilowatt hour.

"Further, the average generating cost for Escom's coal-fired power stations in the Western Cape amounted to approximately 4.7c per kilowatt hour in 1983."

Reacting to the disclosures, Mr Hulley said they provided "a shock to those who expected cost advantages from nuclear power. It raises serious questions of the justification on economic grounds for Koeberg." he said.

Mr Hulley said that he would raise the matter during the current parliamentary session.

Escom spokesmen, however, are adamant that the controversial power station 30km from Cape Town remains viable in spite of numerous allegations of inadequate research.

However, the high cost of production of electricity at Duynefontein is not expected to add significantly to the cost burden of consumers as the capital costs of the station will be amortised over a number of years.

In the original planning for Koeberg, one of the main points of motivation in support of siting the nuclear facility on the Cape West Coast were economic viability and the removal of the tenuous link the Western Cape has through the long lines of supply from the Eastern Transvaal.

However, at that stage it was expected that generating cost factors would not differ significantly.

'Other factors'

Commenting on the figures, Escom said the economic viability of the station could not be viewed in isolation. Transmission costs, security aspects, the securing of the servitude and the cost factor involved in the loss of power through the lines from the Transvaal were additional factors mitigating in favour of Koeberg.

A further factor was the cost of coal — four times higher in price delivered to Western Cape stations in comparison to those in the Transvaal.

In addition, Escom's calculations had shown that the coal price was expected to increase at a far greater rate than that of urnaium. An additional factor was the availability of coal. Escom spokesmen quoted sources pointing to a shortage of supply early in the next century.

Cape Town's electrical engineer, Mr D Palser, said his first reaction to the figures would be that the cost of Koeberg-generated power was high.

Warning on Koeberg

Evacuation a possibility

C/C ARGUS 25/2/84 (56)

Weekend Argus Reporter

THE people of Cape Town had their first taste this week of what it will be like living near the giant Koeberg nuclear reactor, which is due to come on-stream in a couple of months.

It came in the form of a City Council information leaflet telling people what to do if a serious accident were to release radioactivity from the plant into the air.

It warns that families might have to shelter in their houses, closing all doors and windows and sealing air bricks or vents.

It also says that in "very exceptional cases" it might even be necessary to evacuate certain areas.

Schools

The leaflet — which appeared as an advertisement in Cape Town newspapers for the first time today, and which is to be mailed to all electricity consumers with their accounts — says the educational authorities are being asked to ensure that during school hours they will take children under their care and shelter them.

The public are told not to use their telephones except in emergencies as this will block telephone lines needed for important communications.

It also says that while it is extremely unlikely that members of the public in Cape Town will ever be exposed to enough radioactive material from Koeberg to affect their health, "one of the harmful elements could be radioactive iodine, which could harm the thyroid. An effective antidote is the taking of potassium iodate tablets before exposure".

These can be obtained free of charge from City Council clinics for householders to keep in case there should ever be an emergency.

Escom

At a news conference this week to launch the leaflet, Cape Town Medical Officer of Health Dr Reg Coogan said:

- The emergency plan was not the complete answer to all possible Koeberg nuclear emergencies, simply the best in the circumstances.
- He was opposed to the fact that the plan would be implemented by an Escom official. This was against international practice, where State health departments controlled public safety.
- In the event of an accident, the public could be exposed to many other radioactive elements besides iodine, but there was only preventive medication for the latter.

Radiation tablets 'bizarre'

Weekend Argus Reporter

CAPE TOWN'S planned distribution of potassium iodate tablets to prevent thyroid cancer — possible in cases of a nuclear radiation leak from Koeberg power plant — has been described as "bizarre" by Koeberg Alert.

The City Council's emergency plans in case of a Koeberg nuclear leak contain a proposal to distribute these tablets.

Koeberg Alert spokesman Mr Mike Kantey, said: "There are about 250 different radio-nucleids in routine emissions from nuclear plants.

"Many are radioactive isotopes of trace and other elements important in nutrition, and therefore tend to be deposited in vital parts of the body.

"Among these elements are strontium and cesium, which also collect in food substances. Iodine is not the only one affected."

Emergency

Mr Kantey also slammed the fact that Escom would be the central controller in case of a nuclear emergency from Koeberg.

He said Koeberg Alert opposed the control of an emergency being vested in an Escom official as this would always lead to a severe conflict of interest.

Koeberg Albert also commented on the council's pamphlet as being "clearly aimed only at electricity subscribers.

"No mention is made of how people without electricity, for example those in Bishop Lavis or Crossroads, are to be contacted," he said.

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Safety plans for Koeberg attacked

Cape Times 25/2/84

Municipal Reporter

IF THE Koeberg Nuclear Power Plant was as safe as claimed by the City Council, the publication of emergency plans in major newspapers today was "contradictory", a Koeberg Alert spokesman said yesterday.

But the Council's emergency plans — also contained in a pamphlet which will be distributed to electricity subscribers during the first two weeks in March — were "a reasonable attempt to convince the public that their best interests were being served", said Mr Mike Kantey.

"However, the pamphlet contains recommendations that will do little to prevent the effects of a worst possible accident at Koeberg.

"The proposal to make thyroid tablets available is bizarre. There are about 250 different radionucleids in routine emissions from nuclear plants and many are radioactive isotopes of trace and other elements important in nutrition and therefore tending to be deposited in vital parts of the body. Among them are strontium and cesium, which also collect in food substances. Iodine is not the only one affected.

"The siting of Koeberg can never be justified. Wind studies, all done after the start of construction, show that 15 percent of the time a large proportion of Capetonians will be placed at risk of developing cancer in the event of a major accident. Overseas evidence based on extensive monitoring of routine releases of radioactive material show that the risk of ill effects extends up to 80km from the plant itself.

"Koeberg Alert has also repeatedly opposed the control of an emergency being vested in an Escom official, as with the best will in the world, this will always lead to a severe conflict of interest. Control should be in the hands of an independent State health official as in most overseas countries.

"The council's leaflet is clearly aimed only at electricity subscribers. No mention is made of how people without electricity, for example those in Bishop Lavis or Crossroads, are to be contacted. The people at greatest risk, in Atlantis, are unable to shelter because of of the poor condition of their houses."

'Public misled over Koeberg'

55 CAPE TIMES 25/2/84

Staff Reporter

THE government's disclosure of high generating costs for Koeberg electricity was proof that there had been a "cover-up for years", says the anti-nuclear group Koeberg Alert.

Dr Derek Yach of Koeberg Alert said the disclosures — made in reply to questions to the Minister of Mineral and Energy Affairs, Mr P T C du Plessis, from the Rorgressive Federal Party MP for Constantia, Mr Roger Hulley — showed that the quoted costs proved clearly that there had been a lack of foundation for initial research into the economic viability of Koeberg.

The figures showed that the power produced at Koeberg would be between two and three times as expensive as that currently available from coal-fired power stations.

Dr Yach said "millions of rands has left the country in payment for Koeberg, numerous job opportunities have been wasted, and all this with a well-developed coal-fired power station building facility".

"Why go ahead with the building of Koeberg? Why the rush? It was for some strategic reason apparently, but for years we have been asking questions without getting answers," Dr Yach said.

Another spokesman for the organization, Mr John Venn, said the announcement confirmed Koeberg Alert's criticisms of nuclear power.

"For the past six years Koeberg Alert has maintained that nuclear power was more expensive than coal-generated electricity.

'Inquiry'

"This has been vigorously denied until now by the pro-nuclear lobby. It has also been admitted that electricity from Koeberg is more expensive than even the older coal power stations in the Western Cape, which are less efficient than modern stations," he said.

Mr Venn questioned the existence of Koeberg in light of the high costs. "Who will pay the extra costs?" he asked.

Koeberg Alert believed the decision whether or not to build Koeberg should have been made after a public inquiry into the safety and economics of nuclear power. "We have no doubt that had such an inquiry taken place, Koeberg would not have been built."

Consumers slam fuel price increase

1/3/84 (55) Star

By Zenaide Vendeiro
and Colleen Ryan

Motor industry leaders and consumer organisations have slammed the inland fuel price increase of 1,5c a litre.

Mr Denzyl Vermooten, economic affairs executive of the Automobile Association, said the Government was "unfair" in expecting inland road-users to subsidise certain uneconomic railway services.

"The profit of the fuel pipeline from the coast to inland areas is in excess of operation costs. Its high rate of traffic subsidises the low rate of traffic on other services," he said.

When asked why the increase in the cost of transporting fuel from the coast was necessary if a substantial amount of fuel was refined inland, Mr Vermooten said secrecy surrounding petroleum products prevented him from responding.

"But in view of the existence of the Sasol plants, this matter needs to be investigated."

Mr Vermooten said he was mystified by a statement by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, that a fuel increase had become necessary.

"I can't understand why an increase in the petrol price is warranted after it was reduced before the referendum."

He welcomed the Minister's announcement that the basic cost of fuels would be maintained at their present levels.

Mr Bernard Hellberg, assistant director of the Consumer Council, condemned the increase.

"This increase is unjustified. The pipeline is running at sheer profit."

Transport costs push inland petrol price up

Political Staff

CAPE TOWN — It will cost more to fill your car's petrol tank after April 1 — even though the basic price of petrol is not going up.

The Minister of Mineral and Energy Affairs, Mr Danie Steyn, said no fuel price increases are foreseen for the rest of the year.

The snag is that higher transport costs announced yesterday by the Minister of Transport, Mr Hendrik Schoeman, will put about 1,5 c on every litre of fuel which has to be taken from the coast to inland areas.

For the average motorist pulling up at the petrol pumps to get 30 or 40 litres, the increase will be about 50 c.

Mr Steyn said yesterday that a substantial fuel price increase had in fact become necessary because of the unfavourable rand-dollar exchange rate.

However, the Government was well aware that such an increase would have detrimental effects and it had therefore decided to release a small portion of South Africa's crude oil stocks for refining.

That would not in any way affect the country's preparedness and would keep the cost of fuels at their present levels.

In the present relatively favourable buyer's market for crude oil, existing stocks could be replaced by better quality products and more knowledge could be gained about stockpiling.

Mr Steyn said: "Apart from the announced increase in transport costs, no more increases in the price of petrol, diesel, jet fuel, illuminating paraffin and power kerosene are foreseen during 1984."

SLAMMED

The Progressive Federal Party has slammed the inland fuel price increase as inflationary.

PFP mineral and energy affairs spokesman Mr Brian Goodall said it was unfair that inland motorists had to subsidise unprofitable transport services.

Pipeline surpluses should have been used to absorb the extra cost of transporting petrol, he said.

The Automobile Association and motor industry leaders have also criticised the inland fuel price rise.

SCHOOLS PREPARE FOR KOEBERG EMERGENCY

W/E ARGUS 3/3/84 55

Nuclear disaster plan

By CHRIS ERASMUS
Weekend Argus Reporter

IF THAT one-in-a-billion-chance accident happens and Koeberg releases a cloud of radioactivity — and if this happens during school hours — what will become of your children at school ?

On the face of it, the chances of such an event appear so remote it hardly warrants thinking about.

After all, a scenario in which a school or schools are threatened with any significant accidental release of radioactivity is so full of improbable ifs that to be concerned about its possible consequences seems merely to be looking for something to worry about.

But the level of public and official concern in Cape Town, Atlantis, and the Peninsula about the forthcoming switching-on of the country's first commercial nuclear reactor has been so high that a contingency plan is being formulated for even this eventuality.

Shelter

Said Dr Stan Evans, the city's Town Clerk: "We approached the province's education department last year about this issue. We decided that the best thing to do, in the unlikely event of a cloud of radioactive particles approaching a school or schools, was to shelter the children in the affected area.

"The idea is, rather than have hundreds of worried parents having to rush into an affected or potentially affected area during an accident, it would be better to look after the children on the spot — perhaps in the school hall or another suitable building."

Dr Evans said the thing to remember was that any accident would be extremely unlikely to release such large quantities of radioactive particles that people would have to evacuated.

Obvious

"However, if evacuation should prove necessary, it is obviously better to have all the children in a school in one place to facilitate a proper evacuation."

He pointed out that in most nuclear accidents, sheltering in a building — such as a home or school hall — with all windows, doors and air vents shut, would be adequate protection from airborne radiation.

"We want parents to know that during such an emergency their children will be as well cared for as the parents themselves would."

Dr Reg Coogan, the city's Medical Officer of Health, said that in the event of a large release of radioactive materials from Koeberg — mostly in the form of gases and dust — the greatest hazard to the public would come from the radioactive isotopes of iodine, particularly Iodine 131.

Pupils of Ellerton Primary School in Sea Point practise one of their drills for an emergency. In the event of a nuclear emergency, these children would be sheltered in the Sea Point Civic Centre, or some other suitable building until the danger has passed, or until they are evacuated.

Town Clerk moots safety measures 'in the unlikely event' of fallout

Absorbed

"These radioactive isotopes are absorbed by the thyroid gland and can damage and cause cancer to this organ. There is, however, an internationally accepted protective measure which we can use to prevent this hazard — potassium iodate tablets.

Potassium iodate — a common medicine often found in cough mixtures — should be taken before exposure to radioactive iodine, but only in the event of a nuclear emergency, said Dr Coogan.

Since it would not be feasible to distribute these tablets during an emergency, they would be issued to the public and schools through the city's health department clinics from March 5.

If it was necessary during an emergency, sheltered school children would be given the tablets as a protective measure.

Mr H A Lambrechts, Director of Education, said he had been approached by the Cape Town City Council and was satisfied with the council's plans for protection to school children during a nuclear emergency.

"However, everything is still in the planning stage. We would prefer that the 18 local and municipal authorities affected or involved in the contingency emergency planning for a nuclear accident get together and come up with a co-ordinated and co-operative plan of steps to be taken to protect the children.

"It is not only the schools under the jurisdiction of the Cape Town City Council which are involved, but all those within the contingency planning zone around Koeberg.

"It is obviously better to have a co-ordinated plan for the whole area, rather than each authority having its own plan. But I am confident that adequate measures will be taken to ensure the safety of the children," he said.

Rural communities running out of fuel

(55) E. Post 3/3/84

By SHARON LI GREEN

PEOPLE in the underdeveloped rural communities of the Eastern Cape and other regions are running out of cooking and heating fuel.

More and more black people in Port Elizabeth are being driven to buy expensive gas and paraffin because of the shortage of firewood.

And in Grahamstown, many still walk long distances daily to gather wood from areas where no trees are being planted.

Underdeveloped rural communities face a real fuel crisis, according to research undertaken by the Energy Research Institute of the University of Cape Town.

For many black people, the real crisis is not the fluctuation in the oil price but the growing scarcity of wood for fuel, particularly for those who do not have access to electricity.

A recent conference in Cape Town focused on strategies to overcome the problem of receding woodland which has led to soil erosion, increasingly arduous trips for fuel-wood collection and growing commercialisation of fuelwood.

South Africa produces nearly 60% of the total electricity supplies in Africa. But most of its population — about 10 million — is still dependent on wood.

The amount of timber used annually is estimated at 7,2 million cubic metres. Every year, timber which could cover about 1 000 rugby fields piled one metre high is burned.

This overwhelming dependence on fuel-wood resources and agricultural residues, coupled with the pressure on the land and swelling populations could have a more horrific effect than the present drought, according to the Department of Environment Affairs. This could lead to the start of desert areas.

In Port Elizabeth, 5% of the black people are still dependent on wood. They come mainly from the slum areas of Red Location, Soweto and parts of Zwide and Kwazakele.

According to the Deputy-Mayor of Kayamnandi Town Council, Mr Tamsanqa Linda, 50% of the township people use paraffin and gas while 45% use electricity.

"Wood is usually obtained from farmers selling it in the townships," he says.

The shortage of wood is also evident in the sales of woodstoves which declined drastically last year.

"From May to December last year, 19 stoves were bought and 12 were subsequently repossessed. The reasons given were that they could not get wood," said the manager of Fraser Furnishers, Mr Jacobus Vermeulen.

In Grahamstown, forest fires over the years have burned out plantations, which has not helped alleviate the shortage of rural fuel, according to the Deputy Town Clerk of Grahamstown, Mr C D Coetzee.

"The black community is still largely dependent on wood, particularly in winter. They can be seen walking distances daily or riding on their donkey-carts," he said.

No trees had been planted in plantations in the past 18 years because of a programme to eradicate the exotic Port Jackson willow, said Mr Garth Timm, Parks and Forests superintendent in Grahamstown.

People were allowed to collect firewood without limitation wherever there were Port Jackson willows, wattle, gum and pine as long as a ticket was issued by the department.

But many had to walk long distances, varying between two and eight kilometres, to gather wood. And because of this, they were instead going to nearer indigenous areas such as the Mountain Drive ravines. Forest rangers were now policing that area.

"The time will come when there is a desperate shortage of rural fuel," says Mr Timm. "But we have several ideas in mind to prevent this."

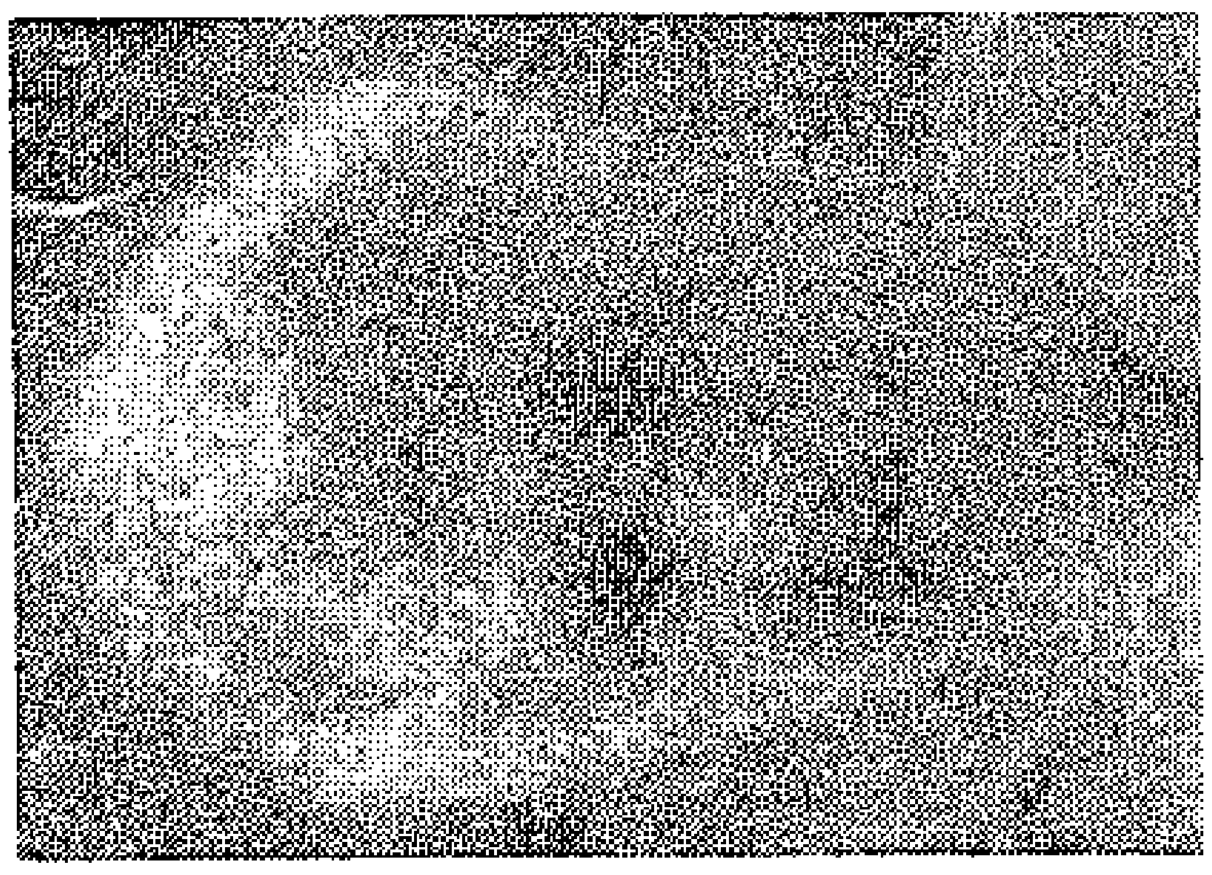
Brigadier hits Sasol for R270m

Korean war hero files secret claim

55

S. Express
4/3/84

By MARTIN WELZ



● Brigadier Jan Blaauw ... a mysterious figure

BRIGADIER Jan Blaauw, the man whose diamond claims brought down Mr Fanie Botha, is a member of an international syndicate suing Sasol and other parties in one of the biggest law suits in South African history.

The case, in which more than R270-million is being claimed, is scheduled to begin behind closed doors in the Rand Supreme Court on March 12, and is believed to have serious political implications.

Defendants in the case are Sasol, the Strategic Fuel Fund Association, and a Cape Town diplomat, Mr H Storch-Nielsen.

Mr Storch-Nielsen is honorary consul-general for Peru, and is referred to by business associates as 'The Stork'.

The huge claim has been brought by Brig Blaauw and a mysterious British businessman, Mr Maurice Sellier.

A British post office source told the Sunday Express correspondent in London that his telephone was ex-directory and classified as "not to be disclosed to anybody under any circumstances".

Associated with Mr Sellier, although not a party to the case, is Ms Susan Guinness, member of a prominent titled British family with interests in the banking houses Guinness-Peet and Guinness-Mahon.

Ms Guinness is known to have accompanied Mr Sellier on a recent visit to South Africa to brief lawyers.

Brig Blaauw, also a mysterious figure, is a retired South African Air Force officer and arms dealer. He won a DFC as commander of the Flying Cheetahs in Korea and has since become a wealthy dealer in arms and strategic materials.

He precipitated the sudden resignation in November of Mr Fanie Botha, then Minister of Manpower, when he demanded payment of promissory notes totalling R190 000.

Brig Blaauw also insisted that Mr

To Page 2

P.T.O.

Swapo supp[illegible]

Sasol case parties sworn to secrecy

From Page 1

Botha had promised him certain west coast diamond concessions as a reward for special services rendered to the country. A legal suit against the government on this claim is pending.

The Financial Mail reported this week that the lawyers and all other parties in the Sasol case – described on the court roll simply as "M Sellier and others vs Sasol Ltd and others" – were asked to sign undertakings that they would not reveal details of the case.

55 S. Times 4/3/84

State cashes in on oil

THE R550-million of crude oil to be drawn from strategic stocks will be sold to refineries at prevailing market prices. This could result in a stock profit of hundreds of millions of rands for the State.

A Department of Mineral and Energy Affairs spokesman told Business Times this week that although details had not been finally worked out with the oil companies, the oil would go at current prices and not at cost.

Because oil bought up to 15 years ago was cheap, enormous profits are in prospect.

The department spokesman said the large profit was justified because holding stocks for years had proved extremely expensive. The profit would facilitate future stockpiling.

Some oil industry watchers were hoping that refineries would get the oil at cost and that they would be the beneficiaries.

The rand has depreciated 11,7% against the dollar in the past year, and spot oil prices have risen off the 1983 low of $28 a barrel by 1% in the past year. The price at which SA buys oil is not known, but as the Minister of Energy Affairs said this week, in rand terms it is up appreciably.

Economists have inferred that the impending stock profit helped to avert a petrol price increase. The 1,5c a litre increase in fuel prices inland is an increase in transport fees to help a beleaguered Sats.

Economists praised the drawing down of oil stocks and said it had several benefits.

First, fuel prices and inflation were held back. Second, the balance of payments was protected from another knock in the wake of a depressed gold price and on the eve of large maize imports.

Oil today, they said, was more readily available and less likely to soar in price. If the gold price rose and the dollar declined, the rand should strengthen, making it easier to top up the stockpile.

Petrol . . . now the big sting!

S-Tribune 4/3/84

55

Loaded pipeline charges squeeze inland motorists

By Kevin Davie

UP-COUNTRY motorists are being loaded with fuel pipeline charges — now 6,5 c a litre on the Rand — but almost no petrol is being pumped from the coast to the Reef.

Sasol meets virtually all the country's inland petrol requirements but the levy was raised, in Johannesburg from 5 c to 6,5 c by the Minister of Transport, Hendrik Schoeman.

The pipeline levy currently nets the transport budget R200 million a year.

The move has outraged motoring and opposition leaders.

John Malcomess, Opposition spokesman on transport, said he believed if a proper investigation were done into the charges, the end result would be that the public would get cheaper petrol.

"It's quite obvious that the inland petrol user is being hit to an unnecessarily large extent," he said.

"And," said Denzil Vermooten, economic spokesman for the Automobile Association, "the profit of the fuel pipeline from the coast to inland areas is way in excess of operation costs."

The pipeline last year produced a huge profit of R149 million, helping the Minister of Transport to show a minor overall deficit of only R11 million.

A senior source at the pipeline office in Durban confirmed that, because Sasol was now the main inland supplier, very little fuel was being pumped from Durban to the Reef.

However, the quantity pumped from Sasol was similar to the quantity that was pumped from Durban in the past.

The source confirmed that the pipeline was used also to pump commodities other than fuel but declined to identify these for strategic reasons.

"Very probably the amount of oil is being transported a considerably shorter distance," said Mr Malcomess, criticising the fact that over the past two years pipeline charges had increased above the level of inflation.

He said he understood that the pipeline charge were based on what it would cost to rail the petrol and he believed, because most of South Africa's petrol was being produced where it was consumed — in the Transvaal — this meant that the "public should get their petrol cheaper".

"This appears to be a cross-subsidisation exercise. The Johannesburg motorist has to pay for uneconomic rail passenger services," he said.

The AA has been campaigning for some years to remove cross-sudsidisation.

According to Mr Vermooten, at present South African Transport Services gets 5 c a litre for petrol sold inland to cover transport costs. This nets a profit of about R160 million a year, whereas the National Road Fund receives 4 c a litre, bringing it R150 million.

"If the National Road Fund got a bigger share it would avoid the need of having to get its money through the toll system which is a very expensive method.

"More than 40 percent of money collected on the toll system goes to administrative expenses while the administrative expenses involved with the petrol levy is negligible," he said.

The Star Monday March 5 1984

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SA's first dustbin for nuclear waste to be in Namaqualand

Cape is to get new research N-centre

By Sheryl Raine,
Pretoria Bureau

Within the next five years the Nuclear Development Corporation of South Africa (Nucor) will establish a nuclear research centre in the Riversdale district in the Cape.

The site will be called Gouriqua, after an extinct tribe who once inhabited the area.

"Pelindaba, outside Pretoria, is virtually saturated spacewise, so a new research centre will be established at Gouriqua," a Nucor spokesman said.

The research at Gouriqua will follow the lines of that at Pelindaba. All that is known at present is that the centre will not be involved with generating nuclear power.

The buildings will be designed to blend with their surroundings, and everything possible will be done to preserve and enhance the natural environment.

Being close to the Gouritz River mouth, one of the advantages of the Gouriqua site will be an abundance of sea water for cooling purposes.

By Sheryl Raine,
Pretoria Bureau

Excavations to turn a barren stretch of Namaqualand into South Africa's first radioactive waste depository will start within the next six months, says the Nuclear Development Corporation (Nucor).

Three farms, approximately 10 000 ha in extent, have been bought at Vaalputs, Namaqualand, for use as the first national radioactive dustbin.

The site will be administered by Nucor and the first consignments of waste are expected at Vaalputs in about three years.

Research at Vaalputs indicates that the site is socio-economically and geologically suitable to become a nuclear depository, says Nucor.

The surface materials of the district consist of sand, calcrete and a variety of clays, including kaolin. All of these were extremely suitable for the retention and immobilisation of radioactive waste, a Nucor spokesman explained.

Waste stored at Vaalputs will come mostly from Koeberg nuclear power station, near Cape Town, and will include resins, laboratory equipment, and clothing worn by workers and researchers in the nuclear industry.

"Nuclear waste will be taken to the site in accordance with the strictest internationally approved safety regulations," the Nucor spokesman said.

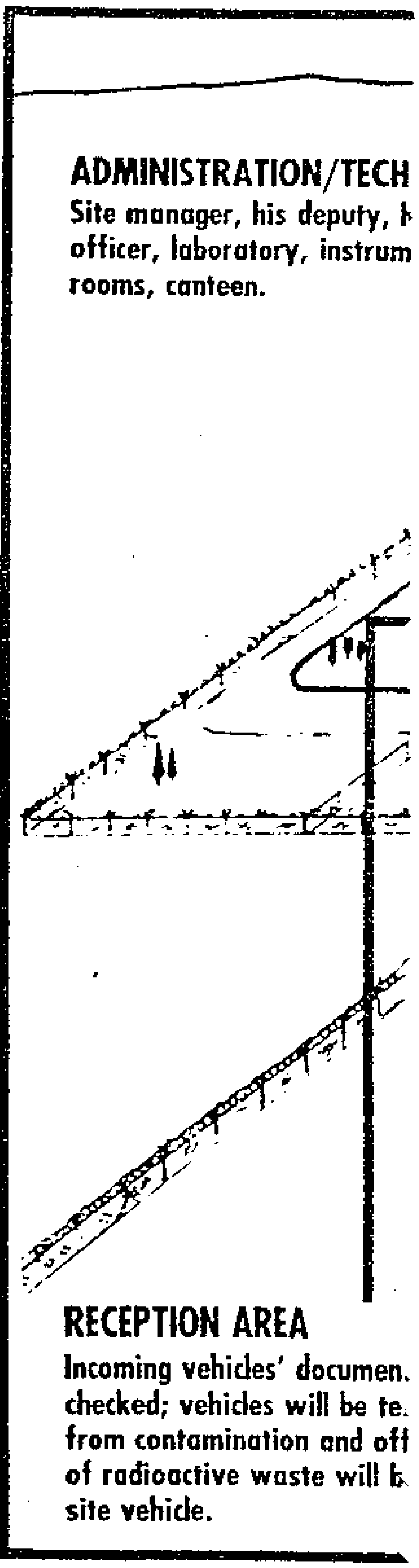
These regulations were drawn up by the International Atomic Energy Agency in Vienna. They include standards of safety which provide an acceptable level of control of the radiation hazards to people, property and the environment.

"Medium-active waste will be set in a concrete mixture in concrete drums and low-active waste will be compacted in steel drums," the spokesman said.

"The steel drums will resist corrosion for between five and 10 years. But ground covering will ensure that any harmful radionuclides are safely contained. The concrete drums will show little, if any, corrosion over an indefinite period.

"About 2 000 drums will be received at Vaalputs each year over a period of 40 years. The area used will be no bigger than a rugby field and each item will be measured and recorded before being deposited.

"For the most part, low and intermediate waste will decay to safe limits within 150 years. In the unlikely event of the rupture of a container, no escaping radionuclides will easily find their way to the surface within a period of 1 000 years by which time they will have become harmless."



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Fierce debate over elite universities for West Germany

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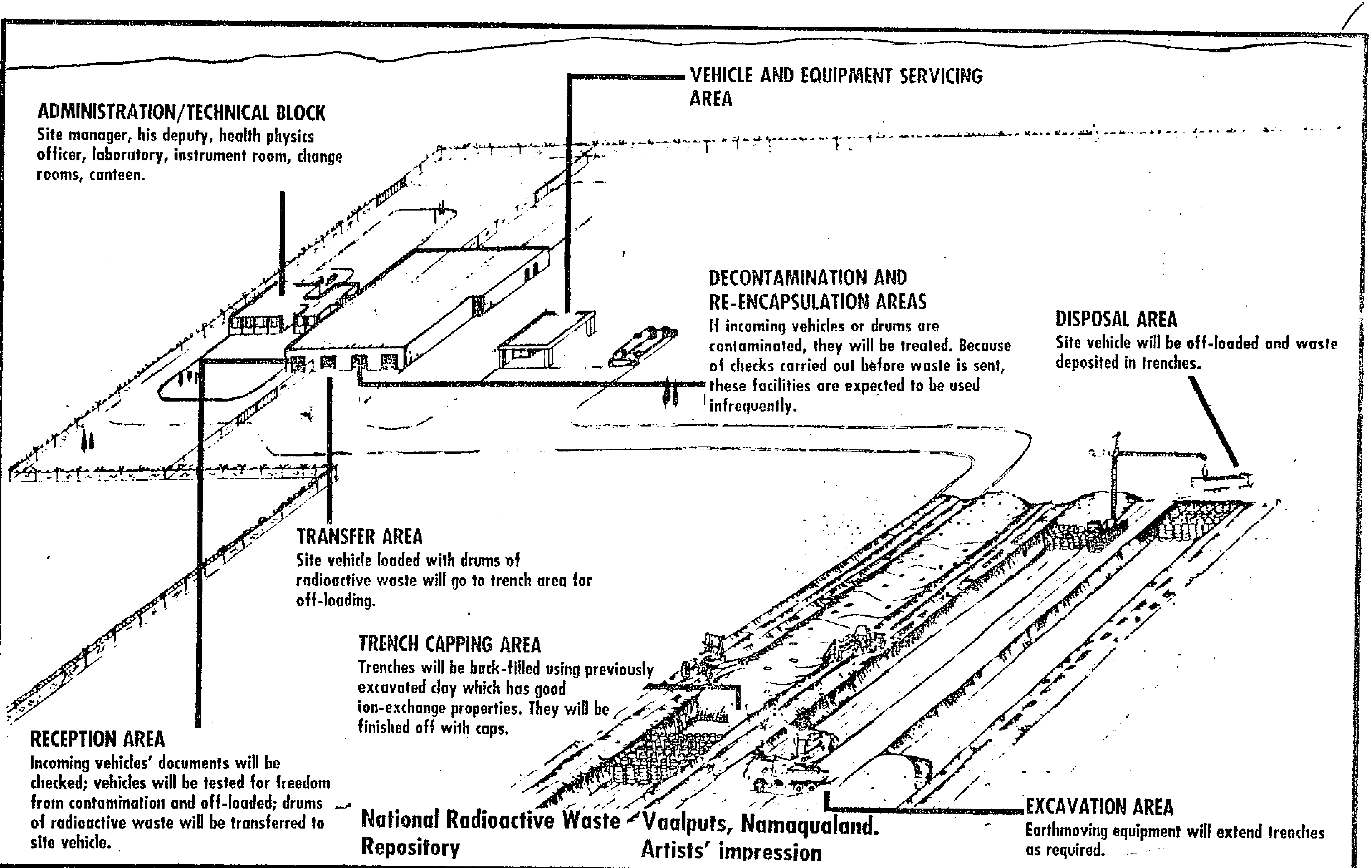

National Radioactive Waste Repository — Vaalputs, Namaqualand. Artists' impression

Koeberg's power 'not to cost more'

ARGUS 7/3/84 SS

Staff Reporter

KOEBERG'S electricity would not cost consumers more than they paid now, even though nuclear-generated power cost more than conventional power, Escom's chairman, Mr Jan Smith, said in Cape Town last night.

Mr Smith said a coal-burning power station would have produced electricity at nearly 1c a kilowatt-hour less than Koeberg's electricity.

But once Koeberg goes on stream within the next few weeks Western Cape consumers would still pay only the going national rate of 4,4c a kilowatt-hour because the nuclear power station's electricity is fed into the Escom national power grid.

It is estimated that Koeberg's electricity would cost 5,6c a kilowatt-hour to produce.

A coal-burning power station would have been cheaper than Koeberg in the short term but not in the long term because of the high transportation costs for coal, Mr Smith said.

"The long-term outlook for nuclear power is rosy because it is, for instance, the energy form which produces the least pollution and it is relatively independent of our scarce inland water resources.

"The short-term prospects are poorer because the only areas where nuclear power would be economically feasible would be in the coastal areas. And unless they show greater economic development, more nuclear power stations would not be justified."

Mr Smith said because of the current economic situation Escom would not begin building any additional power stations, nuclear or otherwise, this year.

Koeberg 'is an economic proposition'

CAPE TIMES 7/3/84 (55)

Staff Reporter

IN SPITE of huge cost increases and a projected decline in the long-term growth rate of the demand for electricity, Koeberg remained an economic proposition, the Escom chairman, Mr Jan H Smith, said last night.

Speaking at the annual Escom dinner held at a City hotel, Mr Smith said Western Cape consumers would not pay the controversial 5,6 cents per kilowatt-hour for electricity from Koeberg. Because Koeberg power would be fed into the national grid, the average cost of electricity would remain below 4,4 cents per kilowatt-hour.

Much that was "unexpected" had occurred since construction at Koeberg had been started in the early 1970s, when projections had shown it to be economically justifiable.

"The price of nuclear fuel, for example, increased significantly. After Three Mile Island, additional — and often legitimate — security measures had to be introduced. The possibility of sabotage necessitated further security measures. Also, the delays that resulted became a major additional cost factor."

Comparing 1984 cost estimates of Koeberg power with other Western Cape power options, Mr Smith said a coal-fired power station locally-commissioned in 1984 would have cost 4,7 cents per kilowatt-hour. Electricity fed from new inland coal-fired power stations commissioned in 1984 would have cost 4,3 cents per kilowatt-hour.

The latter option would have made the Cape fully dependant on imported electricity and associated cost rises.

A local coal-fired power station, although cheaper in the short-term, was subject to rising transportation costs. Coal was presently five times more expensive locally than in the interior.

Mr Smith believed that the estimated initial cost of Koeberg-generated electricity (5,6 cents) would tend to remain more stable in the future. It was "possible" that the nuclear fuel price would rise at a lower rate than that of coal and its associated transport costs.

Search for oil: a world of costly secret deals

55 E. Post 7/3/84

By LIZ VAN DEN NIEUWENHOF

SOUTH AFRICA, in its search for oil and armaments, has created a world of secret deals and shady transactions where wheeler-dealers, operating in their own element, have taken the Government for an expensive ride.

The latest glimpse of this shadowy world emerged this week in reports of a case brought by a British businessman, Mr Maurice Sellier, Mr Ezra Nonoo and a company called Trade and Technology (Holding) Ltd against Sasol. The case is to be heard *in camera* in the Rand Supreme Court next week and involves a claim of R270 million.

The public gets only the barest glimmering of what goes on in such cases. Hints of bogus deals conducted under "national security" crop up in the odd court reference, or in reports from foreign countries. There are frequent rumours of financially disastrous deals.

In particular, the secrecy provisions of the Petroleum Procurement Act and the Defence Act have enabled swindlers to use South Africa for devious multi-million rand deals without their activities becoming known.

The most notorious case so far was the Salem fraud — the greatest maritime fraud in history — which has been a hot issue internationally since December 1979.

Briefly, the Salem was scuttled off the west coast of Africa to conceal the fact that its cargo had been clandestinely sold to South Africa.

It cost South Africa R37-million when the fraud was discovered.

After a 15-month investigation, a report has been sent to the Greek and Dutch governments, but the South African public and Parliament remain in the dark.

The legal screen behind which oil transactions are conducted has also hidden from the public the details of a massive claim for R84-million filed in the Rand Supreme Court against Mr Marino Chiavelli, the oil billionaire who has bought lavish homes in Johannesburg and Cape Town.

Details of this civil action, brought by millionaire Mr Taki Xenopoulos, have been kept secret in terms of a ruling under the Petroleum Procurement Act. The action contains no suggestion of criminal activity, but it has focused attention repeatedly on the curious background of Mr Chiavelli.

The Italian, often described as one of the masterminds of the international oil trade, has been granted permanent residence despite the fact that he failed in his application to disclose a criminal record. To the mystery of his background has been added the glamour of his lifestyle at Summer Place, a Johannesburg mansion he bought for R1,8-million.

When Oppostion MPs asked about Mr Chiavelli in Parliament, they were warned "they had never been closer to treason."

Far more ominous is the case of Mr Richard Mueller, another free-spending millionaire who chose the sunny shores of Souh Africa and used his Cape Town-based company, Micro-Electronics Research Institute, as a channel through which to move highly sophisticated computer equipment to the Soviet Union.

His company and South Africn operations are now being scrutinised by intelligence networks in the United States, Britain and West Germany.

In South Africa no comment is being given ... it concerns internal security.

Mr Mueller, together with his partner, Volker Nast, arrived with their families in 1982 and immediately adopted a "lavish lifestyle".

On Mueller's shopping list was Barbara Barnard's R300 000 house. Later he bought a R2-million Constantia wine farm, Buitenverwachting.

Mr Mueller abruptly left South Africa on a direct flight from Durban to London in September.

It was later discovered that he and Mr Nast had been involved in several cases of high-technology dealings with Eastern bloc countries and both ran foul of the United States Export Administration Act.

During an intensive German investigation it was discovered that five truckloads of strategic computers had crossed the East German border two years ago.

Mr Mueller is believed to have imported the equipment into South Africa before shopping it to Russia.

Even more bizarre is the case of the "oil sniffer" scandal that rocked France last year when it was disclosed that the French Government had been tricked into paying for a bogus 'sniffer plane' to fly around sniffing for oil.

A French report on the subject brought to light that South Africa, too, had lost about R5-million in an experimental search for oil with "sniffers" over Zululand. The money lost was described by the Deputy Director-General of Mineral and Energy Affairs, Dr W L van Wyk, as "not a scandal, but risk capital spent."

Little is known about the affair.

In December, 1979, the Government had to step in to kill a R100-million Venda "development deal" with a mysterious Middle East broker, Mr Salim El Hajj, believed to have become R8-million richer after making a similar deal with Transkei.

Mr El Hajj had announced in 1978 that he had sold Transkei an extravagant R450-million loan scheme for "the development of an oil refinery, harbour and international airport."

Plans were apparently delayed because the homeland could not make the R16-million down payment.

It was believed, however, that Mr El Hajj had received R8-million from struggling Transkei before it was decided to "postpone" the deal — a charge that he persistently denied.

When his attentions were turned to Venda, the South African Government moved in quickly after certain South African officials seconded to the Venda Development Corporation had been impressed by Mr El Hajj — then Iscor's Middle East agent.

Mr El Hajj had for several years held the multi-million rand agency in the Middle East for South African steel and timber, but a month after the Venda controversy he was fired by Iscor after his credentials were re-checked.

Shortly after Press reports on Mr El Hajj's abortive deals with Transkei and Venda, he claimed R327-million in damages from South African Associated Newspapers but last month his attorneys informed Saan's attorneys that their client had withdrawn any action against the company and agreed to pay costs.

Commenting in an interview on the secrecy surrounding such deals, Mr Michael Spicer, of the South African Institute of International Affairs, said: "There is a necessity for a certain amount of secrecy to avoid those opposed to South Africa from preventing certain deals. But because South Africa has become a pariah, chances are higher of it being taken for a ride."

Mr Spicer said it was to be questioned where national interest ended and obsession with secrecy started.

"As far as arms trading is concerned, South Africa has been trying to defuse the constraints placed on it since the United Nations arms embargo.

"For this it needed a measure of secrecy ... it couldn't broadcast what it was doing to the world.

"But the penalty we will pay is that unless the Government exercises great vigilance, it will be prone to rip-offs," he said.

Furore certain over Bill to increase secrecy on oil

55 295

S. Time 11/3/84

By BRIAN POTTINGER
Political Correspondent

TOUGH new provisions that throw a heavier blanket over information relating to South African oil procurement, consumption and use have been presented to Parliament.

The provisions are certain to spark another furore over the secrecy which traditionally cloaks Government oil-procurement issues.

The Bill also has as backdrop recent alleged frauds and civil-court actions relating to oil procurement involving staggering sums of money.

The Petroleum Products Amendments Bill, published yesterday, presages fierce new clamps on the publication, discussion or even comment on oil-procurement matters.

Penalties stand

In the past the Government has apparently found the term "publish" too loosely defined. The new Bill has extended the phrase to cover release, disclosure or conveyance of information in any publication, film, video, tape or pamphlet.

It even prevents any "written or oral release, announcement, disclosure, conveyance or comment" from one person to another on a range of topics affecting oil procurement, transportation, storage, consumption or any related business.

The penalties established by the 1979 amendment to the Act — up to R7 000 fine or seven years' imprisonment — still stand.

Provision is again made for the Minister of Mineral Affairs to give permission to publish articles. But the draft Bill would now also empower him to set down any conditions he wants relating to publication.

Another section allows him to exempt "certain persons" from the provisions of the Act — a term widely interpreted as being of application to court proceedings and records.

Mineral and Energy Affairs officials this week were adamant that the Bill was not a response to the brouhaha which erupted last year in Parliament and seemed for a time to threaten parliamentarians' privilege to say what they wanted in Parliament.

The row began when an Opposition spokesman, Mr John Malcomess, quoted British court records dealing with the Salem oil scandal in which South Africa was allegedly defrauded of nearly R50-million by oil sharks. The Department initially refused the Press the right to publish the speech.

Alarm bells

Eventually the Speaker ruled that a member's right to speak was protected in legislation, and he reaffirmed the tradition that the Press was free to publish what was said in Parliament.

But the tight new definitions in the proposed legislation are certain to set the alarm bells ringing in Opposition quarters again, and could well lead the official Opposition to review the support they gave to the original amendment in 1979 that established penalties for publication of issues dealing with oil procurement.

Since then the Government has become mired in the Salem fraud case in which international conmen allegedly defrauded the State's oil-buying agencies of R50-million.

Although the details were widely known overseas for months, the Government refused permission for South African newspapers to publish them.

Since then there have also been a number of civil-court actions in which various individuals connected with oil procurement are claiming enormous sums of money.

The latest is a multi-million-rand suit brought by Pretoria arms, diamond and oil dealer Brigadier Jan Blaauw against Sasol, the Strategic Oil Fund Association and a Cape Town diplomat.

MYSTERY SURROUNDS LINK TO COURT CASE AGAINST SASOL

Brigadier Blaauw in oil case meetings

‘Previous negotiations with Minister and department officials could have been in their personal capacities’

By **MARTIN WELZ**

THE mammoth case being brought by an international syndicate against Sasol and others in the Rand Supreme Court this week was preceded by meetings between government representatives and Pretoria arms and commodity dealer, Brigadier Jan Blaauw.

The amount being claimed in the case was approximately R89-million, but the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said in Parliament this week this was not a final figure, and Sunday Express sources say it could exceed R270-million before the case ends.

The meetings all took place in the offices of the Department of Mineral and Energy Affairs in Pretoria. They started early last year and continued at intervals, apparently ending in October.

At most of them Brig Blaauw, representing the syndicate, was accompanied by a business associate, Mr Frans Whelpton.

He is a former private secretary to Mr Fanie Botha and a former deputy secretary of the Department of Mines.

According to informed sources close to the department they met variously with the then Minister of Mineral and Energy Affairs, Mr P T C du Plessis, and at least two senior officials in the department: the Director-General, Mr Sarel du Plessis, and a Deputy Director-General, Dr Wessel van Wyk.

But this week Mr Sarel du Plessis said: "I am saying nothing. My lips are sealed."

The Sunday Express called Mr P T C du Plessis, now Minister of Manpower, at his Lydenburg farm.

His private secretary confirmed that the Minister was in and could be called, but when told the Sunday Express wanted to discuss the Sasol case, said Mr du Plessis had left for a farm where he could not be reached by phone until after the Sunday Express had gone to press.

Dr Van Wyk is on leave and could not be reached for confirmation.

The brigadier, approached for comment on the Pretoria meetings, said simply: "I never talk to the Press".

Mr Whelpton did not deny that he had attended meetings between the brigadier and the Minister and officials about the Sasol case, but would not elaborate.

The brigadier has been seen accompanying syndicate representatives to the same Johannesburg lawyers who have acted for him in the past. But he is not a party to the court action against Sasol.

Mystery still surrounds his role and involvement, disclosed for the first time by the Sunday Express last week. Confusion reigned in official circles following the Sunday Express disclosures.

Sasol issued a statement naming all the parties to the case and denying knowledge of the brigadier's involvement. It described the Sunday Express report as "speculative and riddled with inaccuracies".

A Sasol spokesman said later he was unable to elaborate on this.

The Department of Mineral and Energy Affairs first issued a statement claiming the government was not interested or involved in the case, and then denied having made such a statement.

The Minister, Mr Steyn, who succeeded Mr du Plessis at the end of last year, said this week he knew nothing about negotiations between his department and Brigadier Blaauw, adding that he "might not be that well informed".

"I believe that any negotiations that my predecessor, Mr du Plessis, might have had with Brig Blaauw and officials in my department could have been in their personal capacities, and not departmental," the Minister said.

The Sasol statement this week named the plaintiffs as Mr Maurice Sellier, Mr Ezra Nanoo and Trade and Technology (Holding) Ltd, a foreign company. Defendants are Sasol Ltd, the Strategic Fuel Fund Association, and Mr H Storch Nielsen, honorary consul for Peru.

An alleged right to commission for the supply of crude oil to the Strategic Fuel Fund Association was the base of claims being brought against Sasol, Mr Steyn confirmed in Parliament this week.

He was replying to questions tabled by Mr John Malcomess, Progressive Federal Party MP for Port Elizabeth Central and the party's spokesman on mineral and energy affairs.

Lawyers for Sasol and the SFF Association would ask for the case to be heard in camera, he said, but his department had made no representations to the court in this regard.

Cape Times 12/3/84

Koeberg station set for start-up

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By DI MEEK
Environment Reporter

KOEBERG nuclear power station is set "to go critical" on Wednesday pending the installation being given a clean bill of health by the Atomic Energy Corporation (AEC) today.

If the licensing for the first reactor goes through today, the nuclear reaction within the reactor will be started and maintained at a constant level to produce nuclear power.

Reliable sources told the Cape Times last night that a number of ministers — including the Minister of Mineral and Energy Affairs, Mr Danie Steyn — top officials and AEC inspectors would be visiting Koeberg today.

The press liaison officer for the AEC, Mr Dries Sonnekus, said last night that the target date for the issuing of the licence was today, but it would depend on the final inspection.

It would also have to be approved by the independent Council on Nuclear Safety.

Mr Sonnekus said inspectors had been at Koeberg during the past few months, continually checking that all safety and security measures were being adhered to.

He said "criticality" would be followed by a another long testing phase, during which the reactor would be kept at low power to ensure that all systems were performing to safety regulations.

Synchronization with the Escom power grid could be expected by mid-April.

Full-power generation was expected by the mid-July.

Govt seeks ban on petrol news

CAPE TIMES 12/3/84

Political Staff

THE Government is seeking to place what amounts to a blanket ban on all news and information concerning petroleum products — including, it seems, discussion of the subject or comment by individuals.

But it appears that the right of Members of Parliament to raise matters related to petroleum in the House of Assembly, and the right of the press to report their speeches will not be legislated against directly.

Tightening

The Petroleum Products Amendment Bill, details of which were published in Cape Town at the weekend, seeks to further tighten the almost totally restrictive laws governing what may be published about any matter concerning petroleum products.

Although officials of the Department of Mineral and Energy Affairs have declined to discuss the exact intention of the Bill, it is understood that there was concern in government circles that information believed to be potentially harmful to South Africa's oil supplies was still leaking through loopholes in the existing tough restrictions.

When the Minister of Mineral and Energy Affairs, Mr Danie Steyn, gave notice in Parliament last week of his intention to introduce the Bill, a senior Progressive Federal Party spokesman, Mr John Malcomess, expressed the fear that the proposed measure might be aimed at curbing the right of MPs to speak in Parliament on petroleum matters or at preventing press reports of their speeches.

There has been speculation that the proposed measure could prevent the publication of news of pending court actions involving petroleum products.

The news of such an action involving Sasol, the Strategic Fuel Fund and a number of individuals, and reported to involve more than R200-million, was reported in the Sunday Express two weeks ago.

Questions on the matter were asked in Parliament last week by Mr Malcomess, who was told by Mr Steyn that the court action involved claims for commissions on oil sales.

The proposed amendment bill aims to tighten up and extend the definition of the term "publish" to include any "written or oral release, announcement, disclosure, conveyance or comment" between individuals.

Penalties will remain as they are at present — a fine of up to R7 000 or seven years' imprisonment.

At present, the Minister of Mineral and Energy Affairs must give permission for the publication of information, but it is now proposed that he also be empowered to stipulate conditions for publication.

Early last year Mr Malcomess severely embarrassed the government by quoting in Parliament from Lloyd's Law Reports which detailed the massive Salem oil fraud in which the government was sold a tanker-load of stolen oil.

After Mr Malcomess's speech in Parliment had been widely reported, the then Minister for Mineral and Energy Affairs, Mr Pietie du Plessis, tried to ban further publication.

But the Speaker, Mr Johan Greeff, reaffirmed the privilege of MPs to speak in the Assembly and the general right of the press to report their speeches.

Oil may have influenced pact with SA

CAPE TIMES 13/3/86

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Political Staff

CHANCES of the discovery of an oil deposit off the Mozambique coast may be one of, the key factors leading to the signing of a non-aggression pact with South Africa.

The two countries will sign the Accord of Nkomati near Komatipoort on the border between the two countries on Friday morning.

According to the February edition of the magazine African Business, a paper scheduled to be presented at a world conference on future petroleum areas describes the Southern Mozambican basin as "the most promising hydrocarbon province offshore East Africa".

And, the article points out, the most recent geological data on the offshore area "indicate that the chances of locating a sizeable oil deposit are far higher than was originally suspected".

The article, written before the announcement of the signing of the Accord of Nkomati, hails the December meeting between the South African Minister of Foreign Affairs, Mr Pik Botha, and Mozambican ministers in Swaziland.

Guerilla 'impediment'

And it emphasizes that the "main impediment", according to oil industry sources, to the development of the oil industry "is anxiety by potential investors that drilling equipment and personnel might be attacked by guerillas of the Mozambique Resistance Movement (MNR)".

This statement indicates just how important the Accord of Nkomati is for Mozambique. One of the kernels of the non-aggression pact is the containment of both the MNR on the one hand and the African National Congress (ANC) on the other.

Details of the pact released so far disclose that both sides undertake not to allow their territory or that of a third country to be used as a springboard for attacks on the other, the implication being that both the ANC and MNR could find themselves without backers in the region.

The Swaziland meeting was welcomed by Western oil companies, and the announcement of the accord must have aroused emotions little short of glee.

Just how interested Western oil companies are, according to the article, is illustrated by the fact that the deadline for the bidding on offshore blocks has been postponed twice and the deadline is now March 31. The postponement came "in response to requests" from several of the 22 oil companies involved in the bidding.

Optimism in oil circles

The major companies reported to be involved in the exploration are Shell and Esso, and this was confirmed yesterday by a South African oil company source, who added that there was considerable optimism in oil circles.

The magazine reported that surveys conducted in mid-1982 by Norwegian and United States companies "positively establish the hydrocarbon potential of the basin". The geologists add that "former pessimism regarding the basin's liquid hydrocarbon potential should be revised".

It is understood that Gulf Oil prospected in the region for about 10 years, but established only that there were considerable deposits of gas.

Should oil exist in viable quantities — and the oil companies are optimistic that it does — then it clearly holds the potential for an economic boom which would be of considerable benefit for the whole region.

An oil find would undoubtedly bring vast quantities of Western capital, something which Mozambique dearly needs and which is one major reason why the Accord of Nkomati holds such great potential for that country — and indeed for the whole region.

Parliament and Politics

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Talks on power supply for SA

Political Staff

TOP-LEVEL talks which are expected to lead to the resuming of power supplies to South Africa from Cahora Bassa in Mozambique will be held in Cape Town today between representatives of the government's of South Africa, Portugal and Mozambique.

The Portuguese and Mozambique delegations arrived in Cape Town yesterday and had separate talks with the South African delegation headed by the Deputy Minister of Foreign Affairs, Mr Louis Nel.

Today and tomorrow the three delegations will have joint talks at the picturesque and historic Groot Constantia wine estate near the city.

The Portuguese delegation is headed by the Deputy Minister of Finance, Dr Antonio de Almeida, and the Mozambique delegation is led by the Minister of Mineral and Energy Affairs, Mr Antonio Branco.

The talks will be concluded on Wednesday.

Power supplies from Cahora Bassa have been disrupted by sabotage by rebels of the Mozambique National Resistance movement.

Investment

Portugal's considerable capital investment in the project makes it essential that power be sold to South Africa to pay for the project.

Last month Mr Nel led a South African delegation to Lisbon for talks with Portuguese leaders on Cahora Bassa.

The negotiations stemmed from contacts between South African and Mozambican committees established late last year during the initial stages of the improved relations between the two countries.

Many ghosts seen

IDON. — Almost every person who took part in itish survey about the supernatural claimed to e seen a ghost, and most said they had seen into future and believed they were telepathic, a nen's magazine reported yesterday.

he monthly Hers, which has a circulation of out 100 000, said 93 percent of readers who had ponded to a questionaire claimed to have seen e ghost or more, mostly in their own homes.

ighty-two percent said they had seen into the ure, 81 percent believed they were telepathic d 56 percent were certain they had lived before. Sapa-AP

Sasol trial to be held in secrecy

CAPE TIMES 13/3/84

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Own Correspondent

JOHANNESBURG. — A shroud of secrecy was placed over proceedings at the Rand Supreme Court yesterday at the start of a civil claim involving millions of rands which will be fought by some of the country's most prominent lawyers.

The claim is being brought by British businessman Mr Maurice Sellier, a Middle Eastern businessman Mr Ezra Nonoo, and Trade and Technology (Holding) Ltd, a foreign company.

Defendants in the case are Sasol Ltd, the Strategic Fuel Fund Association and the honorary consul general for Peru, Mr Helge Storch-Nielsen.

At the start of yesterday's proceedings, Mr F Cilliers SC, appearing for Sasol and the Strategic Fuel Fund Association, applied for the case to be held in camera, and, if contested, that the application also be held in camera.

The application was uncontested and the order was made by Mr Justice D A Melamet.

Everyone was ordered to leave the court during the proceedings except the parties involved — including representatives of corporate defendants — their legal representatives, witnesses called to testify, and staff of the court.

Also allowed in were legal representatives of the Minister of Mineral and Energy Affairs who were present to hold a watching brief.

Mr Justice Melamet further ordered that no publication of the pleadings, evidence or documents before the court, legal argument or judgment on the case be allowed.

As the parties left the court building during the lunch break, many of them hurried away from the group of photographers waiting outside and those who had pictures taken would not give their names.

Mr S Kentridge SC, Mr S Cohen and Mr P Solomon appeared for Mr Sellier, Mr Nonoo, and Trade and Technology.

Mr F Cilliers SC, assisted by Mr P Streicher, appeared for Sasol and the Strategic Fuel Fund Association. Dr W E Cooper SC, assisted by Mr J du Plessis, appeared for Mr Storch-Nielsen.

Galjoen: Further restrictions imposed

Environment Reporter

IN a further effort to protect seriously dwindling galjoen resources, the government has imposed strict bag limits and transportation restrictions in addition to banning sales of the Cape delicacy.

In a statement issued yesterday, the Deputy Minister of Environment Affairs, Mr John Wiley, called on the public to help conserve South Africa's diminishing line-fish resources, especially galjoen.

He said galjoen had been identified as a seriously threatened resource and would be treated as a priority.

Included in this strategy would be the launching of an enhanced research programme involving the National Line-Fish Programme of the South African National Committee for Oceanographic Research, several universities and the Sea Fisheries Research Institute.

Mr Wiley said it had been found that a sales ban on galjoen would not ensure adequate protection. He had therefore imposed a bag limit of six galjoen a person and restricted possession and transportation to six fish only.

A notice to this effect had been published in the Government Gazette of Friday, March 2.

Prince hits at media

Own Correspondent

LONDON. — Prince Edward took another tilt at the media at the start of

Koeberg — first nuclear reaction today

ARGUS 14/3/84 55P

By TOS WENTZEL

THE FIRST nuclear reaction in the Koeberg power station took place at 9.25am today, the Minister of Mineral and Energy affairs, Mr D W Steyn, announced in the Assembly this afternoon.

He said it was the culmination of a long period of investigation, construction, safety measures and procedures and was of great significance to South Africa.

"These events of today herald the era of nuclear power generation in South Africa," Mr Steyn said.

Milestone

"For South Africa, a country with only two indigenous energy resouces, coal and uranium, this is a milestone of the utmost importance.

"Where South Africa exported its production in the past, these two energy resources will in conjunction in future be utilised in the best interest of our country.

"It is particularly gratifying to know that, as far as the safe design and operation of Koeberg is concerned, South Africa is also a leader in this field and that these measures comply with world standards.

"The community can also rest assured that the AEC and Escom enjoy international recognition in this regard and that these measures will be maintained with the utmost vigilance.

Proud of them

"I therefore have great pleasure in congratulating the organisations and our engineers, scientists and other experts concerned with the project, on this notable achievement. We are proud of them.

"I am convinced that South Africa's energy future is ensured by the combination of oil-from-coal plants, coal-fired power stations and abundant uranium resources for electricity generation.

"I would like to call on everyone to accept this valuable asset for the Western Cape, its industries and people, and indeed for all South Africa, as a component of a balanced energy supply structure.

"The Government is convinced that nuclear energy, as all the other conventional and alternative energy carriers, needs to play a specific and rightful role in our energy economy in order to give expression to a successful energy policy."

Welcomed

The Leader of the Opposition, Dr F van Zyl Slabbert, welcomed the additional power which will be added to South Africa's national power grid.

Dr Slabbert said: "Naturally, the additional power available will be of benefit to the whole of South Africa.

"I believe it is important to keep a close watch on the potentially high cost of power to be generated by Koeberg and that any further establishment and location of nuclear plants in South Africa be very carefully evaluated.

"One must accept that the question of nuclear power is one that generates fears and a good deal of heated debate among the general public.

"This must be taken into account and everything should be done to ensure that every possible precaution is taken to protect the public from any danger which could arise from a nuclear power station and also to keep the public as informed as is possible about these matters."

Koeberg 'starts SA nuclear era'

55 Cape Times 15/3/84

Political Correspondent

THE government once again emphasized the safety and security measures at Koeberg after South Africa's first nuclear-power plant was started up.

The Minister of Mineral and Energy Affairs, Mr Danie Steyn, said in a special announcement to Parliament that the nuclear reaction in the first Koeberg reactor was started at 9.25am yesterday.

"Today's events usher in the era of nuclear power for South Africa," he stated proudly.

Mr Steyn also issued a subsequent statement about the reaction, the advantages of nuclear power and Koeberg's safety measures. Escom gave technical details of the reaction itself.

The Escom statement said the reaction would be maintained at a low level known as "criticality" while further tests and measurements were done pending further tests at higher levels of activity.

Licence

Full-scale commercial power generation would start once a licence to do so had been issued by the Atomic Energy Corporation (AEC).

"Connection to the power grid is planned for the middle of April with full power generation by the middle of July."

Both in his parliamentary announcement and his subsequent statement, Mr Steyn was at pains to allay fears of people in the Western Cape that Koeberg presented a nuclear threat to the region.

"It is particularly reassuring to know that, as far as the safe design and operation of Koeberg are concerned, South Africa is in the forefront and compares with the best in the world," he said.

"The public can be assured that the AEC and Escom are recognized internationally and that safety standards will be maintained meticulously."

'No bomb'

Mr Steyn said in his statement that it was impossible for Koeberg "to explode like a nuclear bomb". The most important potential risk was the "highly unlikely" accidental release of radioactive elements.

"The assurance can be given that Koeberg has been constructed according to a dependable design and dozens of reactors with an impeccable safety record are in operation in Europe."

Control and safety measures had been formulated after an exhaustive assessment of the risk potential of nuclear installations.

The most stringent criteria based on international standards were imposed to ensure Koeberg's safe design, construction and operation.

"These measures have been proved to be efficient by the impeccable safety record of the international nuclear industry, unmatched by that of any other comparable industry."

Lightning

Mr Steyn said the risk factor of a nuclear power plant was "no more than one additional death per 100-million people per year" in the vicinity of the plant.

This was 20 times smaller than the risk of anybody being killed by lightning in South Africa and 15 000 times smaller than the risk of being run over and killed by a motor vehicle.

Standards adopted in South Africa were now being implemented elsewhere in the world, Mr Steyn said.

The AEC and the Council for Nuclear Safety were satisfied with the emergency plan to ensure the safety of the local community should a large amount of radioactive material be released. This plan would be improved on a regular basis.

'Asset'

He urged people in the Western Cape to accept Koeberg as an asset to the region, its industries and its people. It would end the area's dependency on coal-generated electricity from the Eastern Transvaal and while its equivalent coal consumption would have been 6-million tons a year.

While the announcement of Koeberg's operation was welcomed by all parties in Parliament, the leader of the Opposition, Dr Van Zyl Slabbert, added that a close watch should be kept on Koeberg's costs and safety procedures.

The future establishment and location of additional nuclear plants in South Africa should be very carefully evaluated, Dr Slabbert said.

13/3/84

Cahora Bassa talks fail

298

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Political Staff

SOUTH Africa, Mozambique and Portugal failed to reach agreement in Cape Town yesterday on the restoration of power supplies to South Africa from the Cahora Bassa hydroelectric project in Mozambique.

It is understood there was disagreement over the price to be paid for power by South Africa.

Portugal is insisting on a 200 percent increase in the price paid for power by South Africa. The price has not been changed since the project started generating power in 1977.

Contract

Cahora Bassa has the potential to supply around eight percent of South Africa's needs. Two days of trilateral talks ended at Groot Constantia yesterday.

In a statement afterwards, the Deputy Minister of Foreign Affairs, Mr Louis Nel, said the three delegations were in the process of negotiating two documents relating to Cahora Bassa.

One was an agreement between the three governments regulating the "broad and basic principles applicable", and the other was a contract between Escom and a supply company designated by Portugal and Mozambique.

The next round of trilateral talks will be held in Maputo on a date to be announced.

2 The Cape Times, Friday, March 16, 1984

Koeberg — masterpiece or costly mistake?

By DI MEEK
Environment Reporter

AT 9.25am on Wednesday this week, 10 years after the first contracts were signed, a nuclear reaction was started in the first reactor of the Koeberg nuclear power station.

The licensing for the first reactor to start up, or "go critical", was issued by the Atomic Energy Corporation (AEC) on schedule earlier in the week after being approved by the independant Council on Nuclear Safety.

"Criticality" will be followed by another long testing phase during which the reactor will be kept at a low power to ensure that systems are performing to safety regulations.

More licences have to be issued before synchronization with the Escom power grid in mid-April and full power generation by the first reactor is expected by mid-July.

Synchronization of the second unit with the national grid is due by December.

Acclaimed as one of South Africa's most outstanding civil engineering achievements of the decade, Koeberg nonetheless offers a perfect target for terrorist attack.

And while Escom gave the assurance that the plant would be the safest of its kind in the world, a series of four explosions rocked the R2 000-million plant in December 1982. The banned African National Congress claimed responsibility, and commissioning of the first reactor was set back by an estimated nine months.

This and the very real fear of a nuclear-related accident at the plant, although said to be less than one in a billion, have caused an escalation of opposition to the scheme.

Ironically, when the project was first mooted the Cape Town City Council, ratepayers' associations, farmer groups, churches and local provincial and central government were all in favour of the scheme.

But attitudes quickly changed after the infamous American nuclear disaster at Three Mile Island.

Public and offical concern demanded that a comprehensive emergency plan be devised.

An essence of the plan appeared as an advertisement in Cape Town newspapers a fortnight ago, and gave Capetonians their first taste of what it would be like living 30km from a live nuclear reactor.

It warned that families might have to shelter in their homes, close all doors and windows and seal all vents. In exceptional cases evacuation might be necessary.

It said that while it was extremely unlikely that Capetonians would ever be exposed to enough radioactive material from Koeberg to affect their health, potassium iodate tablets, should be taken "before exposure" as an effective antidote to one of the harmful elements, radioactive iodine, which attacks the thyroid.

Objections to certain aspects of the emergency plan have been lodged by the Cape Town City Council and the anti-nuclear group, Koeberg Alert.

Were Koeberg to generate electricity more cheaply than coal-fired power stations, the saving might have provided some consolation for its proximity to Cape Town.

But in a shock disclosure last week it was learnt that the cost of generating power at Koeberg had been estimated at 300 percent higher than the present cost of power from the country's coal-fired stations.

Koeberg's estimated costs per kilowatt/hour would be 5,6c per kilowatt in comparison to the 1,97c for coal-fired power stations in 1983.

The disclosures have dashed any economic argument for South Africa's only nuclear plant and shaken the credibility of Escom, who for years have said that nuclear power would be "too cheap to meter."

However, since the 1982 sabotage attack requirements regarding physical security, as well as licensing requirments were drastically intensified.

Speaking in Parliament earlier this year, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said everything possible had been done by Escom and the two controlling bodies — the AEC and the Council on Nuclear Safety — to ensure the safety of the plant and the public.

Yet Koeberg remains, and while it may be easy to question the wisdom of erecting it at all, there are, after all, thousands of people who are prepared to work there.

Cape Times 16/3/86

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Anti-nuclear power struggle 'not lost'

By **PETER DENNEHY**

THE struggle against nuclear power was not lost, a speaker at a meeting organized by Koeberg Alert said last night.

About 300 people attended the meeting at the Rondebosch Town Hall.

A resolution was passed with only two votes against it at the end of the meeting.

It called on the Atomic Energy Corporation to withdraw the operator licence for the Koeberg Station from Escom until emergency procedures had been tested in an exercise involving all people at risk.

Other conditions to be met included:

- ●Escom should not control the emergency plan.
- ●The public must know the plans and the wind pattern data on which they were based.
- ●A permanent solution for nuclear waste must be made public.
- ●There must be assurances that these conditions apply to any other nuclear power development in South Africa, and that the construction of other plants must be preceded by environmental impact studies and public consent.

Mr Derek Yach chaired the meeting. The speakers were Mr Mike Kantey, former secretary of Koeberg Alert; Ms Carol Bower, a Cape Town feminist; Mr John Venn, a chemical engineer and spokesman for Koeberg Alert; and Ms Sue Nicholson, a member of the organization.

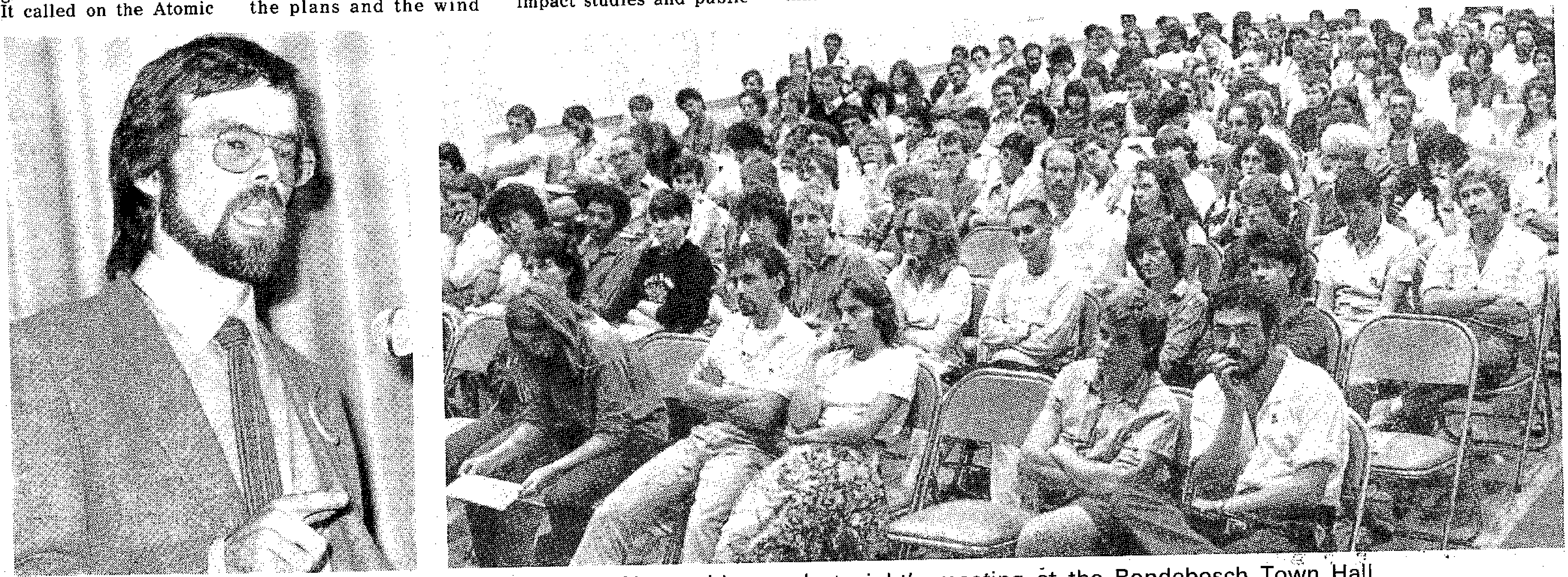
Mr Kantey remarked that on the admission of the Minister for Mineral Affairs, Mr 'Pietie' du Plessis, Koeberg energy cost 5,6c a kilowatt-hour to produce.

Yet Mr Jan Smith, chairman of Escom, said it would be bought from the national grid at 4,4c a kilowatt-hour. It seemed Koeberg would be run at a loss, said Mr Kantey.

Ms Bower said the Koeberg station was a symptom and symbol of patriachy.

Mr Venn tackled the dangers the station posed to Cape Town, and Ms Nicholson spoke of the realities of living in a nuclear state, and legal aspects.

The overall feeling was that the battle was not yet lost, even though the station had come onstream.



Mr Mike Kantey, former secretary of Koeberg Alert, addresses last night's meeting at the Rondebosch Town Hall.

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Reporter

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Withdraw Koeberg licence plea

AG45/16/3/84 **Staff Reporter** 55

THE Atomic Energy Commission is being ~~called~~ on to withdraw Escom's operating licence for Koeberg nuclear power station until the emergency plan is controlled by a body independent of Escom.

This was part of a resolution adopted by more than 300 people at a public meeting called by Koeberg Alert in Rondebosch last night.

Other conditions which should be attached to Escom's operating licence were:

- That emergency procedures be tested in an exercise involving people.
- Full public disclosure of the emergency plan and the wind paths upon which it is based.
- A permanent solution, to be made public, for disposing high and low-level nuclear waste from the plant.

Chemical engineer and Koeberg Alert member Mr John Venn told the meeting the greatest risk peaceful nuclear power posed was the proliferation of nuclear weapons.

Reprocessing of high-level nuclear waste produced plutonium which could be used in the production of nuclear weapons.

Although the Government had denied that it would develop nuclear weapons, it had not signed the Nuclear Non-Proliferation Treaty.

Referring to the Three Mile Island nuclear accident, Mr Venn said previous theoretical calculations had put the chances of an accident at one in 20 000.

However, a commission appointed to investigate the accident concluded that, given the level of operator training, it was inevitable.

Koeberg Alert had "serious reservations" about Escom's emergency plan, some of which were shared by the city council, Mr Venn said.

"We doubt whether any evacuation scheme could work, given the possibility of panic and inadequate roads.

"We fear that Escom knows there is a large risk of panic so they may not order evacuation even though this may be neccessary."

PETROLEUM BILL

Curtain of secrecy

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FM 16/3/86

As the mysterious court case involving Sasol and the Strategic Fuel Fund Association (SFFA) got under way this week, government moved to further tighten secrecy about SA's fuel supplies.

The Petroleum Products Amendment Bill, tabled in Parliament, extends the already wide-ranging prohibition on the publication of details about oil supplies. It may also have the effect of preventing the publication of MPs' parliamentary speeches on the subject.

Although officials deny the new Bill will in any way infringe on the Powers and Privileges of Parliament Act (under which MPs in the House have total freedom of speech, subject only to the Speaker's authority), opposition spokesmen are concerned it could effect the protection the press enjoys in reporting parliamentary statements.

John Malcomess, the Progressive Federal Party's spokesman on mineral and energy affairs, points out that there have been attempts in the past to limit press reporting on parliamentary disclosure of energy matters.

Last year, then Minister of Mineral and Energy Affairs Pietie du Plessis tried to prevent press reporting of Malcomess's speech revealing details of the *Salem* affair.

The *Salem* matter has itself resurfaced. Minister of Mineral and Energy Affairs Danie Steyn has confirmed that a secret government report on the matter has been referred to the State attorneys for further investigation. Inevitably this has led to speculation that prosecutions may be pending against people in SA.

The opposition is concerned that government reaction to embarrassing revelations about energy matters is simply to rush further laws on secrecy into law. They point

Continued on page 51

out that, however efficient the SFFA may be in obtaining oil supplies, its record, so far as this is known, is decidedly spotty when it comes to getting involved in deals that lead to unfavourable publicity.

Not only was it the organisation that purchased the stolen oil from the *Salem* (albeit in all innocence), but it is also one of the prime defendants in the mysterious case before the Transvaal Supreme Court in which largely overseas interests are suing Sasol, the SFFA and others.

Although the Minister is not involved in the case, he is being represented in court by lawyers appointed by the State attorneys, who are empowered to "intervene" if the interests of the Department of Mineral and Energy Affairs require it.

The identities of the plaintiffs are known, but the interests they represent remain a mystery. Maurice Sellier, in whose name the case is being brought, is said to be a British barrister — but his name does not appear on the British bar list. Nor is Trade and Technology Holdings (Ltd), a company involved in the case, listed by the British companies' office.

Lawyers point out that the Sasol/SFFA case is not the only one involving huge sums of money being heard in absolute secrecy by SA courts. The case in which Johannesburg businessman Taki Xenopolous is suing free-spending Italian expatriate Marino Chiavelli for some R70m is being heard in the same secrecy.

The opposition does not object to secrecy necessary to protect SA's fuel supplies. But, in the light of the *Salem* case and of talk surrounding the court cases, there is inevitably the suspicion that secrecy is cloaking inefficiency — or worse.

R100m warning to Chiavelli

(55) S. Times 18/3/84

By NEIL HOOPER

BILLIONAIRE Mr Marino Chiavelli will be ordered to pay Fontana food boss Mr Taki Xenopolous more than R100-million if he does not comply within 60 days with an order issued by the Rand Supreme Court this week.

The order requires the 55-year-old Italian-born businessman to "further and better" supply Mr Xenopolous with documents relevant to the case.

New court order in secret hearing

The court ordered Mr Chiavelli to pay the costs of Mr Xenopolous's application and also the cost of three legal counsel, said to total about R250 000.

This is the latest round in the mammoth secret court battle between the two businessmen which started in July, 1981, when Mr Chiavelli was arrested pending the action Mr Xenopolous intended bringing against him.

At the time, when Mr Chiavelli successfully applied for his release, Mr Justice Coetzee ruled that the hearing should be secret in terms of the National Supplies Procurement Act.

Faint outlines of the secret deal forming the basis of the dispute emerged in the Rand Supreme Court file of the application by Mr Chiavelli for an order to set aside the earlier order for his arrest.

The original order granted to Mr Xenopolous's company, Fontana Holdings, forms part of the file.

It reads: "Order directing the Deputy Sheriff to arrest the respondent in order to found the jurisdiction of the Court in an action to be instituted by the applicant against the respondent in which the applicant will claim payment of R45 081 600."

The order said Mr Xenopolous would also claim, for 16 months from and including July 1981, "a commission" of two percent of the value of all further supplies of the goods which formed the basis of the action.

Mr Chiavelli has denied that he is indebted to Fontana Holdings.

In August, 1982, Fontana sucessfully applied to the Rand Supreme Court for an order compelling Mr Chiavelli to make available relevant documents "relating to any matter in said action and which are or have at any time been in the possession or control" of Mr Chiavelli.

TAKI XENOPOLOUS
R100-million claim

In granting the order Mr Justice D O Vermooten said Mr Chiavelli had shown a "reprehensible disregard" for the rules of the court.

Although the hearing was in camera, Mr Justice Vermooten made the papers used in the application available for publication.

These showed that among the documents sought by Fontana were some dealing with the affairs of Mr Chiavelli's Italian Forestal group of import-export companies.

The application this week by Fontana for "further and better discovery" of relevant documents was a sequel to this action.

The hearing was again held in camera, but Mr Justice Margo ruled that certain sections of the judgment could be disclosed.

They showed that the Fontana application had been successful and that Mr Chiavelli had been ordered to make "further and better discovery" of documents within 60 days.

MARINO CHIAVELLI
Faced with new order

If this were not done Fontana would be entitled to judgment in the main action, claiming more than R100-million including interest on the original R45-million claim plus costs.

The court also ruled that Mr Chiavelli should pay the cost of three of the four counsel who appeared for Fontana in this week's application.

South African legal expert Professor S A S Strauss of the University of South Africa, said costs were normally ordered for only two counsel.

The order for costs of three, coupled with that of further and better discovery, indicated that the court had not been impressed with the way Mr Chiavelli had complied with the earlier order.

"It is clearly a reprimand to Mr Chiavelli," he said.

SUNDAY EXPRESS March 18, 1984

SS

SA SUPPLY 'SECRETS' ARE COMMON KNOWLEDGE OVERSEAS

Oil: What THEY know about what WE may not know

By MARION WHITEHEAD

THE tough new Bill introduced in Parliament to keep South Africa's oil transactions secret will have no effect overseas — they already know where we get our oil.

It is one of the worst-kept secrets of the decade as published lists of companies and tankers breaking United Nations sanctions against selling oil to South Africa are widely available overseas.

Nevertheless, the Petroleum Products Amendment Bill to be debated in Parliament, probably this week, seeks to place South Africans in an even darker position than they already are and could prevent scandals like the Salem fraud — which cost taxpayers more than R30-million — from reaching the public.

The scandal, which involved the scuttling of the tanker Salem after it had sold its cargo twice (to South Africa and to Shell), took four years to reach the South African public despite an outcry — and major court actions — abroad.

Salem crooks

A cryptic report outlining South Africa's dealings with the Salem crooks was published in the Sunday Express but could give no indication that it concerned oil, and the story did not come out until it was taken up in Parliament.

This type of occurrence has led some academics to emphasise the need for a balance between strategic needs for secrecy and public accountability to prevent corruption.

The Progressive Federal Party, which will oppose the Bill, points out that the government's record in this area gives no cause for confidence.

"A distinction should be drawn between the national interest and the interests of the National Party," Mr Brian Goodall, PFP mineral and energy affairs spokesman, said this week.

Another aspect of the secrecy is reflected in the civil court case — thought to involve the biggest claim in South African history — brought against Sasol Limited, the Strategic Fuel Fund Association and the honorary Consul-General for Peru, Mr Helge Storch-Nielsen, in the Rand Supreme Court this week by British consulting lawyer, Mr Maurice Sellier, a foreign company, Trade and Technology (Holding) Limited, and a Middle-Eastern businessman, Mr Ezra Nonoo.

Mr Justice D A Melamet has ordered that the case be held *in camera* and that none of the proceedings, including the pleadings and judgment, may be published. Legal representatives are believed to have had to sign undertakings not to reveal details of the claim.

The first steps of another civil case, said now to involve more than R100-million, have been taken in the same building. It involves two of the country's richest men, Mr Marino Chiavelli and Mr Taki Xenopoulous, and is also subject to a secrecy ruling.

The public have no way of knowing whether the facts are being kept hidden because of strategic security reasons, or because the huge amounts of money at stake have led to corruption.

Cover bungles

Professor Michael Hough, director of the Institute for Strategic Studies at the University of Pretoria, cautioned in an interview this week that excessive secrecy could be used by the government to cover up bungles.

It could also be used to buy oil cheaply and sell expensively to the taxpayer, and "that would not be right".

He suggested some form of indirect public accountability such as a select parliamentary group.

Dr Peter Vale, director of research at the Institute for International Affairs at the University of the Witwatersrand, said there was no need for further secrecy on petroleum supplies as there were sufficient Acts to cover sensitive information.

He said the Bill raised the question of whether these Acts were becoming a matter of prestige and pride for the bureaucracies involved, where each department wanted its own legislation.

"They get caught up in putting in their own Act for their own territory, to prove their loyalty to the state."

Dr Vale warned that there was the possibility of corruption arising out of this secrecy.

"Besides, everyone knows it's difficult to keep secrets."

Sasol declined to comment on whether there was any need for more secrecy.

The Department of Mineral and Energy Affairs side-stepped questions on the the 'secrecy Bill' and the fact that much of the protected information is widely known overseas. A spokesman said any comment on the draft Bill would be premature.

'Oil Tankers to South Africa' is banned in this country. It is the title of a report sent to the governments of all countries that have anything to do with shipping, the United Nations special committee on apartheid, oil companies around the world, and the international Press.

Apply sanctions

It was compiled by the UN-linked Shipping Research Bureau in Amsterdam for 1979 and updated for 1980/81.

The Shipping Research Bureau was founded in 1980 after a UN seminar in Amsterdam decided to find out how South Africa still managed to get oil despite the fact that all major suppliers in OPEC had officially agreed to apply sanctions.

The bureau was formed by two anti-apartheid groups, the Holland Committee on South Africa and Kairos, a group of Christians against apartheid.

Another source of information on South Africa's oil connections is the respected newsletter, Africa Confidential, edited by Charlies Meynell in London.

An article on the subject was published in Africa Confidential in January last year and listed the names of companies and countries said to be involved in supplying oil to South Africa. It also named some people as dealers who had made their fortunes out of this trade and subsequently settled in South Africa.

Africa Confidential has a limited circulation among private subscribers, thought to be about 1 200.

So what is the purpose of the secrecy laws? The unanswerable question is whether the South African veil of secrecy, while it does not hide the oil trade from the country's enemies, might not be hiding other things from the taxpayers.

FRESH SALEM PROBE: CHARGES MAY FOLLOW

By KITT KATZIN

THE Cape Attorney-General's office is to begin a fresh investigation into the R37-million Salem fraud — and there is a chance that charges of fraud and theft may be brought against South African businessmen and foreigners living abroad.

Mr Danie Steyn, the Minister of Mineral and Energy Affairs, has handed a secret government report on the fraud to Mr Niel Rossouw, the Attorney-General of the Cape.

Mr Rossouw said he had assigned one of his senior officials to conduct the investigation and that it would be given top priority.

The official would begin studying the file and supporting documents and other evidence within the next week.

A spokesman for Mr Steyn said yesterday Mr Rossouw would deal with the file "at his discretion".

Mr Rossouw said certain people might have to be consulted again.

Asked how long the investigation would take, he said it would depend on the nature of the probe and the availability of people.

"Some of them may be abroad and others difficult to contact," Mr Rossouw said.

"I believe it will take some time."

The government's report was drawn up by Mr Pieter Swanepoel, a former senior police officer, who was seconded to Mr Steyn's department.

Meanwhile, in terms of a Bill published in Cape Town, the government is extending its control over the acquisition of oil supplies and tightening the prohibition on publication of any information on the subject.

Petrol increase: Just who profits?

JUST who gets the lion's share of the cake when the petrol price goes up is a closely guarded secret in South Africa. And even if you were to hear what the mouse's share was, it would be an offence to tell.

Mere snippets of information may be gleaned from Ministers in Parliament when they announce price increases but they speak in the best give-nothing-away style and invoke big words to reconcile the public to paying more to fill their tanks.

An unfavourable rand-dollar exchange rate was one of the villains blamed for the 1,5c increase due to take effect on April 1 on the Reef.

At the same time the government announced it would sell R550-million of crude oil from South Africa's strategic stocks because of the current relatively favourable buyers' market for crude oil.

Selling cheaper, old oil stocks at today's larger prices to local refineries means a handsome profit for someone. But who?

The refineries were hoping they would get a look in. A spokesman for the Department of Mineral and Energy Affairs was saying details had not yet been sorted out, but the oil would go at current prices and not at cost.

But finally, nobody was allowed to know just who got what cut.

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Sunday Express 18/3/84

it, that comes from scripture," he said.

Dr Boesak said the terms of unity adopted by the white NGK meant nothing if the church wanted to remain white.

"They have been talking about unity and open membership for a long time now," he said.

"There cannot be four racially divided churches at the grassroots level while you have an ecumenical synod of Dutch Reformed Churches which will meet at

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Yes, admits Steyn, Blaauw was met

By MARTIN WELZ

THE government this week confirmed that meetings took place last year between Brigadier Jan Blaauw, representing an international syndicate now suing Sasol and others, and the Minister and officials of the Department of Mineral and Energy Affairs — and that they were official.

The Minister of Mineral and Energy Affairs at the time was Mr P T C du Plessis, who has since become Minister of Manpower.

Last week his successor as Minister of Mineral and Energy Affairs, Mr Danie Steyn, told the Sunday Express he had no knowledge of such meetings having taken place.

He was quoted as suggesting that if there had been such meetings, they might not have been "departmental" but might have been attended by Mr du Plessis and the two officials in their personal capacities.

"Since publication of the Sunday Express report, it has been confirmed with Mr du Plessis and the officials involved that all discussions with Brig Blaauw were in their official capacities only," Mr Steyn said this week in a statement issued by his department.

The statement added, however: "In the (Minister's) telephonic discussion with the Sunday Express's reporter, it could never have been his intention to create the impression that the Honourable Mr P T C du Plessis, or officials of the department could, in their personal capacities, have had discussions with Brigadier Blaauw.

"It would be appreciated if the misunderstanding which has arisen could be corrected," it concluded.

The Sunday Express accepts that the Minister did not intend to create the impression that his words conveyed. The report was based on the following exchange extracted from the Sunday Express record of the interview:

Sunday Express. "Brig Blaauw is reported to have denied any involvement with the syndicate suing Sasol, or in the case. We, however, have reliable information that he in fact met Mr P T C du Plessis and at least two senior officials in your department, Mr Sarel du Plessis (the director-general) and Dr Wessel van Wyk (one of his deputies) on several occasions last year to discuss the matter on behalf of the syndicate".

Mr Steyn: "My department is absolutely not involved in the matter. I have no knowledge of Brig Blaauw's involvement or non-involvement."

Sunday Express: "We know at least six such meetings took place with Minister du Plessis and the officials in your department's offices in Pretoria."

Mr Steyn: "It could, I believe, possibly have been in their personal capacities, but not departmentally."

Top Irish guerrilla captured

DUBLIN — Dominic McGlinchey, Ireland's most wanted guerrilla, was captured after a shootout with police yesterday — St Patrick's Day.

McGlinchey, 29, was Irish National Liberation Army chief-of-staff, and boasted of killing 30 people and taking part in more than 200 bombings and shootings. — Sapa-AP.

55

Oil trapped on seabed liftable?

Chief Reporter

THE chances of recovering a trapped oil cargo worth about R15-million, lying on the ocean bed in 400 metres of water off the Cape West Coast, are being studied by several unnamed companies overseas and in South Africa.

This was disclosed by government as well as private sources in Cape Town yesterday.

If undertaken, the project would be one of the deepest oil-salvage attempts ever made.

The Gulf crude oil, the volume of which has been officially estimated at between 60 000 and 75 000 tons, is trapped in the sunken stern section of the Spanish supertanker Castillo de Bellver, 25 nautical miles west of Yzerfontein.

Studies now in progress are of the technical as well as the economic feasibility of such a project, in which highly-specialized deep-sea diving and recovery equipment would be needed.

The Director-General of Transport, Mr A B Eksteen, said yesterday that his department had received "a few inquiries" from parties with an interest in recovering the sunken oil cargo, but that these people had been referred to the owners or underwriters of the trapped oil.

"While we would not stand in the way of any such project, we would require substantial guarantees that there would be no pollution of the coastline during or after the recovery process."

South-easter

● The Castillo de Bellver, bound for Spain from the Persian Gulf with a cargo of 250 000 tons of crude, broke in two in a sea of fire off the West Coast last August.

About 90 000 tons of spilt oil was taken well away from the coastline by unseasonal south-easterly winds and by the Benguela Current, and the mostly-submerged bow section containing an estimated 60 000 tons of oil was towed seaward by the giant salvage tug John Ross and sunk by explosives in more than 2 000 metres of water 100 sea-miles west of Cape Columbine.

Not leaking

Replying to questions by Mr D J N Malcomess (PFP, Port Elizabeth Central) in the Assembly this month, the Minister of Transport Affairs, Mr Hendrik Schoeman, said the sunken stern section of the tanker had not been leaking oil since early February.

Mr Schoeman said an estimated 60 000 to 75 000 tons of oil remained in this section. He added that Kuswag vessels and fishing boats were constantly on the lookout for signs of oil pollution.

(55) Hansard Q. Col. 690 21/3/84

Oil/gas

*8. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

(1) What was the total amount spent in 1983 on prospecting for oil on land and at sea;

(2) whether any (a) oil and (b) gas was discovered in that year; if so, where in each case;

(3) whether prospecting was restricted to South African (a) territory and (b) territorial waters; if not, in what other areas did prospecting take place?

The MINISTER OF NATIONAL EDUCATION (Reply laid upon the Table with leave of House):

(1) During the calendar year 1983 Soekor conducted prospecting for oil in the offshore areas only and the total cost amounted to R82,61 million. On land a private concession-holder spent R284 856.

(2) (a) None.

(b) *The results are as follows:*

Borehole	Approximate location	Results
E—G3	138 km South-West of Mossel Bay	Gas occurrence
JC—C1	28 km North-East of Durban	Dry
F—AF1	97 km South of Mossel Bay	Gas occurrence
JC—B1	80 km North-East of Durban	Gas occurrence
E—S1	82 km South-West of Mossel Bay	Gas occurrence with potential
HA—D1	37 km South-West of Port Elizabeth	Gas occurrence
E—S2	82 km South-West of Mossel Bay	Dry
E—S3	80 km South-West of Mossel Bay	Gas occurrence
E—G5	138 km South-West of Mossel Bay	Dry
GB—H1	75 km South-East of Plettenberg Bay	Dry
E—Q1	174 km South-West of Mossel Bay	Dry
A—Q1	70 km South-East of Plettenberg Bay	Gas occurrence with potential
F—A10	87 km South of Mossel Bay	Gas occurrence with potential
F—A11	86 km South of Mossel Bay	Dry

(3) (a) and (b) Yes.

Mr Kirsten said the workforce had been halved at the 350 biggest nurseries in the 17 000 sq km Rand Water Board area. They had contributed R100 million to the industry's R200 million turnover before the drought.

Least affected

Some firms have diversified to survive. Many are concentrating on pot plants, landscaping and other areas which are least affected by the drought.

"We have advised members to diversify and concentrate on the most profitable markets," said Mr Kirsten. "People won't buy for their gardens because they have been destroyed. But more and more are buying for their flat or balcony gardens, or for inside the home."

He said nurserymen generally, especially the 400 bigger organisations which are members of the South African Nurserymen's Association, are "weathering the storm" — for the moment.

"The bigger ones are putting down their own boreholes and concentrating on landscaping and other earth works. But the coming winter will be the crunch. A couple of nurseries in the Magaliesberg area have only two weeks of water left."

The drought-hit parts of the country are the ones where most nurseries were based. There were 1 218 in the Transvaal: 991 in the Cape; 407 in Natal and 105 in the Free State.

Mr Kirsten said the survivors of the drought would benefit from an expected boom in sales when people scramble to rebuild their destroyed gardens.

Fashion festival

A feast of the colours, fabrics and designs we can expect this winter were presented at a fashion festival in Johannesburg last night.

Television personality Dorianne Berry acted as compere to the 25 models who displayed about 200 garments.

Hard hats are one way of warding off blizzards and biting winds, as models (from top) Shirley Gains, Angela Bowman and Dayle Broderick demonstrated.

● Picture by Sarel van den Berg.

'Koeberg pills' are issued

CAPE TOWN — A fair number of Capetonians have been issued with potassium iodate tablets —

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Star 22/3/84

Escom announces consumer forum

By Sol Makgabutlane

Regular meetings are to be held between the Electricity Supply Commission (Escom) and representatives of commerce and consumer bodies to improve communication between Escom and electricity users.

The establishment of a forum was announced last night by Escom's senior general manager, Mr Dave van der Walt, after a three-hour meeting with consumer and commerce representatives.

Mr van der Walt later said: "The whole idea is to get closer to our consumers to discuss common problems. We believe our purpose is to serve them."

Mr van der Walt said Escom had in the past been able to project the growth of South Africa's energy requirements with a high degree of accuracy, basing its calculations on the experience of past decades. This method, however, no longer proved satisfactory and Escom thought a more efficient, less intermittent communication with its main consumers would encourage a free flow of information.

"The forum is therefore seen as an important step in this direction. We consider it as a potentially powerful means of communication through which it can present the information on which its long-term programmes are based. Whereas in the past individual consumer bodies have met Escom on an ad-hoc basis, now main consumers will be briefed on current matters of concern and given the opportunity to express their views."

Mr Randolph Forbes, Escom's assistant general manager (finance), stressed the importance of information by electricity users on the expansion and the quality of supply required for their future growth.

The new forum will meet four times a year.

(55) Hansard Q. Col. 728 23/3/84

Household gas

*5. Mr P C CRONJE asked the Minister of Mineral and Energy Affairs:†

(1) Whether household gas is subject to price control; if so,

(2) whether the price thereof was increased recently; if so, (a) by what percentage and (b) when?

†The DEPUTY MINISTER OF INTERNAL AFFAIRS (for the Minister of Mineral and Energy Affairs):

(1) No.

(2). (a) and (b) Although the price of household gas is not subject to control, the Department of Mineral and Energy Affairs has been advised by the oil industry that the price increased by 5,0 c/ℓ or by 9,8 per cent in Johannesburg on 12 March 1984.

Division	Appointments	Resignations
Administrative	822	347
Clerical	3 158	1 444
Professional	1 712	1 174
Technical	1 017	373
General A	337	220
General B	6 426	3 466
Total	13 472	7 024

Gold/other foreign exchange reserves

540. Mr J J B VAN ZYL asked the Minister of Finance:†

What was the level of South Africa's net gold and other foreign exchange reserves as at (a) 30 June 1983, (b) 30 September 1983, (c) 31 December 1983 and (d) the latest specified date for which figures are available?

The MINISTER OF FINANCE:

(a) R665 million;

(b) R518 million;

(c) R581 million;

(d) the figure as at 31 December 1983 is the latest available.

Private short-/long-term funds

541. Mr J J B VAN ZYL asked the Minister of Finance:†

What was the net flow in respect of private (a) short-term and (b) long-term funds recorded on the capital account of the balance of payments in each month of 1983?

The MINISTER OF FINANCE:

(a) First quarter 1983: –R304 million
Second quarter 1983: –R956 million
Third quarter 1983: +R864 million
Fourth quarter 1983: +R493 million

(b) First quarter 1983: –R403 million
Second quarter 1983: –R124 million
Third quarter 1983: –R896 million
Fourth quarter 1983: –R135 million

Private capital movements are compiled on a quarterly basis only.

Forward exchange cover

543. Mr J J B VAN ZYL asked the Minister of Finance:†

Whether the Treasury has suffered any losses in respect of the forward exchange cover provided by the South African Reserve Bank; if so, what amount was paid out in respect of such losses from the beginning of the current financial year to the latest specified date for which figures are available?

The MINISTER OF FINANCE:

Yes. The net consolidated amount owed to the Bank in terms of section 17D.(1) of the South African Reserve Bank Act, 1944 (Act 29 of 1944), for the period 1 April 1983 to 29 February 1984 amounted to R598,4 million (unaudited).

Short-term foreign liabilities

544. Mr J J B VAN ZYL asked the Minister of Finance:†

What was the amount of South Africa's short-term foreign liabilities as at (a) 30 June 1983, (b) 30 September 1983, (c) 31 December 1983 and (d) the latest specified date for which figures are available?

The MINISTER OF FINANCE:

(d) South Africa's foreign short-term liabilities as at 31 December 1982 (latest available figure) amounted to R8 231 million.

(a) (b) and (c) Fall away.

Hansard Q. Col. 745
23/3/84

(55)

Nuclear Non-Proliferation Treaty

712. ~~Mr~~ R R HULLEY asked the Minister of Foreign Affairs:

(a) (i) Which countries had signed the Nuclear Non-Proliferation Treaty by the latest specified date for which the information is available and (ii) when did they sign it in each case and (b) which countries had not signed this treaty by that date?

The MINISTER OF FOREIGN AFFAIRS:

(a) (i) and (ii) Latest information (19 March 1984) indicates that the following countries have signed, ratified and/or acceded to the Nuclear Non-Proliferation Treaty:

Country	Date of Signature	Date of Ratification/Accession
Afghanistan	1 Jul 1968	4 Feb 1970
Antigua and Barbuda*	—	—
Australia	27 Feb 1970	23 Jan 1973
Austria	1 Jul 1968	27 Jun 1969
Bahamas	—	10 Jul 1973 acc.
Bangladesh	—	27 Sep 1979 acc.
Barbados	1 Jul 1968	21 Feb 1980
Belgium	20 Aug 1968	2 May 1975
Benin	1 Jul 1968	31 Oct 1972
Bolivia	1 Jul 1968	26 May 1970
Botswana	1 Jul 1968	28 Apr 1969
Bulgaria	1 Jul 1968	5 Sep 1969
Burundi	—	19 Mar 1971 acc.
Canada	23 Jul 1968	8 Jan 1969
Cape Verde	—	24 Oct 1979 acc.
Central African Republic	—	25 Oct 1970 acc.
Chad	1 Jul 1968	10 Mar 1971
China, Republic of	1 Jul 1968	27 Jan 1970
Colombia	1 Jul 1968	—
Congo, People's Republic of	—	23 Oct 1968 acc.
Costa Rica	1 Jul 1968	3 Mar 1970
Cyprus	1 Jul 1968	10 Feb 1970
Czechoslovakia	1 Jul 1968	22 Jul 1969
Democratic Kampuchea	—	2 Jun 1972 acc.
Democratic Yemen	14 Nov 1968	1 Jun 1979
Denmark	1 Jul 1968	3 Jan 1969
Dominican Republic	1 Jul 1968	24 Jul 1971
Ecuador	9 Jul 1968	7 Mar 1969
Egypt	1 Jul 1968	26 Feb 1981
El Salvador	1 Jul 1968	11 Jul 1972
Ethiopia	5 Sep 1968	5 Feb 1970

Country	Date of Signature	Date of Ratification/Accession
Fiji	—	14 Jul 1972 acc.
Finland	1 Jul 1968	5 Feb 1969
Gabon	—	19 Feb 1974 acc.
Gambia	4 Sep 1968	12 May 1975
German Democratic Republic	1 Jul 1968	31 Oct 1969
Germany, Federal Republic of	28 Nov 1969	2 May 1975
Ghana	1 Jul 1968	5 May 1970
Greece	1 Jul 1968	11 Mar 1970
Grenada	—	19 Aug 1974 acc.
Guatemala	26 Jul 1968	22 Sep 1970
Guinea Bissau	—	20 Aug 1976 acc.
Haiti	1 Jul 1968	2 Jun 1970
Holy See	—	25 Feb 1971 acc.
Honduras	1 Jul 1968	16 May 1973
Hungary	1 Jul 1968	27 May 1969
Iceland	1 Jul 1968	18 Jul 1969
Indonesia	2 Mar 1970	12 Jul 1979
Iran	1 Jul 1968	2 Feb 1970
Iraq	1 Jul 1968	29 Oct 1969
Ireland	1 Jul 1968	1 Jul 1968
Italy	28 Jan 1969	2 May 1975
Ivory Coast	1 Jul 1968	6 Mar 1973
Jamaica	14 Apr 1969	5 Mar 1970
Japan	3 Feb 1970	8 Jun 1976
Jordan	10 Jul 1968	11 Feb 1970
Kenya	1 Jul 1968	11 Jun 1970
Korea, Republic of	1 Jul 1968	23 Apr 1975
Kuwait	15 Aug 1968	—
Lao People's Democratic Republic	1 Jul 1968	20 Feb 1970
Lebanon	1 Jul 1968	15 Jul 1970
Lesotho	9 Jul 1968	20 May 1970
Liberia	1 Jul 1968	5 Mar 1970
Libyan Arab Jamahiriya	18 Jul 1968	26 May 1975
Liechtenstein	—	20 Apr 1978 acc.
Luxembourg	14 Aug 1968	2 May 1975
Madagascar	22 Aug 1968	8 Oct 1970
Malaysia	1 Jul 1968	5 Mar 1970
Maldives	11 Sep 1968	7 Apr 1970
Mali	15 Jul 1969	10 Feb 1970
Malta	17 Apr 1969	6 Feb 1970
Mauritius	1 Jul 1968	14 Apr 1969
Mexico	26 Jul 1968	21 Jan 1969
Mongolia	1 Jul 1968	14 May 1969
Morocco	1 Jul 1968	27 Nov 1970

Country	Date of Signature	Date of Ratification/Accession
Naura*	—	—
Nepal	1 Jul 1968	5 Jan 1970
Netherlands	20 Aug 1968	2 May 1975
New Zealand	1 Jul 1968	10 Sep 1969
Nicaragua	1 Jul 1968	6 Mar 1973
Nigeria	1 Jul 1968	27 Sep 1968
Norway	1 Jul 1968	5 Feb 1969
Panama	1 Jul 1968	13 Jan 1977
Papua New Guinea	—	25 Jan 1982 acc.
Paraguay	1 Jul 1968	4 Feb 1970
Peru	1 Jul 1968	3 Mar 1970
Philippines	1 Jul 1968	5 Oct 1972
Poland	1 Jul 1968	12 Jun 1969
Portugal	—	15 Dec 1977 acc.
Rumania	1 Jul 1968	4 Feb 1970
Rwanda	—	20 May 1975 acc.
Samoa	—	17 Mar 1975 acc.
San Marino	1 Jul 1968	10 Aug 1970
Santa Lucia	—	28 Dec 1979 acc.
Senegal	1 Jul 1968	17 Dec 1970
Sierra Leone	—	26 Feb 1975 acc.
Singapore	5 Feb 1970	10 Mar 1976
Solomon Islands*	—	—
Somalia	1 Jul 1968	5 Mar 1970
Sri Lanka	1 Jul 1968	5 Mar 1979
Sudan	24 Dec 1968	31 Oct 1973
Suriname	—	30 Jun 1976 succ.
Swaziland	24 Jun 1969	11 Dec 1969
Sweden	19 Aug 1968	9 Jan 1970
Switzerland	27 Nov 1969	9 Mar 1977
Syrian Arab Republic	1 Jul 1968	24 Sep 1969
Thailand	—	7 Dec 1972 acc.
Togo	1 Jul 1968	26 Feb 1970
Tonga	—	7 Jul 1971 acc.
Trinidad and Tobago	22 Aug 1968	—
Tunisia	1 Jul 1968	26 Feb 1970
Tuvalu	—	19 Jan 1979 succ.
Turkey	28 Jan 1969	17 Apr 1980
Uganda	—	20 Oct 1982 acc.
Union of Soviet Socialist Republics	1 Jul 1968	5 Mar 1970
United Kingdom	1 Jul 1968	27 Nov 1968
United Republic of Cameroon	18 Jul 1968	8 Jan 1969
United States of America	1 Jul 1968	5 Mar 1970

Country	Date of Signature	Date of Ratification/Accession
Upper Volta	11 Aug 1969	3 Mar 1970
Uruguay	1 Jul 1968	31 Aug 1970
Venezuela	1 Jul 1968	26 Sep 1975
Viet-Nam†	1 Jul 1968	10 Sep 1971†
Yemen Arab Republic	23 Sep 1968	—
Yugoslavia	10 Jul 1968	3 Mar 1970
Zaire	22 Jul 1968	4 Aug 1970

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* Exact dates of accession unknown, but presumed to be since 1982.

† The Republic of Viet-Nam signed the Nuclear Non-Proliferation Treaty on 1 July 1968 and ratified it on 10 September 1971. The Socialist Republic of Viet-Nam terminated its membership on 29 April 1980.

(b) The following countries have not signed or acceded to the Nuclear Non-Proliferation Treaty:

Albania
Algeria
Angola
Argentina
Bahrain
Bhutan
Brazil
Burma
Byelorussian SSR§
Chile
Comoros
Cuba
Democratic People's Republic Korea
Djibouti
Dominica
Equatorial Guinea
France
Guinea
Guyana
India
Israel
Malawi
Mauritania
Monaco
Mozambique
Niger
Oman
Pakistan
Qatar
Sao Tome and Principe
Saudi Arabia
Seychelles
South Africa
Spain
St Vincent and Grenadines
Ukranian SSR§
United Arab Emirates
United Republic of Tanzania
Vanuatu
Zambia
Zimbabwe

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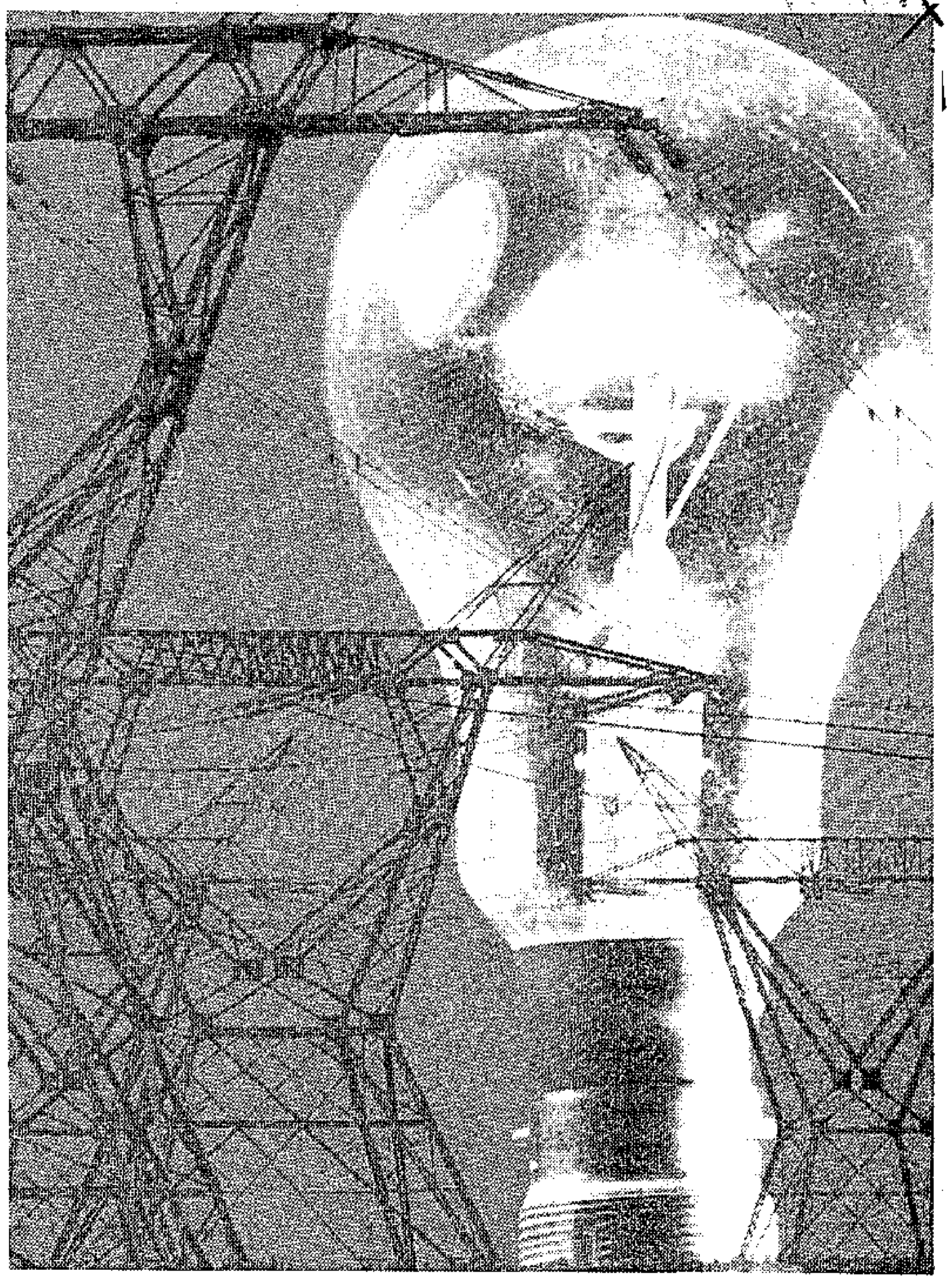
§ Although these two members of the International Atomic Energy Agency have not separately signed the Nuclear Non-Proliferation Treaty, they are assumed (unofficially) to be Nuclear Non-Proliferation Treaty members on the strength of the signature of the USSR.

QUESTIONS UNDER NAME OF MEMBER

95

We have never run short of electricity



By James Clarke

One of the remarkable things about South Africa's development — which in recent years has been stressed by both booms and recessions — is that it has never been hampered by a shortage of electricity.

A decade or so ago Escom was severely criticised by the public for spending too much money on development when times were hard. The voices were stilled when the boom of the 70s got under way and the power capacity was there to cope with it.

The Electricity Supply Commission (Escom) was established in 1923 as a utility in terms of the Electricity Act of 1922. Its aim: to supply Southern Africa with an adequate supply of electricity — at cost.

Since then it has been one of the major factors in promoting a quality of life which, for urban and small town populations at least, is unrivalled over much of the world.

At present Escom provides more than 93 percent of the electricity used in Southern Africa — or nearly half of all the electricity used on the continent of Africa.

Electricity in South Africa is largely generated by means of coal with a low heat content (average 17 MJ/kg). A thing few people appreciate is that by developing the technology of squeezing more and more energy from relatively poor-quality coal Escom has left better quality coal for the export market and other industries which need better quality.

This optimalisation of coal resources has led to some multiproduct mines. Optimum mine for instance. This mine supplies Hendrina power station with low-grade coal and is left to be able to export the high-quality material.

> **"Since 1922, Escom has been one of the major factors in promoting a quality of life which, for urban and small town populations at least, is unrivalled over much of the world."**

Escom's Matimba power station — near Ellisras in the north-western Transvaal — again uses coal from the Grootegeluk mine after Iscor has extracted the coking coal component necessary for steel production.

An interesting feature of Matimba (generating 3 600 MW makes it just about the biggest coal-fired power station on earth) will be its gigantic dry-cooled system (similar to the radiator of a motor-car) which will replace the cooling towers or wet-cooling system found in most other power stations.

With this technology, the water consumption per kWh produced will drop dramatically: from 2,5 litres per kWh in a wet-cooled station to a mere 0,5 in a dry-cooled station — an 80 percent cut in water demand.

Dry cooling can be of two types — indirect, such as at Grootvlei power station, or direct condensing (to be used at Matimba). Matimba will be the world's largest direct dry-cooled station. In fact it will be 10 times larger than the world's next largest — the 350 MW Wyodak power station in the United Sates.

In another attempt to make optimum use of water, Escom has, in conjunction with the Directorate of Water Affairs (under the Department of Environment Affairs) begun developing pumped-storage stations. Here an artificial waterfall is created which can be used to generate electricity.

Take the Drakensberg scheme: during off-peak periods the water is pumped from the Little Tugela, up a mountainside and into Sterkfontein Dam where it is stored ready for the next sudden surge in demand. Then it is released down huge concealed pipes (concealed for aesthetic reasons) to drive the turbines below.

It can instantly provide as much power as an average-size nuclear power station. But Sterkfontein's water can also be pumped to other areas. With the recent water shortage, water from the Sterkfontein Dam was "exported" to the Vaal from where it was pumped up that river to serve the drought-hit power stations in the Eastern Transvaal, with coolant.

To transmit electricity from power stations to various centres, Escom uses a national grid — a network of pylons, transmission lines and substations. With an electricity demand which, over 30 years has increased at an average annual growth rate of 8,6 percent, Escom needs to move large blocks of energy over long distances.

Thus it has adópted what it describes as "the only reasonable solution" — 765 kV transmission lines. (To give an idea of the amount of power involved: that sort of current would be more than enough to power London).

Not too much experience is available in this technology so Escom has had to build its own test facilities. Its research and development is a combined effort between CSIR, the SA Bureau of Standards and the Italian research group CESI.

Technological advancements in electricity distribution is vital in South Africa's case. We fortunately have vast coalfields on which to plant power stations — but, unfortunately, these fields are far from some of the country's biggest electricity users.

It was this which created the need for nuclear power. Escom had a choice — which really amounted to no choice at all.

It could either build more giant power stations on the coalfields (where air quality is already suffering and water availability is becoming a problem in times of drought) and then "wire" electrcity down to the Cape to feed its industrial growth — or it could rail the coal down there and generate the electricity on the spot. Both ways would have resulted in an enormous waste of energy.

The development of Koeberg will at least relieve that situation. Its siting enables it to use sea water as a coolant.

Eventually Koeberg will have three reactors feeding 1844 MW — about half the power of one of the Transvaal giants — into the national grid. The power station, with its present two reactors, will begin feeding power into the grid in the next few weeks.

It should work out as one of the most economic nuclear power stations built in recent years anywhere in the world. It's design is French — and France is the one country which is demonstrating that nuclear power is an economic proposition.

Putting politics into water

By James Clarke

From time to time nature provides us with a demonstration of its extraordinary eccentricity. This year's weird weather is one instance: we have devastating floods in Natal while a couple of hundred kilometres inland farmers watch their crops wither in a crippling drought.

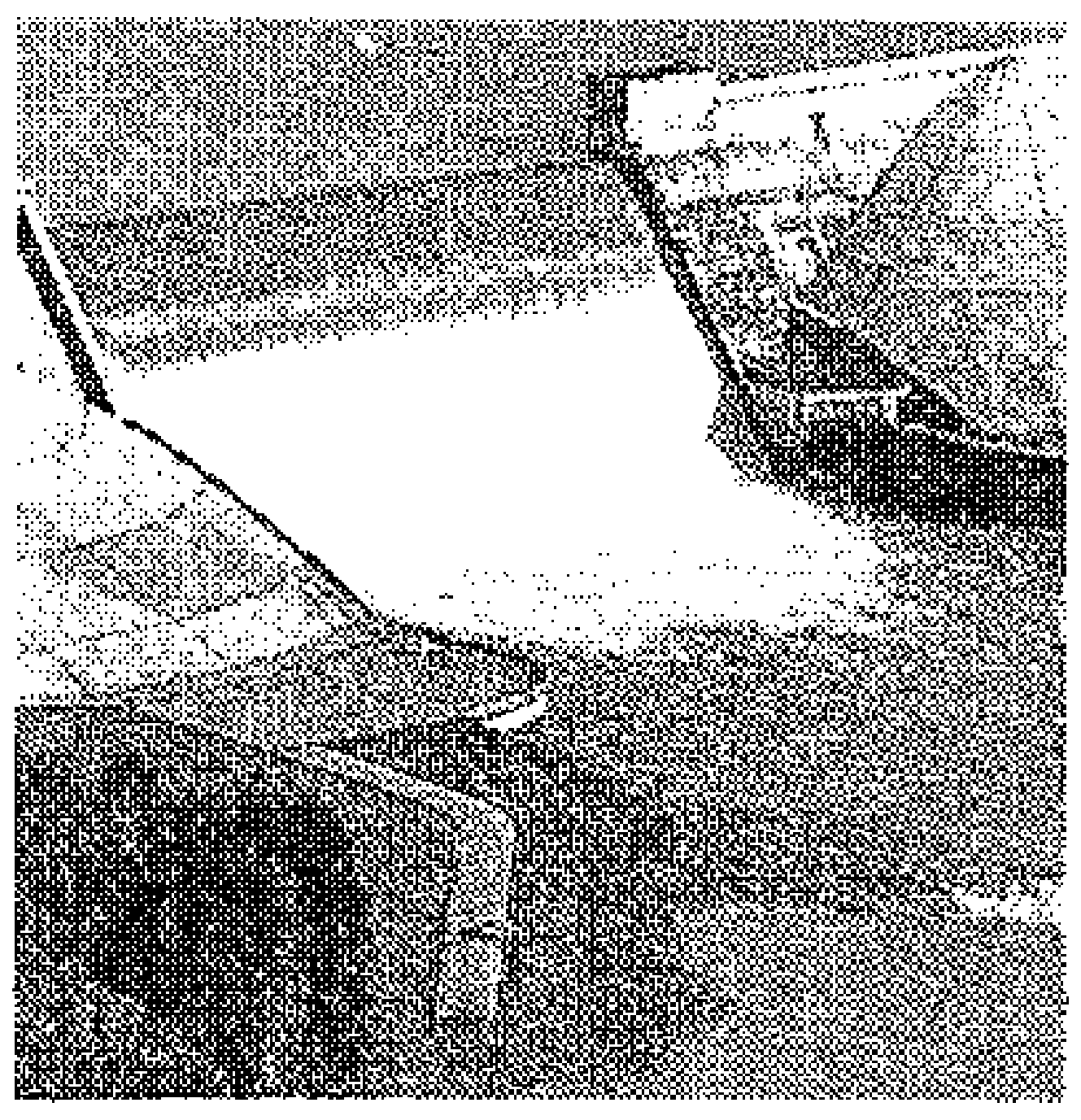
There seems no pattern to our rainfall — except we know it mostly falls on the highveld in summer and in the Western Cape in winter. But neither region can rely on adequate rains — neither for farming nor for water storage.

For all that, we have generally managed to grow enough food, not only for our own needs but for export too. And we have managed to develop a huge industrial economy which includes massive water users such as oil-from-coal plants and an enormous battery of water-cooled coal-fired power stations some of which are among the world's largest.

But the current drought has shown that we are beginning to feel the strain.

Hydrologist Professor Desmond Midgley pointed out many years ago that South Africa was not well-endowed with rivers. Its topography, rather like an upturned saucer with the Drankensberg escarpment representing its central ridge, is such that water runs off at great speed. He described our rivers as "wild and fickle".

In the mid-sixties the Orange River, our longest, stopped flowing. A couple of months later it recorded a greater volume of water than the Zambezi. A river can hardly be more fickle than that!



> **"The permanent answer to our future water supplies lies mostly outside South Africa and, therefore, requires a political incentive rather than a technological one."**

Our other great handicap is our high evaporation rate. Thus we must build elaborate and expensive dams to allow for evaporation. Vaal Dam loses half its depth annually to evaporation.

The Hendrik Verwoerd Dam is not much better. Much of their water is used for irrigating areas in even higher evaporation zones.

Our largest irrigation scheme, at Vaalharts, has an annual evaporation rate of 3m. Irrigating Vaalharts's 50 000 ha (about the size of Johannesburg's municipal area) requires about as much water as the entire Witwatersrand complex which produces half of South Africa's goods.

If we are so desperately short of water now, what about the future?

The picture is not as bleak as it appears. In the first place because water is cheap in South Africa — cheap, that is, in relation to its scarcity — we have tended to use it wastefully.

The 1983/84 drought has shown that, given the incentive, some big industrial water users are capable of cutting down by two thirds and domestic users by at least that much.

The permanent answer to our future water supplies lies mostly outside South Africa and, therefore, requires a political incentive rather than a technological one. Lesotho, with its huge spongy uplands — inside the central rim of the upturned saucer — is a natural reservoir.

There is already a plan to build a series of dams, with South Africa's help, which would, first, provide South Africa with water enough for another generation and, second, provide Lesotho with enormous hydroelectric wealth. Only politics have stood in the way.

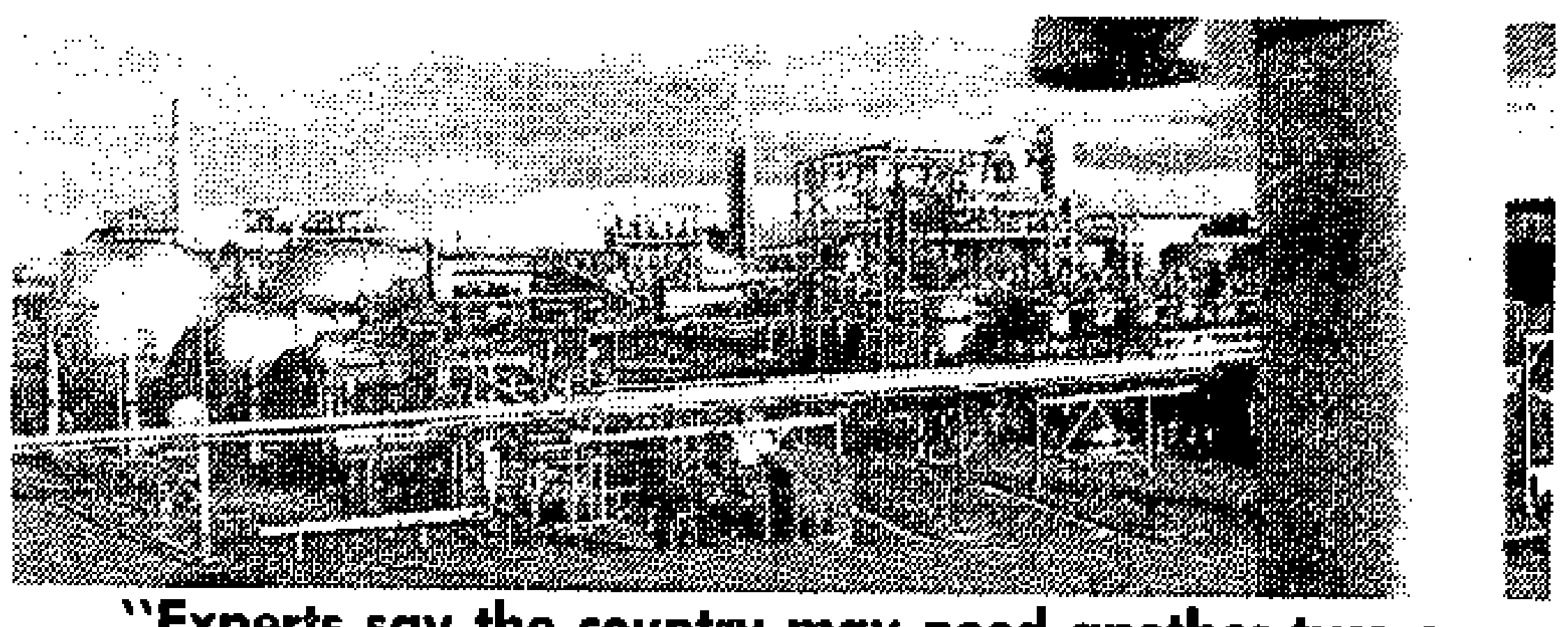
The Zambezi could supply the entire sub-continent with water for many years beyond that. The Zaire River, from just one bend — which, geographically is not much further away than Cape Town — could supply not only water but enough electricity for the entire subcontinent for the foreseeable future.

This is not an improbable scenario. It is just a question of when.

There are signs lately that the countries of Southern Africa are beginning to realise that, collectively, they have the water, the electricity potential, the mineral wealth and the irrigable land potential to become a powerful economic bloc.

Water is the key. While our neighbours have the water South Africa has the technological skills required to begin harnessing it for the community.

It will not have been the first time that water has been used to dissolve international tensions.



> **"Experts say the country may need another two or three Sasol plants by the year 2000 — unless we hit off-shore oil in the interim."**

Fuel — well along the road to independence

South Africa's successful liquid-fuel-from-coal operation is putting South Africa well along the path to self-sufficiency. But experts say the country may need another two or three Sasol plants by the year 2000 — unless we hit off-shore oil in the interim.

Sasolburg was chosen as the site for the country's first liquid-fuel-from-coal plant after Sasol was incorporated in 1950. Sasol was listed on the Johannesburg Stock Exchange in 1979 and since then has become well known around the world as an energy pioneer.

The Sasolburg site was chosen mainly because of its easy access to supplies of coal and water. The new plant came on stream in 1955, using a process that converted coal into gas and back into liquids, to be used as fuel and chemical feedstocks.

Financial experts say feedstock production probably contributes more to Sasol's value then petrol.

After being regarded as an expensive luxury, Sasol is now seen as a strategic asset following the oil price revolutions of the 1970s, oil embargoes and the build-up of the economic boycotts.

Extensive research had secured Sasol world leadership in its field and it was able to embark on the development of Sasol 2 and later Sasol 3 at Secunda in the Easter Transvaal.

Sasol 1 originally cost more tha R100 million, with more being spe later on expansion. Sasol 2 cos R250 million and Sasol 3, R330 mi lion.

Experts say another two or thre more Sasol 2-type plants will b needed by the end of the century i the country is to maintain its liqui fuel self-sufficiency at 40 percent.

Some predict South Africa should reach 50 percent self-sufficiency before the end of the century.

The picture could be altered should South Africa succeed in discovering oil. The ups and downs of the oil exploration business has had everyone either depressed or impressed — and now Soekor has cut its information pipeline, resigning themselves to one or two interim statements annually.

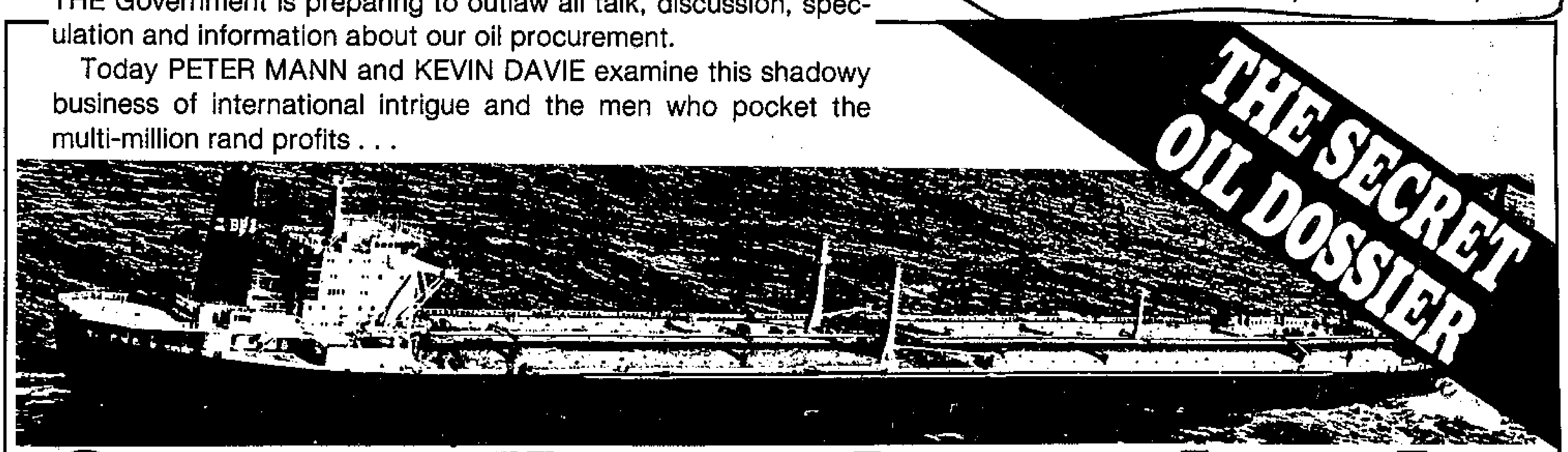
But managing director Dr Piet van Zijl has publically admitted Soekor could be on the verge of discovering a viable oil or gas field.

X (55)

SUNDAY TRIBUNE, MARCH 25, 1984

THE Government is preparing to outlaw all talk, discussion, speculation and information about our oil procurement.

Today PETER MANN and KEVIN DAVIE examine this shadowy business of international intrigue and the men who pocket the multi-million rand profits . . .



OIL: What they don't want you to know...

A RASH of court actions and disclosures of secret oil deals involving billions of rands is threatening the Government's attempts to keep secret details of how and where oil is procured.

And the men who act as shadowy brokers or agents are reputed to be making millions.

The figures involved are astronomical. They dwarf the R3 000 million spent on defence every year and exceed the entire 83/84 budget deficit.

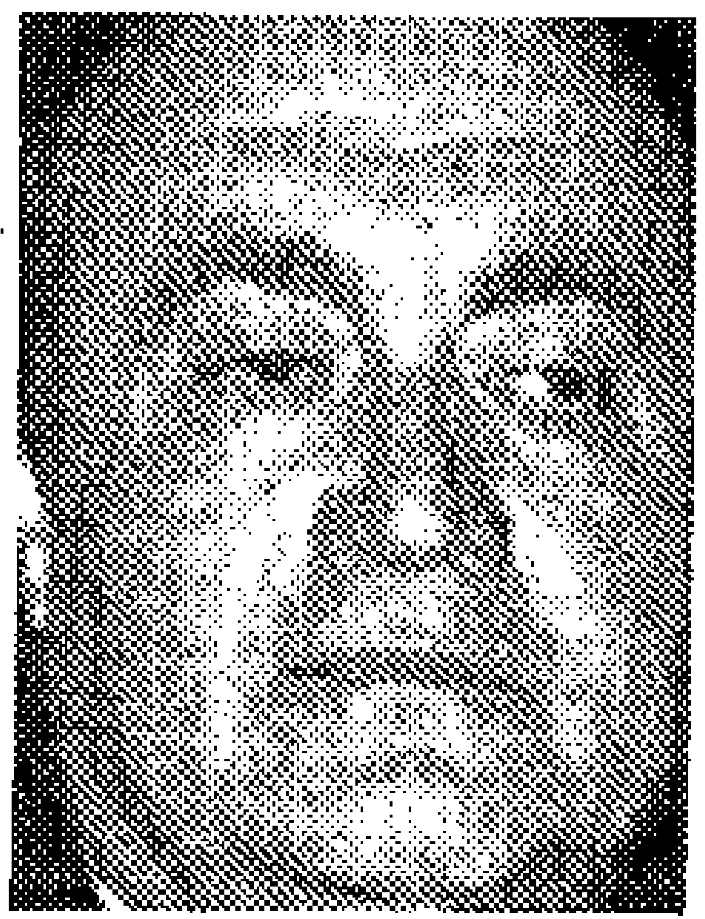
Now the Government is to clamp down even more. Secrecy provisions in the Petroleum Products Act are to be made even more stringent.

In the Rand Supreme Court two multi-million rand court cases have, for the first time, given the public an insight into the gigantic profits oil middle men can expect to make.

One such case is that between millionaires, bogus doctor Marino Chiavelli and Fontana food king, Taki Xenopolous. At stake is R130 million which Mr Xenopolous claims he is owed as his two percent commission on an oil deal.

The Department of Mineral and Energy Affairs has been forced to hand documents to the court so the case can be heard.

If Mr Xenopolous' claim of R90 million plus R40 million interest representing two percent commission is correct, the deal would have involved a mighty R4 500 million.



OIL MILLIONAIRES . . . Marino Chiavelli (top) and Taki Xenopolous

a Johannesburg newspaper to have made R317 million in a secret deal with the South African Government. The total value of the deal was R900 million — meaning his profit was in excess of 30 percent.

Africa Confidential, a highly-regarded British publication, says Rich has been involved in a number of oil deals in South Africa, Angola, Nigeria and Iran.

Catch 22 for the Director-General

THE Director-General of Mineral and Energy Affairs, Mr Sarel du Plessis, is a man with a dilemma.

He wants to reassure the public that money spent on oil is used wisely and in the best interests of South Africa, but he cannot disclose the country's sources of oil or give details of oil transactions often involving billions of rands.

In fact the Government is about to tighten up dramatically on secrecy surrounding the supply of oil. It has published a bill in Parliament which will give effect to this — circumscribing even further the information the public is allowed.

In an interview this week, Mr du Plessis said: "We will set out our reasons for needing this kind of secrecy in full when the bill is debated in Parliament.

"The supply of crude oil to South Africa is a clandestine matter. You cannot make all the facts known. There is still an oil embargo against us. We cannot tell our enemies details of where we get our oil. That means we can't tell the public either.

"Oil in South Africa is bought by the Strategic Fuel Fund (SFF), which in turn sells it to the oil companies.

"It is here that the control lies. The oil companies would not buy the fuel if the price was too high, and their books are scrutinised by their accountants. The SFF is also audited, by private auditors, and it is run on a healthy basis.

"Another check, which will enable you to assess the effectiveness of the fund, is that in spite of the oil embargo South Africa still has one of the cheapest petrol prices in the world. Our success is reflected in the price at the pumps.

"We cannot reveal our sources of crude oil. But at the moment we have no problems in getting oil — and we are paying almost the ruling international prices.

"But we could be back in a crisis tomorrow. All it would take, say, is for the Straits of Hormuz to be closed.

"South African newspapers have said a lot of negative things about our secrecy. But you don't see them telling people how we have beaten the embargo.

"If South Africa's enemies — and by that I mean the people who want to see the embargo against us succeed — know our sources, they will be able to apply pressure to the people and the places to force them to stop supplying us.

"In the crisis of '79 we were in the situation that we received 80 percent of our oil from the Shah of Iran. All of a sudden that channel of supply was cut off.

"We managed to find alternative sources — in spite of the embargo. If there is another crisis we will have to go back and ask those people for help. But if they know we have not kept our word on secrecy they won't deal with us.

"That is my dilemma. I would like to reassure everybody who is asking questions about oil, but I cannot disclose the information."

The Government had given Parliament information about the Salem affair "as soon as we were able".

for his arrest on $48 million tax evasion charges has been issued. Fines for ignoring subpoenas to provide documents for

people said to be involved is Brigadier Johan Blaauw, the man who brought down former Minister of Manpower

African oil case is the Salem affair — details of which are still being sought by the Opposition in Parliament.

Now people are asking about Mr Chiavelli's cut?

The huge profits made by the middle men who supply South Africa's oil is illustrated in the case of yet another shadowy oil dealer, American Marc Rich.

It was disclosed last week that Mr Rich, who is now accused of the biggest tax fraud case in United States history, had made a huge profit, allegedly out of an oil deal with South Africa.

Mr Rich is reported by

The super-profits Rich has earned from these deals is indicated by a recent report in *Fortune* magazine, which detailed his activities.

Rich extracted an $8-a-barrel premium on the 40 000 barrels he supplied to Nigeria, meaning his cut amounted to $320 000 a day.'

Fortune says in a 21-month period Mr Rich collected almost $120 million in commissions and preminums.

An American warrant

the tax evasion investigation are being issued against his company at the rate of $50 000 a day.

Fortune says that, so far, the fines total $8 million.

A fugitive from American justice, Mr Rich now lives in Switzerland.

Another secret hearing in the Rand Supreme Court is the case of M Sellier and others versus Sasol.

The case is reported to involve a staggering R280 million. One of the

Minister and leader of the House of Assembly, Mr Fanie Botha.

The South African Government has also been embarrassed by their involvement in the sniffer plane incident which cost a cool R5 million.

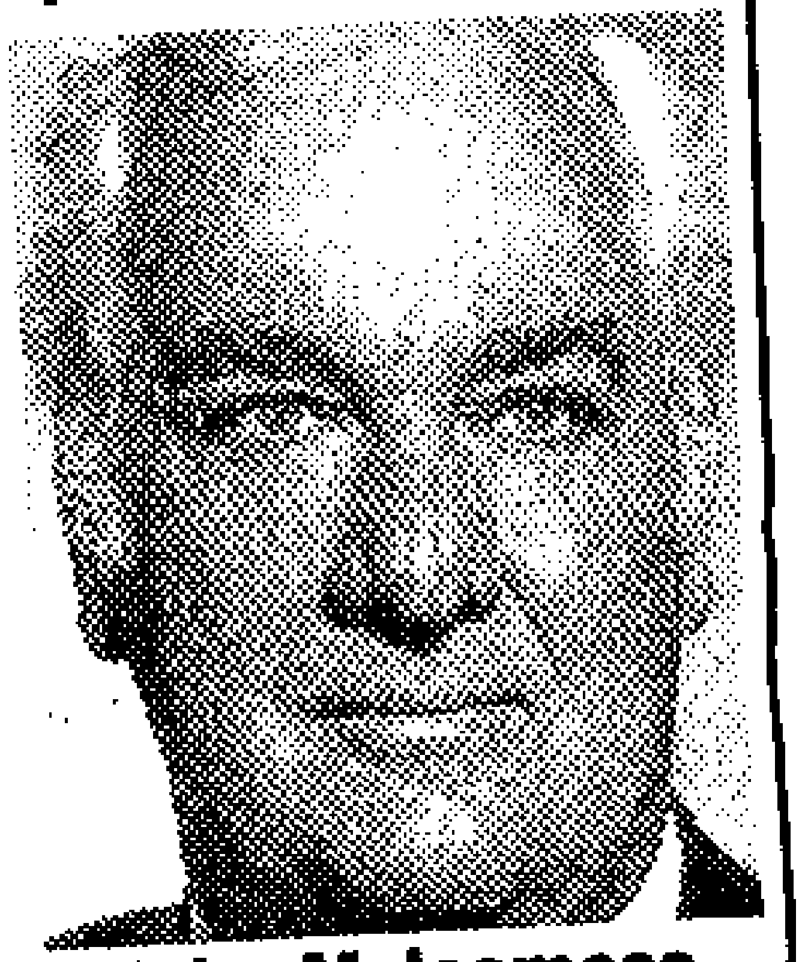
Opposition spokesman John Malcomess says nobody knows how much was lost in drilling locations pinpointed by the aircraft.

The most famous South

sel loaded with oil which secretly disclosed her cargo in South Africa. She was then scuttled off the West African coast in an attempt to hide the theft of her cargo.

Although full details of the affair, which eventually cost South Africa R32 million, were published overseas, South Africans were prevented by the Government from knowing what had transpired.

Oil funds should go to auditor general, says Malcomess



John Malcomess

JOHN Malcomess, PFP MP who lifted the lid on the Salem affair by raising the issue in Parliament, believes oil funds should be audited by Parliament's watchdog, the auditor-general.

And Mr Malcomess says the "abuse of secrecy" and the "so-called total onslaught" are to blame for all not being rosy in the shadowy world of South Africa's oil procurement.

"We are told that money spent on oil is spent wisely and in the best interests of South Africa.

"Yet I can point to three cases where this would seem to be not the case — all involving large sums of money.

"Salem: Through, at best, extreme gullibility the strategic Fuel Fund Association purchased stolen oil and this cost the public in excess of R30 million.

"The sniffer plane, where we were conned into spending about R5 million. How much more we lost in drilling in locations pinpointed by this miraculous method I don't know.

"The fact that the strategic Fuel Fund Association and Sasol are being sued for millions because of an oil supply dispute.

"The crux of the problem lies in the abuse of secrecy and the so-called total onslaught.

"Consider some facts: About R500 to R1 000 million is extracted from the public per annum for purposes relating to the acquisition of oil.

"These funds are not subject to audit by the auditor-general, the normal parliamentary means of control of public funds.

"They are audited by private auditors whose basic functions are different to the auditor-general.

"A similar situation of non-audit of secret funds existed in the Information affair and we know how wrong that went.

"The Government has to be accountable for the expenditure of funds extracted from the public.

"These funds should be audited by the auditor-general and reported on to the select committee on public accounts; even if that report is done in confidence.

"The Salem affair was a classic case of the abuse of the secrecy provisions. The whole world knew the details. Keeping South African citizens ignorant cannot have assisted past or future oil supplies.

"Not many people will believe the statement that the Government gave Parliament information about Salem as soon as they were able.

"If, as Mr Du Plessis says, all I did was to ask the first pertinent question, why did the Minister seek to prohibit the Press from publishing my speech?

"We, in opposition, agree there is a case for secrecy. We supported the original clause in the Petroleum Products Amendment Act."

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normal cost to the business dealing in
of 33.1/3rd% seems reasonable and can p
profit.

Therefore I would not be satisfied with the directors proposal.
The maximum dividend from this source is R20 000 only.

(Foster v New Trinidad Lake Asphalt Co Ltd (1901))
(Hahlo 2nd Edition, p.492)

55 ~~3570~~ E. Post 30/3/84

Blacks' electricity rates to be probed

By JIMMY MATYU

IF black people had their own representatives in Parliament there would not be so many problems about their electricity, Mrs Molly Blackburn, MPC, said in New Brighton last night.

She was addressing a meeting of residents in the Centenary Great Hall, organised by the Iliso Lomzi Committee.

Mrs Blackburn told residents their high electricity rates and additional installation deposits were to be investigated at Ministerial level.

"It is to me unacceptable that people should pay different electricity rates and more deposits based on their skin colour," she said.

"If such discrepancies were happening in the municipal areas they would have made news headlines," she said.

Mrs Blackburn said a letter written on March 16 to Mr Dan Qeqe, chairman of the Iliso Lomzi Committee, by Mr John Malcomess, MP for Port Elizabeth, had mysteriously disappeared because it never reached him.

In the letter, Mrs Blackburn said, Mr Malcomess promised he would investigate, with the Minister of Co-operation and Development, the claim that blacks paid more for their electricity than whites.

She appealed to the residents to have patience and keep up their interest in the matter .

Mr Qeqe saidelectricity levies for blacks were higher than for other race groups in Port Elizabeth.

Highlighting some of the discrepancies, he said in November he received an electricity bill for R4 201 for one of his businesses and on questioning it with Ecab, it was found it should have been R2 000.

Mr Ayanda Mjekula, a Fordville resident, said Fordville residents had taken Ecab to court again yesterday after an alleged threat to disconnect their power supply if they failed to settle their accounts.

31/3/84 D. Dispatch

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Spring: Escom must review its policy

EAST LONDON — Escom's principle that larger centres should not subsidise the cost of power provision to outlying towns should be reviewed, Mr Errol Spring, the Mayor of East London, said.

Mr Spring was commenting on a letter to the Daily Dispatch written by Mr E. Otten, regional manager of Escom, which discussed the generation of power by local authorities.

In the letter Mr Otten contended that it would not be possible for a centre such as East London to generate its own power due to the cost of transporting coal from the pithead to the coast.

"There is no law to say that a local authority cannot generate its own electricity. If it wishes to do so, it must prove to the control board that it can generate more cheaply than Escom. Economies of scale usually preclude this and in the case of East London, most certainly would," Mr Otten said.

In the case of outlying towns, which are not on the main backbone of the power line, consumers pay an extension tariff. Mr Otten said that Escom did not believe that centres on the main line should have to subsidise the extension costs of these outlying towns.

MR SPRING

MR OTTEN

Mr Spring disagrees.

"We in South Africa are faced with the problem of a dying platteland. We can ill afford this decline to happen and are going to have to do something about the cost of electricity to the platteland. Places like Elliot for example can never really afford the cost of electricity under the present system," Mr Spring said.

"There should by uniform electricity tariffs — the bigger centres must subsidise the smaller ones. It's not their fault that they had to take electricity from Escom — there was a time when they generated their own power.

"If a uniform tariff was introduced, the increase in charges in places like the Witwatersrand would be nominal but would mean a lot to these small communities," Mr Spring said.

Mr Otten said that smaller centres were not forced to take power from Escom but that when the time came to upgrade their generating plants, it was obvious that they could never afford to do this.

"We do not have to force these smaller centres to take our electricity. They unfailingly are eager to come on to our lines because it is far more economic for them," Mr Otten said. — DDR

'Blacks paying more for electricity'

4/4/84 E.Post

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PORT ELIZABETH'S black electricity consumers pay more than their white counterparts in the municipal areas, because fewer consumers have to pay for the cost of providing the new infrastructure, according to the Town Clerk of the Kayamnandi Town Council, Mr R J Scholtz.

Mr Scholtz said electricty consumers in Port Elizabeth's black townships paid, on average, 6,5c a unit.

According to Port Elizabeth's Assistant City Treasurer, Mr André Lemmer, the domestic tariff for Port Elizabeth consumers for March was 5,2417c a unit.

The City Council supplies electricity to the East Cape Development Board at a fixed tariff of 3,3421c a unit.

Mr Scholtz said the Port Elizabeth municipal area had more than 60 000 consumers to pay for the electricity reticulation, compared with only 8 200 black consumers.

In the black areas, electricity consumers had risen from 4 000 to 8 200 in the last six to seven years.

Only 8 200 consumers contributed to the capital charges for providing cables, meters, transformers and substations.

The municipal infrastructure for the reticulation of electicity had been there for many years, with thousands of consumers contributing to the redemption on capital outlay.

With the Rive plan for the upgrading of the black areas, new capital had to be raised, with high interest and redemption charges.

Other reasons for a higher tariff included the administrative costs.

● The unit cost of electricity is a monthly variable depending on a number of factors.

Power saps the purse

W/E Arg 5/4/84

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CAPE Town households without electricity spend up to three times as much on lighting, heating, and other energy needs than do similar households with electricity, a city researcher has found.

Dr Anton Eberhard, senior research officer of the Energy Research Institute at UCT, yesterday told the Carnegie conference on poverty that "poorer households are able to buy less energy, but spend proportionately more of their income on energy.

"So relatively wealthy Pinelands spends, on average, less than three percent of household income on domestic energy, while Valhalla Park households with electricity spend 11,9 percent. Valhalla Park residents without electricity spend 24,5 percent of their income," he said.

Some poorer households spent more than half their income on energy.

Hardship

Dr Eberhard added that in Valhalla Park households with electricity spent an average of R25 a month, while those without electricity spent R65 on energy.

"The lack of electricity is felt to be a severe hardship," he said.

The survey also covered Lotus River, Grassy Park, Bellville South and Crossroads.

"In 1981 the City Treasurer issued more than 72 000 disconnection orders in respect of unpaid electricity."

55 [illegible] D. Dispatch 6/4/84

PRO: Escom plan known for years

EAST LONDON — It had been known for some years that Port Elizabeth would be the ideal location for Escom headquarters when the boundaries of the Eastern Cape-Border undertaking changed, Mr Jan Roux, public relations officer for Escom, said yesterday.

Mr Roux was commenting on the announcement that the East London offices of Escom will be moved to Port Elizabeth in 1987, leaving only a small maintenance unit here.

Asked why, in view of the fact that Port Elizabeth had previously been considered the ideal location, Escom chose just 11 months ago to acquire land for extension in Beacon Bay, Mr Roux said this was due to the decreased forecast of future demand for electricity.

"Eleven months ago, when we elected to move our operation to Beacon Bay, we were looking at a tremendous increase in the load forecast," Mr Roux said.

"The projected growth rate was seven per cent, which means that the electricity demand would double every eight or ten years.

"That forecast has now changed to a much lower figure and we are thus able to take long term decisions about operations and location of headquarters," Mr Roux said.

He said that with the redrawing of the undertaking's boundaries in the Eastern Cape, the region had pushed out to the north and west.

This meant that Port Elizabeth was in a far more central position than East London, with Transkei distributing electricity itself. This put East London on the far eastern limb of the undertaking.

"We are not withdrawing from East London, we are simply looking to streamline our operations and in the long term this looks to be the best option," Mr Roux said.

Spokesmen for the Midlands Chamber of Industries (MCI) and the Port Elizabeth Chamber of Commerce, while welcoming the move yesterday, sympathised with the loss to East London.

Mr Tony Gilson, director of the Port Elizabeth chamber said he did not want to "knock" East London and the Border area, but it should be remembered if Escom was looking for a central location it was logical it would be Port Elizabeth.

Mr Brian Matthew, director of the MCI, said the chamber was always grateful for new jobs in the Port Elizabeth and Uitenhage areas but it was disappointing East London would lose out, especially regarding job opportunities there.

The town clerk of Port Elizabeth, Mr P. K. Both, said the Escom representative who had visited him had told him they were looking for a five to six hectare site and he had indicated that a suitable site was available off Admiralty Way in Summerstrand.

Escom were keeping their options open and would have to investigate the suitability of various sites. — DDR-DDC.

Editorial opinion P8

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103

D. Dispatch

7/4/84

friend and I wish our Foreign Affairs Department would keep that friendship warm.

"Industrialists are keen to invest and Your Excellency will have a full report to tell you why most of the industrialists have not been able to invest in our country. It is not of their making but because of our own making." — DDR.

vationists had no choice but to make concessions to military development in the De Hoop area, but had made two gains in exchange.

One was the government's decision to substantially increase the size of De Hoop nature

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7/4/04

D. Dispatch

EL to fight Escom removal

EAST LONDON — The Fighting Port is girding its loins to do battle over Escom's proposed move to Port Elizabeth.

Members of local government in East London said yesterday they would not take the decision to move Escom's regional headquarters lying down.

Earlier this week Escom announced that its Eastern Cape headquarters, with a skilled staff of 200, would move from East London because Port Elizabeth was more centrally situated and the Port Elizabeth-Uitenhage area accounted for more than 40 per cent of the consumption.

Local community leaders said yesterday they would do everything in their power to ensure that the Escom headquarters stayed in East London.

The Mayor of East London, Mr Errol Spring, said a telegram had been sent to the Prime Minister and the Minister of Energy Affairs stating that the move was in conflict with the government's regional development plans for the city.

He said the move could undermine confidence in East London as a centre of industrial growth.

"I hope the minister will review the decision."

Mr Spring said a coordinated effort would be made to get Escom to stay in East London.

"It's no use the various parties trying on their own. We must coordinate and if necessary seek an interview with the minister, and perhaps even the Prime Minister."

He said Escom's reasons for the move were unacceptable because if the government's decentralisation and regional development plans were a success it would make sense for Escom to remain in East London.

Mr Spring expressed confidence in East London's growth potential and said: "I see this only as a hiccup in the city's long-term development programme."

He added that he was disappointed in Escom's handling of the matter as the first he had known of the move was when he had read about it in the newspapers.

"Surely the people most intimately affected by such a move should have been consulted or informed beforehand."

Mrs Elsabe Kemp, MPC for East London City, said she was surprised and disappointed by the move as it was a step backwards in view of the efforts being made to develop the East London region.

"We will not just sit back and watch this happen," she said, and added that attempts had been made to contact the minister, Mr Danie Steyn, who was overseas at the moment.

Mrs Kemp said she would try to find out what was behind the decision.

Veteran city councillor and a member of the Regional Development Advisory Committee for the Eastern Cape, Mr Robbie de Lange, said he had been shattered by reports of the move.

"It was the most shocking news I have read in a long time."

He said East London was on the brink of tremendous economic developments, and he wondered what entrepreneurs and potential investors would think when they knew Escom planned to leave the city.

East Londoners did not begrudge Port Elizabeth any progress that might come their way, he said, but the move had come at a very bad time for East London in view of what was in the pipeline for the city.

Mr De Lange said he was attempting to contact Mr Louis Koch, the chairman of the advisory committee, and he was certain the committee would make representations at the highest level to keep Escom in East London.

"There must have been something terribly wrong in Escom's original estimates when they decided to expand to Beacon Bay." — DDR.

Zola ecstatic about UK citizenship

LONDON — South African wonder athlete Zola Budd has been granted British citizenship by the Home Office and is reported to be "ecstatic".

This means, that the gates are now open for Zola to be chosen to run for Britain in the Olympics.

She flew to Britain recently in an attempt to gain British citizenship.

However, despite the Home Office verdict there are a number of obstacles still to be overcome. Officially there is a three-year wait after a change of nationality before participation in the Games is allowed.

This can be waived in certain circumstances. Zola also faces the prospect of Olympic trials at Crystal Palace in London and in Gateshead in June before her dream of running in the Olympics can come true.

Last night Zola was reported to be "thrilled and delighted". A friend who had been in touch with Zola and her family said that she felt this was "a dream come true".

She had been staying in flats near the New Forest, Essex, where she has been in regular training.

Zola's coach, Pieter Labuschagne, has come over and is overseeing her training.

There was varying reaction in London yesterday at the news that Budd had been granted British citizenship.

Miss Cate Clark of the Anti-Apartheid Movement expressed surprise at the fact that the Home Office could deal with Zola's application so swiftly.

She pointed out that foreign blacks who were entitled to British citizenship often had to wait over a year for their applications to be processed.

In Johannesburg, Mr Rudolf Opperman, president of the South African and Olympic Games Association and South African Sport Federation, greeted the news by wishing her the best of luck, but questioned the manner in which Zola left South Africa.

"We wish her the best of the Republic's luck, whether she runs for Britain or not, but she was reared and taught her sport in South Africa

"The way she left South Africa, in comparison with Sydney Maree's departure who left with our blessings, doesn't sit as nicely to me." — DDC- SAPA.

Labour Party's credibility queried

PORT ELIZABETH — The leader of the People's Congress Party, Mr Peter Marais, is considering approaching

Fordville set for power-ful showdown

~~340~~ 55 City Press

By MONO BADELA

8/4/84

A SHOWDOWN is looming between residents of Port Elizabeth's prestige Fordville Township and the authorities over their huge electricity bills.

PE town clerk R J Scholtz warned at a monthly meeting of the newly-established Kayamandi Town Council that the East Cape Administration Board and his council would contest a Supreme Court action brought by 31 Fordville residents this week.

Last week the residents sought an urgent interdict restraining the council and ECAB from disconnecting the power supply to their homes. The application will be heard on April 17.

Mr Scholtz said residents had complained last year about the meters used in the township. He said the PE municipality had tested the meters and found them correct.

Mr Scholtz said the council was legally able to disconnect the power, but the residents had asked for a court interdict and the matter was now sujudice.

He said, however, that the council had found the meters were in order.

He warned tenants who tampered with meters that their power would be disconnected permanently.

He said the council had also decided to take immediate action against electricity users who owe about R600 000 in arrears.

Recently there was a blitz on tennants in arrears, and last week hundreds of homes had their power disconnected.

(55) FM 13/4/84

ELECTRICITY SUPPLY

Soweto switch-off

The Greater Soweto electrification programme has so far failed to deliver the sales boom the electrical appliance industry hoped for.

A reason is that thousands of consumers are not using the service. Many have had supplies cut off for non-payment of electricity accounts. Figures released by the Soweto city council show that arrears currently amount to R2,3m, some 38% of total revenues for the year, estimated at a little over R6m.

There is also reluctance by new consumers to hook up with the system.

Part of the problem is that electricity is costing a lot more than consumers originally expected. This is partly due to misuse of electrical appliances. It is common knowledge, for example, that some households leave heaters turned on for long periods in the winter while all the windows are open.

Director of the West Rand Development Board's (WRDB) electricity department, Melt van der Spuy, believes Soweto consumers, "to a certain extent," do not understand how to use the service properly.

"Couple this with the fact there are only just over 100 000 homes supporting, at conservative estimates, something in the region of 1,5 million people, bills are likely to be higher," he says.

Irwin Florence, director of finance of the Soweto city council, says: "We estimate that a 'normal' bill should be in the region of R40/month and will investigate any claims of abnormally high charges."

Another reason is that Soweto's 21 000 electricity users who were on stream before the latest electrification programme are balking at a more than sevenfold tariff increase due to the removal of a Johannesburg municipality subsidy.

Grid

Originally electricity drawn from the municipal grid cost the Soweto consumer 0,5c/unit compared with the 3,5c/unit charged to other users in Johannesburg. It is now a little more expensive than power supplied to consumers in Johannesburg. When the charges were raised the 'Committee of 10' advised consumers to carry on paying electricity bills at the old rate and ignore the new rate.

Van der Spuy says the electrification programme, which is running on schedule, will be completed in mid-July with 104 000 houses connected at an estimated cost of R220 million. Only 19 000 of these are new consumers brought on stream since the programme started.

Florence says: "The level of outstanding electricity bills, although not always owed by the same people, has been at this level for three years. The policy in the past has been to disconnect the service for non-payment but it does not seem to help. As yet the council has made no firm policy decision what to do about collecting the money."

He also says that thousands of households have stopped using electricity, because they cannot afford it, or are reluctant to start using it because of the high connection fee. This is R300 for 99-year leaseholders and R30 for those in rented homes.

Van der Spuy says that the WRDB has two teams of technicians whose sole purpose is to cut off and then reconnect the service.

Soweto electricity consumers ... account up to date

"To my knowledge, when they started to cut off the service they began with the people who owed over R1000 and I believe at present they are still trying to recover money from those with outstanding bills of over R300," says Van der Spuy.

But even if they opt not to be supplied with electricity, all Soweto residents will still have to help pay for it. Florence says: "In addition to the R220m capital cost of the programme, there is a R30m interest charge. These sums will be recovered in levies paid by all Soweto residents over the next 20 years. At present they pay a levy of R12/month but this will rise to R30/month in 1986."

CONFERENCES

Money in meetings

Providing facilities for conventions has blossomed into an industry worth between R75m and R100m a year, says Jurgen Burmeister, Southern Sun Hotels' group marketing director.

It now accounts for about 20% of turnover of Durban's Elangeni Hotel, which is why it is being refurbished to create the country's biggest conference centre at a cost of R8,5m. The hotel cost R10m to build in the early Seventies.

Burmeister says hoteliers are now looking for convention business abroad. They have had some success, because the locals can offer a conference for about half the $200 a delegate/day average charged in the US.

"What delegates save offsets their airfares and has them positioned for a holiday in a beautiful country that has become a sought-after destination overseas," says Burmeister.

"Conference business with SA customers is growing at about 12%/year but when international conferences are really on line, growth should go up to about 15% a year."

The recession has hardly dampened the growth. On the Reef, for example, the new Sandton Sun with its enormous conference facilities, has not dented the conference business of the Sandton Holiday Inn, down the road.

In Pretoria, where Southern Sun is doing a major refurbishing job on its Burgers Park Hotel, the conference facilities at the new Holiday Inn, due to open in June, are already so well booked that the Holiday Inn group itself had to accept what was left of the dates to hold its own annual sales conference.

The Department of Transport, which owns the Jan Smuts air terminal buildings, missed a golden opportunity to capitalise on this market when it opted for small conference facilities in the building.

Organisers of many conferences would like to use the airport, but are forced to go elsewhere because its facilities are too limited.

However, there still are some takers. The Federated Chamber of Industries uses the airport for regular meetings of its executive committee. The members fly in, have their meeting and fly out again — all with-

55 D. Dispatch

11/4/84

Govt acts on Escom move

From
ANTHONY JOHNSON
Political Correspondent

CAPE TOWN — In a new development that could influence Escom's announced move from East London, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, yesterday requested the corporation urgently to submit to him a full report on the planned move.

The government's involvement and concern in the sensitive issue of Escom's proposed transfer of its Eastern Cape headquarters to Port Elizabeth follows eleventh-hour representations to the Prime Minister and government ministers by the MP for East London City, Mr Peet de Pontes.

The Prime Minister, Mr P. W. Botha, was "fully informed" yesterday of Escom's proposed move and Mr De Pontes received a "sympathetic ear" in discussions with both Mr Steyn and the Minister of Constitutional Development and Planning, Mr Chris Heunis.

Further written representations will be submitted to the ministers "stressing the importance of the retention of Escom's regional office and its possible extension in East London."

Accompanying these will be requests that the government urgently liaise with Escom on its decision to leave East London — less than a year after the corporation announced plans for a major development at Beacon Bay.

Once Mr Steyn has received Escom's "full report" motivating its planned move, the matter will be "fully discussed and considered."

Although Escom is a state corporation, it is understood that its decision to move from East London was an "internal matter" and was not cleared by the government.

However, ministerial views and suggestions on the issue are now likely to carry significant weight. Should the government consider it necessary, it could suggest an amendment to the act by which Escom was constituted to empower it to take steps in deems appropriate.

While such a drastic move is considered unlikely at this stage, what remains is that the Border region has been given number one priority in the government's regional development master plan.

Mr De Pontes said: "Government regional strategy has largely overcome the earlier uncertainty about the status of the Border as a development area, but this proposed move may have the effect of reducing this uncertainty because it is viewed erroneously."

He said the major danger of the move was that what was essentially a rationalisation of Escom's operations could be seen as a vote of no-confidence in the region as a whole.

This could produce an inappropriate "negative psychological effect" on the present development thrust as people might erroneously equate the Escom action with government action.

"However, the government — including the Prime Minister — remains firmly committed towards development of the area as a prime growth point," he said.

Mr De Pontes stressed that while he viewed the decision of Escom to move its regional office to Port Elizabeth "with utmost concern, it must be remembered that Escom is an autonomous body, taking its own decisions in view of what it believes to be in its best interests and that of its consumers.

"As a public utility institution, I believe, however, that it has a public responsibility wider than purely economic considerations, and that it can, in fact, operate as effectively — and without any increases in costs to the consumer — from East London.

"Everything possible will therefore be done to ensure that this section of Escom can operate viably and remain in East London."

55

Row over oil purchases breaks into the open

RELEASE SECRET REPORT, PFP URGES

By JEAN LE MAY

MR JOHN Malcomess, Progressive Federal Party MP, this week condemned as "unsatisfactory" the Prime Minister's announcement of another oil scandal.

"This raises more questions," he said. "It is important that we should be given more details.

"How much money is involved? Does it involve the public service or the Strategic Fuel Fund or Sasol? What is the magnitude of the allegations?"

Mr Malcomess yesterday called on the Minister of Mineral and Energy Affairs, Mr D W Steyn, to table the government's secret report on oil supplies.

He was reacting to a statement by Mr P W Botha in Parliament this week that a report on the Salem oil fraud had been compiled and had been sent to four foreign governments.

"I am pleased that after 4½ years criminal action is being contemplated against someone who was involved in the Salem scandal," hesaid.

"The fact that the report has been given to foreign governnments means that its release in South Africa cannot bedevil South African oil supplies.

"Why are we being kept in the dark? Why is the government sheltering behind secrecy provisions?

"We believe that these are being used as a cover-up and that they create a fertile field for misappropriation. It is unwise to short-circuit parliamentary control."

Mr Malcomess was responsible for disclosing the Salem fraud to the South African public when he gave details about it in Parliament.

From Page 1

which has been investigated by the National Intelligence Service, and from court actions held *in camera* in which immense commissions were said to be at stake.

The uproar culminated this week in the announcement by the Prime Minister, Mr P W Botha, that the Advocate-General was investigating charges of irregularities going beyond the Salem case.

Mr Steyn, who has been the Minister for only four months, told the Sunday Express he was not aware of any irregularities in his department, and was satisfied that South Africa had not paid excessive prices for oil.

But Mr du Plessis, who has headed the department for four years, confirmed that complaints had been received and that allegations concerning irregularities had been made.

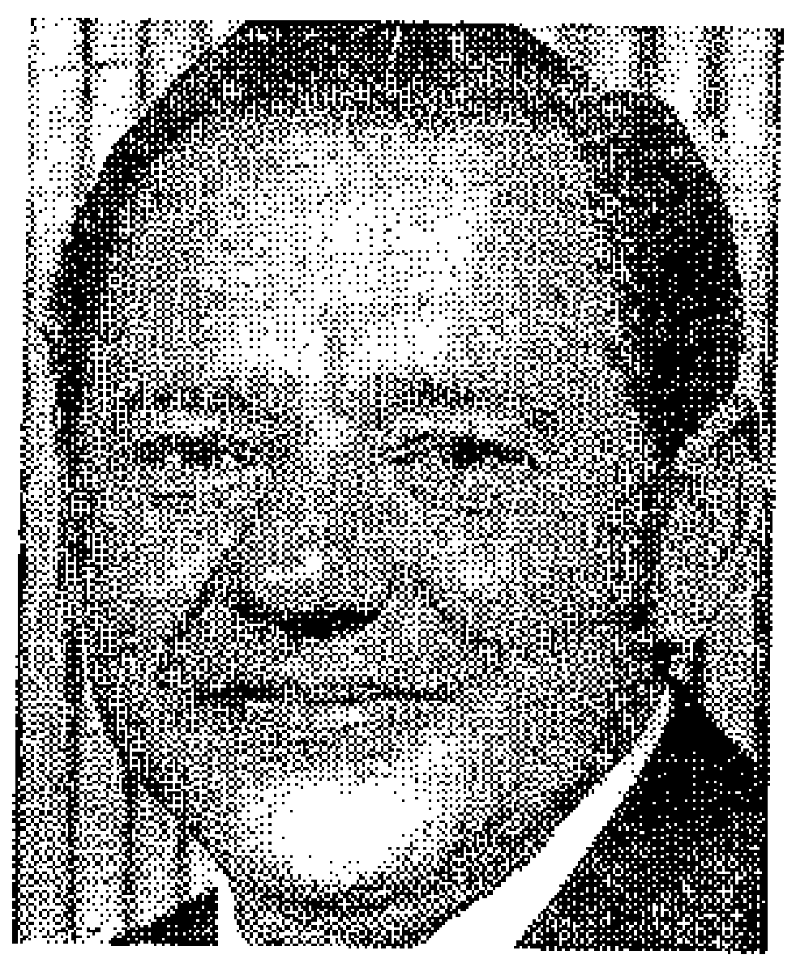
The complaints to the government included charges:

- That gifts were smuggled by an oil trader into South Africa in oil canisters marked "oil samples only" for distribution to his local contacts.

Dagger

- That the gifts included a silver dagger belt and parcels described as "dates".
- That the payment of vast sums of money into Swiss or other foreign bank accounts for South African residents was involved in some of the deals.
- That complaints had been made to the government that excessive profits and irregularities were involved in deals with a small group of traders who had come to dominate the market, and that these complaints included a letter sent to the Prime Minister.
- That some of the traders who made huge profits were men of "dubious reputation".
- That other traders claimed to be able to supply oil at lower prices but that their offers were turned away.

On the issue of the smuggled gifts, despite the documents handed to the department last year, Mr Steyn said: "I don't know anything about it."



● Mr Pietie du Plessis ... 'no comment'

● Mr F W de Klerk ... complaints unanswered

Referring to claims that commissions paid to South African residents had been banked for them in Swiss and other foreign banks, Mr Steyn said: "We don't know, and would not necessarily know."

He suggested that these claims should be referred to the Advocate-General or the police.

Mr du Plessis said it was possible that officials might have accepted bribes, or "put money into their back pockets" but there was no evidence to suggest this had happened, and it would be difficult to prove.

"The officials in my department and the SFF are men of the highest integrity. But I cannot vouch that people concerned in oil dealings did not receive favours from suppliers or buyers.

"If they had, it would be a matter for the Advocate-General or the police.

"The Advocate-General, as an independent body, must decide if there were fraudulent intentions."

Contracts

Mr du Plessis acknowledged that other traders had objected to prices paid for oil since 1979, and to the contracts awarded. He admitted that they had made offers at lower prices and said their complaints, both oral and written, had been investigated.

Mr du Plessis said that under the circumstances prevailing at the time, the oil contracts had been the "best deals at the best prices".

"We are satisfied that in these circumstances no excessive prices were paid. The prices paid were reasonable."

He said: "I cannot judge what the brokers' cut, or profit, was. We only negotiate the price, and we were satisfied. It is up to the broker and the supplier to agree on his margin of profit."

According to information given to the Sunday Express, a written complaint was sent to the Prime Minister as early as April, 1981. It was referred for attention to the department, headed at the time by Mr F W de Klerk, who is now Minister of Internal Affairs.

The department did not reply to the allegations.

Further complaints were made a year later to Mr Pietie du Plessis, then the Minister of Energy and Mineral Affairs, who had succeeded Mr de Klerk.

On one occasion, complaints were lodged at a meeting, lasting several hours, with Mr du Plessis .

The complainants, who represented reputable trading houses abroad, said they could supply oil at much cheaper prices, and complained about prices and excessive commissions paid to agents in deals at that time.

A reduction in the price of petrol was announced by the government soon afterwards.

Yet another agent who is well connected in international business and political circles last year handed documents to the department to substantiate his claims of irregularities in the award of a major contract.

This week Mr Pietie du Plessis refused to comment, and referred the Sunday Express to Mr Steyn, who said he was not aware of these allegations.

Objections

However Mr Sarel du Plessis admitted that his department had received these objections, and allegations of irregularities but said he could not comment on specific allegations as he did not have the files at his disposal.

Outlining the procedure the government followed when purchasing crude oil, Mr du Plessis said that it invited a select group of traders to submit quotes.

The quotations were evaluated by a special committee. "The SFF negotiates directly with the suppliers and the Minister makes the final decision," Mr du Plessis said.

Price, quality, security of supply, reliability and other risk factors were considered.

He said that lower tenders were sometimes received after a contract had already been awarded. Because they had arrived too late, they could not be considered as the SFF was already committed.

The SFF did not deal exclusively with a small group of suppliers and tried to buy from several sources.

Unrelated to the Sunday Express interview with Mr Steyn, the Prime Minister announced in Parliament this week, in reply to questions, that in addition to a report on the Salem case, submitted to various government law enforcement agencies, other reports "of a confidential and domestic nature", relating both to the Salem case and "other investigations", had been submitted to himself and Mr Steyn.

Investigations

The Prime Minister also said certain additional allegations concerning other aspects of the oil trade had been referred to the Advocate-General for investigation and report.

Commenting on newspaper reports that followed the Prime Minister's announcement, Mr Steyn, in a statement to the Sunday Express, issued after the interview at his office, said:

"The Prime Minister has already intimated that certain allegations relating to aspects of the oil trade other than the Salem case have been referred to the Advocate-General for investigation and report.

"It is for the Advocate-General to determine whether or not these allegations can be substantiated and I am not prepared to comment on speculative reports that may pre-empt the Advocate-General's findings."

Buyers go for bargains at Paarl wine auction

THE highest price paid at the Nederburg wine auction in Paarl by late yesterday was R4 000 for a case of 1966 Zonnebloem Cabernet.

Apart from this single buy, prices on the auction were generally more realistic than in previous years.

Buyers acquired bargains, particularly in some white categories. Edelkeur, which has consistently obtained very high prices at recent auctions, sold for an average of just over R100 a case.

Convenor

The convenor of the auction Mr Dave Hughes, said th Edelkeur prices had bee disappointing at time while white wine price had produced several oth er bargains.

The average price of re wines was somewha above those of previou years and was more o less what had been expect ed.

Apart from the R4 000 bi the highest price for re wines was R740 for 196 Zonnebloem Caberne while a 1969 vintage of th same wine fetched R700.

The highest price for whit wine was R260 for a 198 Nederburg Edelkeur and 1979 Nederburg Rieslin Edelkeur.

By lunchtime 36 of the 7 wines on auction had bee sold for a total of just ove R422 000. — Sapa.

Censorship

● There's a new face behind the Censorship Appeal Board.

Turn to LIVING

15/4/84

Labourer breaks his back in 5-floor fal

By DANIELA WYSZKOWSKI

A LABOURER working on a construction site in Randburg was ~~seriously injured~~ when he fell five ~~storeys~~ on to a pile of bricks and scaffolding yesterday morning.

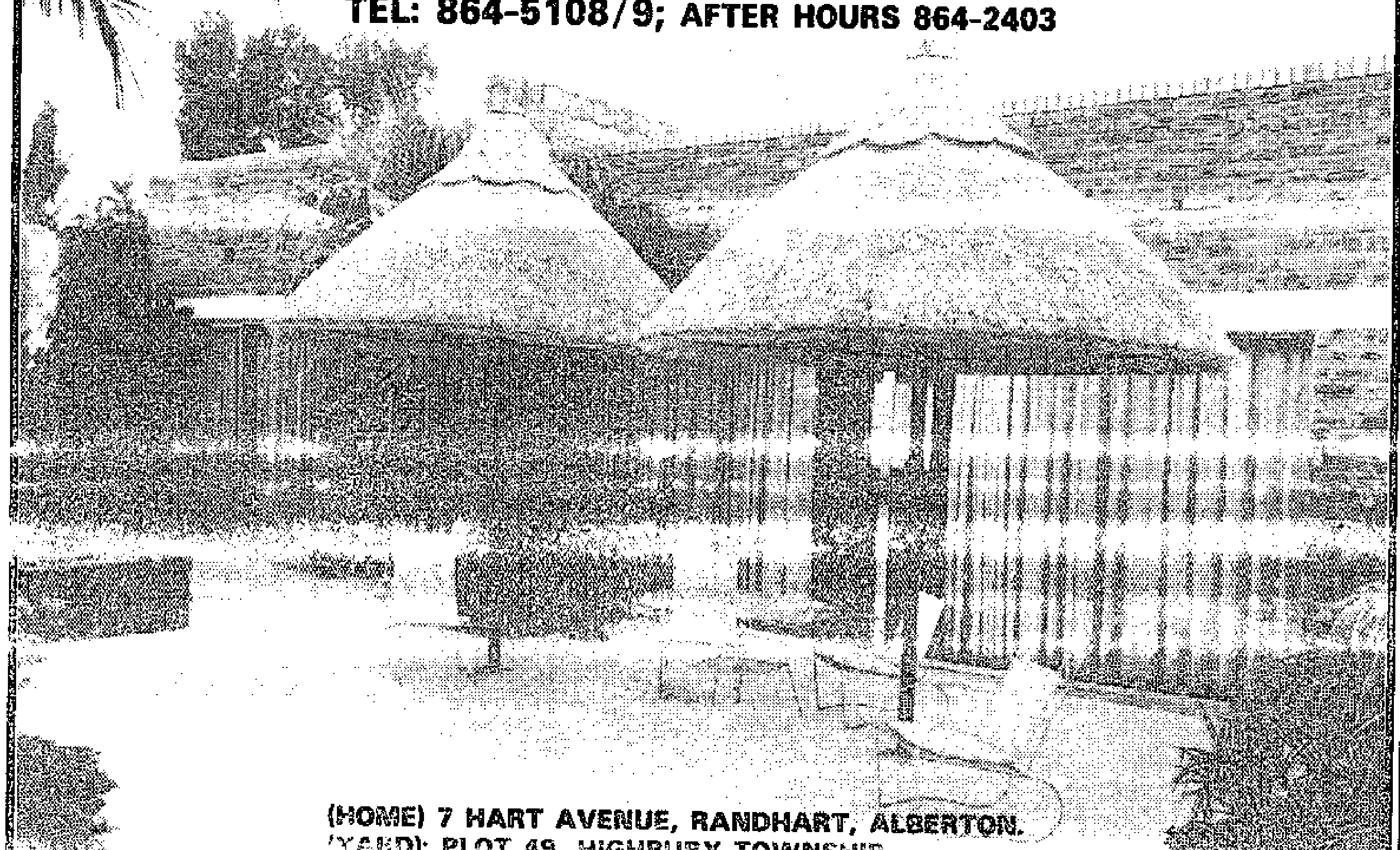
Mr Mondli Johannes Mazibuko, in his late 30s, was pushing a wheelbarrow filled with bricks when the accident happened.

Randburg ambulance officials said Mr Mazibuko's spine was broken ~~in the fall.~~

~~He also broke both his~~ legs and an arm and suffered internal injuries.

It is believed the wheelbarrow Mr Mazibuko was pushing struck a pillar, causing him to lose his balance.

Mr Mazibuko's condition is unkown at this stage as he was still in the operating theatre when the hospital was contacted late yesterday.



AM 506

Sunday Express

50c (For prices elsewhere, see Back Page)

JOHANNESBURG, April 15, 1984

S. Express 15/4/84 (55)

ENTERTAINMENT

BONEY IN BOP

● Evelyn Levison sees Boney M at Sun City. The crowd love it. So does Evelyn

PAGE 17

Redneck George

● Peter McKay sees Boy George take on Redneck Land. The crowd love it. Peter's still recovering

PAGE 20

Today's houses

● In just four pages: The quickest, most comprehensive guide to today's show houses

CENTRE PAGES

Pensioned off

● Continuing our probe into the bewildering world of pension funds . . . *another pathetic case history*

PAGE 4

Taal twister

● It's Nat vs CP time again — but now the setting's suburban Johannesburg and the battling candidates are both pukkah English

PAGE 7

Oil row bursts into the open

By KITT KATZIN and MARTIN WELZ

AN UPROAR about South Africa's secret oil purchases, which has been raging behind the scenes for three years, came into the open this week when the government gave the Sunday Express permission to publish information gathered in a lengthy investigation.

The permission was granted by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, after a meeting behind closed doors with two senior reporters in his office in Cape Town.

The Director-General of his department, Mr Sarel du Plessis, was present at the talks, which were requested by the Sunday Express.

The information put to them concerned complaints previously made to the government — in one case in a letter to the Prime Minister — which had met with no response.

This information included an allegation that gifts for officials were smuggled into the country in oil canisters, and suggestions that large sums of money had been funnelled into Swiss bank accounts.

Dominated

However, the main charge — one made repeatedly to the government over a period of three years — was that the country's oil supply was dominated by a small group of traders who made immense and excessive profits running into hundreds of millions of rands.

The disputes have been shielded from public gaze by the stringent provisions of the Petroleum Products Act but glimpses have previously emerged from the R35-million Salem scandal,

To Page 2

Govt strips Sasol of oil-buying powers

SASOL has been stripped of control of the Strategic Fuel Fund (SFF) which buys all South Africa's oil.

The staffing and management of the fund was taken taken over a month ago without public announcement by the Industrial Development Corporation (IDC) which already controls other strategic supplies.

The Minister of Energy and Mineral Affairs, Mr Danie Steyn, this week confirmed the change but denied it implied dissatisfaction with Sasol's management of the fund. Sasol, he said, had itself asked to be relieved of responsibility of the SFF when it became a private company.

Sasol directors who have resigned from the SFF board are Dr J A Stegmann, Dr D F Mostert, Mr J L J Bezuidenhout and Mr H R Wiggett.

Mr John Malcomess, Progressive Federal Party spokesman on energy affairs, said the Opposition had not been told of the change. "But it does add question marks to developments since the Salem affair," he said.

It is not clear how the change affects ministerial control of oil purchases. The IDC falls under the Minister of Industries, Commerce and Tourism, Dr Dawie de Villiers, while Mr Steyn remains responsible for oil supplies.

● Zola Budd

Zola laps the Brits

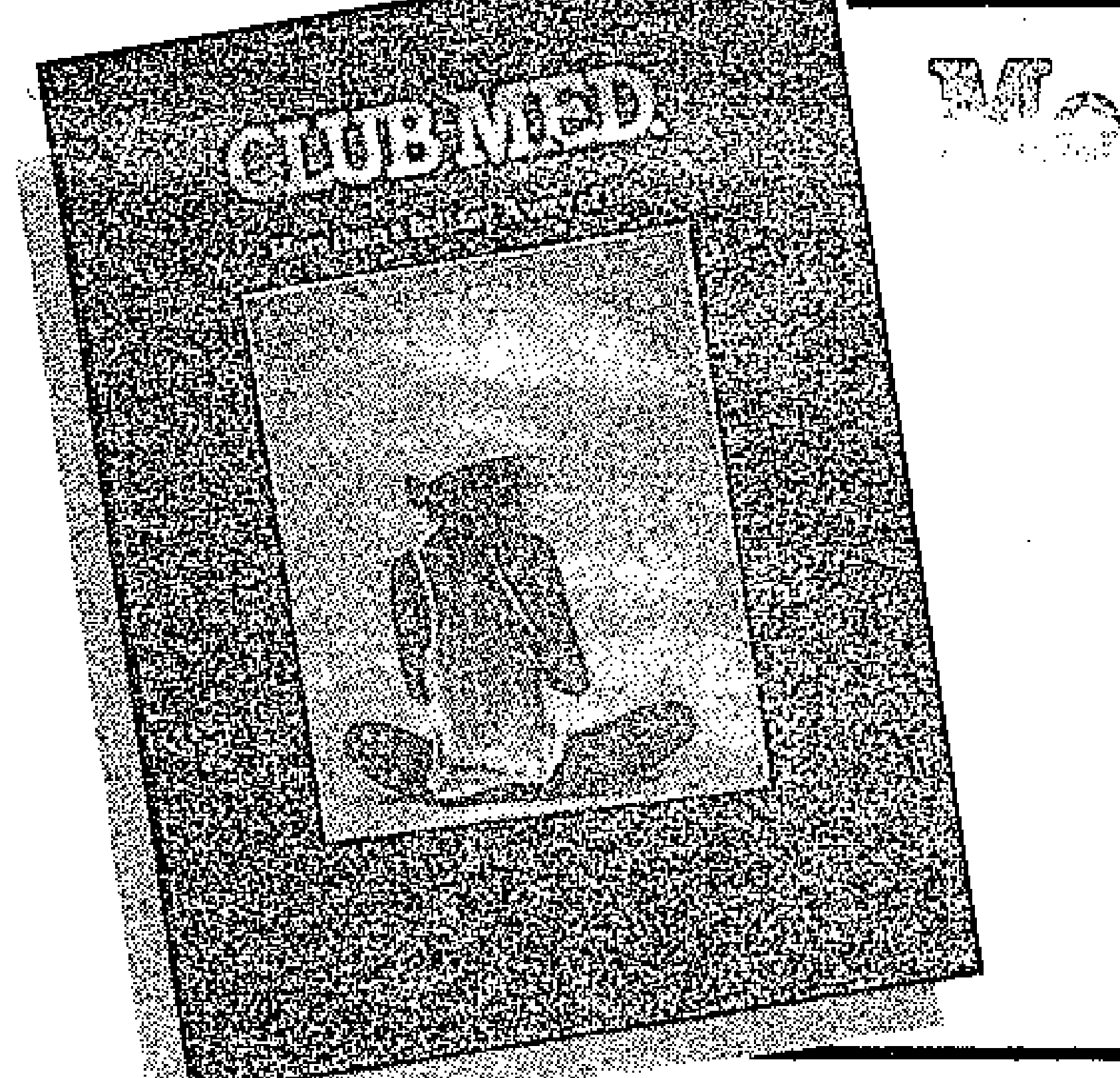
LONDON — Zola Budd, running in spikes, made a triumphant debut in British athletics yesterday by winning her 3 000m event at Dartford, Kent, inside the qualifying time for the Olympics. Watched by more than 5 000 wellwishers and more than 200 Pressmen, the 17-year-old sensation produced the good time of 9 minutes 2,6 seconds, lapping several of her competitors.

● See Page 3, Back Page

Shelagh didn't have to splash out . . .

● Back in the swim . . . Mrs Shelagh Matthews battled for two years to get the cracks in her R6 000 pool fixed by the builders Ripple Pools. Her problems ended this week when, having read a report in last week's Sunday Express about her difficulties, Sub-aqua Pool Services sent frogman Russel Bowden to effect the repairs at no charge. (Full story on Page 6.) Picture: DEENA SHAPIRO

FRONT PAGE NEWS



Probe into 'oil scandal'

Cape Times 16/4/84

Political Staff

55

ALLEGATIONS of another major oil scandal which could dwarf the "Salem Affair" have been referred to the Advocate-General, Mr Justice Piet van der Walt, for investigation.

While details of the alleged scandal are far from clear at this stage, Mr Justice van der Walt yesterday confirmed that he was investigating "possible enrichment at the expense of the State".

He added that the investigation would take "some time" as it had "all sorts of ramifications".

He declined to comment on the amount involved.

Acknowledgement that another possible oil scandal had been unearthed came from the Prime Minister, Mr P W Botha, earlier this week in a reply to Mr John Malcomess, MP for Port Elizabeth Central.

'Allegations referred'

Mr Botha said "certain allegations relating to other aspects of the oil trade have been referred to the Advocate-General for investigation and report".

Commenting on the Prime Minister's disclosure that another alleged oil scandal had been referred to the Advocate-General, Mr Malcomess said Mr Botha's announcement raised more questions than it gave answers, "and as such is unsatisfactory".

"It is important that we should be given more detail. For example, how much money is involved? Does it involve the public service or the Strategic Fuel Fund or Sasol? What is the magnitude of the allegations?", he asked.

- In a reply to a question from Mr Malcomess this week, the Prime Minister said an investigation into the "Salem Affair" conducted by the National Intelligence Service had been referred to the Attorney-General of the Cape.

Whites enjoy cheap energy

CAPE TIMES 16/4/84

55

~~265~~

Labour Reporter

WHITE households in Cape Town spend much less to buy more energy than poorer households in the townships, a study presented to the Carnegie conference on poverty says.

It shows that households in Pinelands pay R44 a month for electricity while poorer households in townships without electricity spend up to R73 a month on paraffin, gas, coal or wood.

On the basis of an extensive survey conducted in Cape Town, Dr Anton Eberhard, of the Energy Research Institute at the University of Cape Town, reports that households with electricity in Valhalla Park spend on average of R25 a month, while those without spend R65 — or nearly triple.

Households without electricity in Grassy Park spend on average of R73 per month on fuel, against R44 in Pinelands, R40 in Heathfield, R21 in Bonteheuwel and R25 in Guguletu.

Additionally, wealthier households spend proportionately less of their income on electricity.

Poorer households earning less than R50 a week buy about a third of the energy which Pinelands households consume, but spend on average 38 percent of their income on energy, and in extreme cases more than 50 percent, he says.

In many poorer areas of Cape Town which are electrified, households do not have electricity because they cannot afford the high installation costs, or because their supplies have been cut off as a result of defaults.

"It is clear that poorer households are struggling to pay for their energy requirements," he says.

CAPE TIMES 16/4/84

55

SA's electricity denied to most

By RIAAN DE VILLIERS
Labour Reporter

SOUTH AFRICA generates about 60 percent of total electricity supplies in Africa — but the majority of its own citizens do not have access to its benefits, a study presented to the Carnegie conference on poverty has found.

Dr Anton Eberhard, of the Energy Research Institute at the University of Cape Town, says South Africa's electricity grid has been extended mainly to "white" industrial and urban centres and some farms, while rural populations in underdeveloped areas are dependent on scarce and rapidly-depleting fuelwood resources.

He reports "further disparities" in energy supply in urban areas. Although whites constitute only 17 percent of the population, they consume about 67 percent of electricity used in the domestic sector.

An estimated three-quarters of black urban houses have no access to electricity, he says.

In another paper, Dr Eberhard and Mr Mark Gandar of Natal University say South Africa has an energy-intensive industrial economy dependent on fossil fuels, supporting a "minority at a high standard of living".

On the other had, it has an underdeveloped sector where the majority of the population "live in poverty and are dependent on fuelwood".

No official figures are available for energy consumption in this sector — which the authors say are ignored in government planning and forecasting.

But they estimate that 15 million blacks living in all the homelands and "white" rural areas consume nearly 190 petajoules — about a tenth of total energy consumption.

They estimate that 7,3 million tons of fuelwood are being consumed in South Africa and the homelands each year, but in spite of this there is no desperate shortgage of forestry resources in South Africa as a whole.

More than 1,2 million hectares are currently under commercial plantation, and 7 million tons of wood wastes are wasted without any energy recovery.

Current energy planning has proved inadequate for the needs of rural populations and the problem calls for a new strategy, they argue.

'Senseless

They advocate a main strategy of producing more firewood, but say this cannot be a solution in itself, as it would require about one million hectares of plantation.

At the moment, the extent of non-commercial plantation for firewood is less than 2 percent of this, of which more than half is in the Transkei.

Under the present system of separate development, it is "senseless to talk about one million hectares of woodlot," they say, and add: "There is in fact no simple, single answer to the rural domestic energy crisis."

They say the current situation is largely the result of historical processes and economic structures which require labour migration and the restriction of a large, growing population to the homelands.

Therefore, efforts to overcome energy problems must involve the reallocation of resources at a national level.

"There is no overall shortgage of energy in South Africa — only a highly inequitable distribution of and access to energy resources," they conclude.

The poor paying more for energy

Sowetan 16/4/84

55

CAPE Town households without electricity spend up to three times as much on lighting, heating and other energy needs than do similar households with electricity, a city researcher has found.

This has been reported by Dr Anton Eberhard, senior research officer of the Energy Research Institute at UCT, to the Carnegie Conference on poverty.

"Poorer households are able to buy less energy but spend proportionately more of their income on energy.

Income

"Hence relatively wealthy Pinelands spends, on average, less than three percent of household income on domestic energy, while Valhalla Park households with electricity spend 11,9 percent and Valhalla Park residents without electricity spend 24,5 percent on their income," he found.

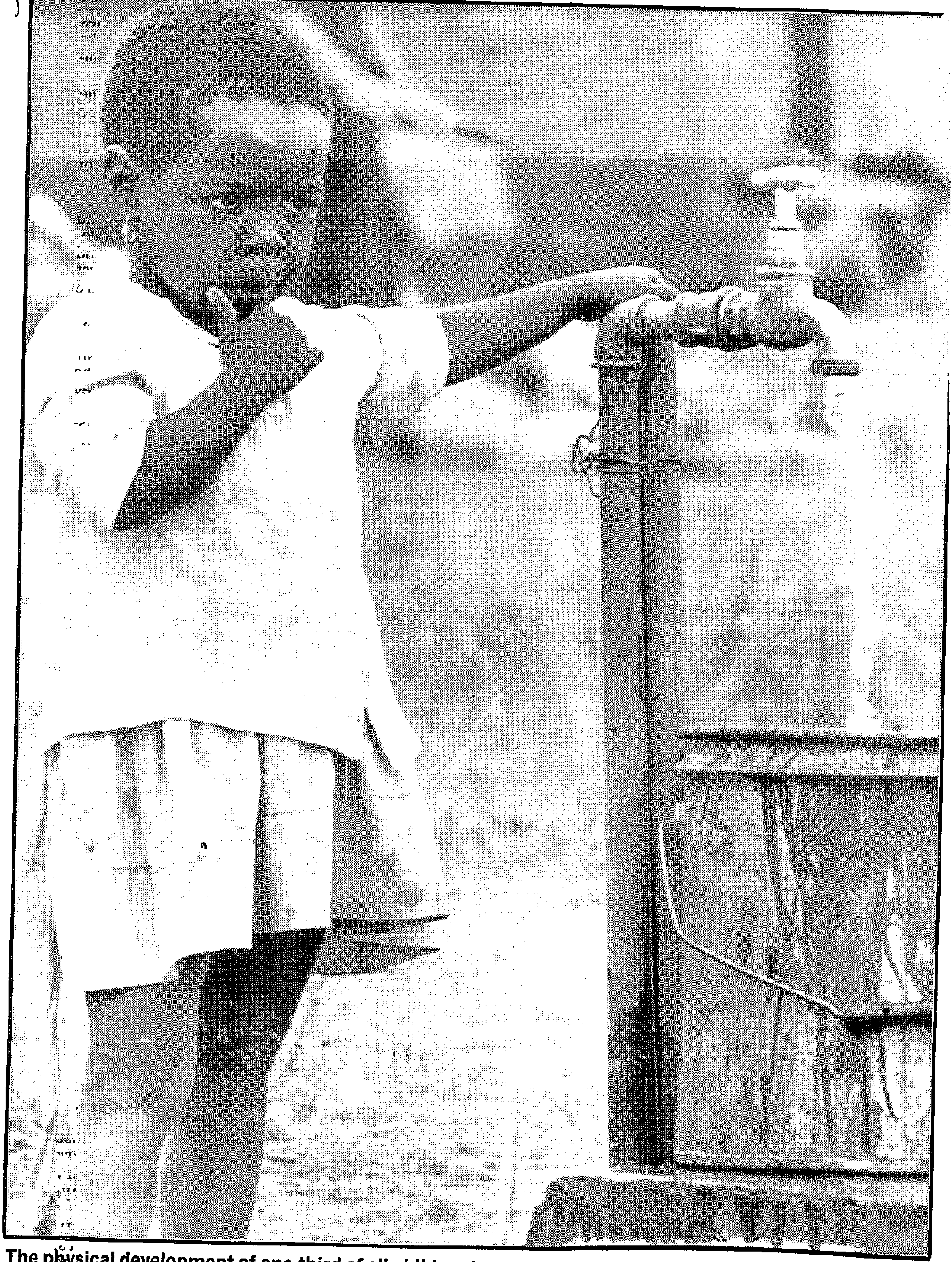
Some poorer households spend more than half their income on energy, he found.

He added that in Valhalla Park, households with electricity spend an average of R25 a month while those without electricity spend R65 on energy including paraffin, gas, coal, wood, candles and batteries.

Hardships

"The lack of electricity is felt to be a severe hardship because of the expense, inconvenience and dangers associated with current fuels," he found.

The survey also covered Lotus River, Grassy Park, Bellville South and Crossroads.



The physical development of one-third of all children in rural areas is stunted . . . In one Venda village, 10 out of 30 babies born in a year died from water contamination, the Carnegie conference was told.

RDM 17/4/84 (55) [illegible]

No answer to energy crisis

SOUTH AFRICA generates about 60% of the total electricity supplies in Africa — but the majority of its own citizens do not have access to its benefits, a study presented to the Carnegie conference has found.

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On the other hand, the majority of the population "live in poverty and are dependent on fuelwood".

They estimate 15-million blacks living in all the homelands and "white" rural areas consume about a tenth of total energy consumption.

In South Africa and the homelands, they estimate 7,3-million tons of fuelwood are consumed each year. Despite this there is no desperate shortage of forestry resources.

More than 1,2-million hectares are under commercial plantation. The paper claims that large amounts of wood and 7-million tons of wood wastes are wasted without any energy recovery.

Current energy planning has proved inadequate for the needs of rural populations and the problem calls for a new strategy, they argue.

They advocate a main strategy of producing more firewood, but say this cannot be a solution in itself as it would require about 1-million hectares of plantation.

At the moment, the extent of non-commercial plantation for firewood is less than 2% of this, of which over half is in the Transkei.

Under the present system of separate development, it is "senseless to talk about one million hectares of woodlot," they say, and add: "There is in fact no simple, single answer to the rural domestic energy crisis."

They say efforts to overcome energy problems must involve the reallocation of resources at a national level.

"There is no overall shortage of energy in South Africa — only a highly inequitable distribution of and access to energy resources," they conclude.

Mercury 18/4/84 (55)

25 000 Israelis helping S A, says author

London Bureau

AS MANY as 25 000 Israelis are working in South Africa, mainly on Government-to-Government contracts, especially work on arms and energy projects, says James Adams, a British journalist, in *The Unnatural Alliance* to be published here tomorrow.

Adam's 218-page book claims to be the first detailed account of co-operation between South Africa and Israel, particularly in the military and espionage fields.

He says South Africa and Israel have drawn increasingly together for mutual security, and as a result they 'have used every means at their disposal to equip themselves with modern weapons from the open market and from each other, and to build up their own independent arms industries, combining Israel's innovative technology and South Africa's rich supplies of raw materials and its relatively full coffers'.

Biggest

This joint production and shared research and development costs 'have not only been applied to sophisticated missiles, tanks, aircraft and naval vessels, but also to nuclear weapons'.

When all trade is taken into account, Adams declares, Israel may be South Africa's biggest trading partner.

Israel currently gets 50 percent of its diamonds from South Africa. Diamond cutting and polishing is now a vast business in Israel employing some 15 000 people and, after military sales, is the second largest export earner.

Adams describes a period of conflict between Israel and De Beers which ended with a 'savage attack' by De Beers on Israeli purchases on the open market, thus shoring up the price of diamonds. But 'the spectre of more than one billion rands in diamonds stored in the vaults of Israeli banks still hangs over De Beers'.

Learned

South Africa's military strategy has been developed with the help of Israeli officers, her armed forces are equipped by Israel and 'their counter-insurgency tactics have evolved almost entirely as a result of lessons learned by the Israelis in their fight against the Palestine Liberation Organisation'.

Much of the efficiency of the South African security services must be placed at the door of Israel, for both army experts and specialists in counter-intelligence operations and interrogation from the Mossad (Israeli Secret Service) have been based in South Africa in a permanent advisory capacity since 1976.

When the Israelis pushed north into the Lebanon in June 1982 they captured Tyre and Sidon and a hoard of PLO documents, revealing among other things the PLO's links with the ANC. South Africa was an early recipient of this information.

Israeli security specialists have been permanently based in South Africa on secondment for at least 10 years, and at the present time more than 50 are working along the borders and advising the South Africans. This has not been simple philanthropy. Millions of dollars in orders have been placed with Israeli firms.

'Privately, the South African military has conceded that much of the border area, particularly near Angola and Mozambique, is riddled with anti-personnel mines manufactured in Israel.'

For the past 20 years men of senior rank in both countries' armed forces have been visiting their opposite numbers. This has been particularly useful to the Israelis whose common practice is for senior officers to go into the arms business on retirement.

To help South Africa take advantage of its range of products, Israeli technicians from the country's three main electronics companies — Tadiran, Elbit and IA — combined to help South Africa design and build its own electronics manufacturing ability.

Israel has supplied South Africa with the Scount Remotely Piloted Vehicle, helped with the design and construction of airfields, and with Israel's help South Africa has acquired a military strength which far exceeds that of any of its potential enemies.

A senior South African Defence Force spokesman said it was not the policy of the Defence Force to comment in any way on the acquisition or sales of weapons and equipment.

jnt.

S A to sign three-way power deal

Mercury 24/4/84 (55)

MAPUTO—Mozambique, South Africa and Portugal will sign an agreement on May 2 on the use of power from the Cahora Bassa hydro-electric station in north-western Mozambique, it was announced yesterday.

A communique, issued after talks between Mozambican and South African officials, said the agreement will be signed in Cape Town by Portuguese Foreign Minister, Jaime Gama; South African Foreign Minister Pik Botha amd Mozambican Foreign Minister Mario Machungo.

In conjunction with the agreement, South Africa will sign a contract to receive up to 1 450 megawatts annually from the Cahora Bassa scheme.

In turn, South Africa will supply Mozambique, whose capital Maputo is almost entirely dependent on electricity from its white-ruled neighbour, with 90 MW of electric power from its Escom national grid system this year.

The communique said the supply contract established a new tariff for power supplied to South Africa from Cahora Bassa, which was built while Mozambique was a Portuguese colony principally to meet South African electricty requirements. The new tariff was not specified.

Portugal incurred heavy debts in the construction of the dam and repayments were to be met by the sale of power to South Africa.

However, a low tariff rate and disrupted supplies due to guerilla action by the anti-government Mozambique National Resistance drastically cut the level of anticipated income.

Negotiating

The three governments have been negotiating a new agreement on the use of the dam's power since mid-February. The communique said South Africa will receive 8 percent of its electricity needs from Cahora Bassa once the new agreement is fully operational.

Heading the two sides at yesterday's talks were South African Deputy Foreign Minister Mr Louis Nel and Mozambican Industry and Energy Minister Mr Antonio Branco.

Portugal was not involved in the discussions, but the communique said South African and Portuguese delegations agreed on the text of the new agreement in Lisbon last week. — (Sapa-Reuter)

NATIONAL/INTERNATIONAL

Cabora Bassa security major stumbling block

Argus 24/4/84

53

Political Staff

THE security of the 800km power lines from Cabora Bassa to South Africa is still a major stumbling block which could slow down the provision of electricity to the Escom national grid.

However, Mr Louis Nel, Deputy-Minister of Foreign Affairs, who led the South African negotiating team in reaching agreement with Mozambique and Portugal on the resumption of power from the hydro-electric scheme, said today he was optimistic the lines would be secured.

In an interview Mr Nel declined to comment on the possibility of South African security forces being used to help secure the lines, but it is understood the Government is not in favour of doing this.

Commission

Mr Nel said the issue of securing the lines had been referred to the joint security commission established in terms of the Nkomati Accord.

"No final decision has been reached on how to secure the lines. It is a matter of having to get security for the whole region.

"I am personally optimistic the lines will be secured."

He pointed out that in terms of the agreement on the use of power from Cabora Bassa, an ordinary tariff would be paid, plus a premium if there was uninterrupted power.

"The premium would be an incentive to ensure firm supply."

The text of the trilateral agreement between South Africa, Portugal and Mozambique, which will be signed in Cape Town on May 2, would be released, Mr Nel said.

BCS 4 (Cont.)

e points could be conveniently grouped under the

dings:

legal

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(55)

Cape Times 24/4/84

Agreement on Cahora Bassa

MAPUTO. — Mozambique, South Africa and Portugal would sign an agreement on May 2 on the use of power from the Cahora Bassa hydro-electric station in north-western Mozambique, it was announced here yesterday.

A communique, issued after talks between Mozambican and South African officials, said the agreement would be signed in Cape Town by the Portuguese Foreign Minister, Mr Jaime Gama, the South African Foreign Minister, Mr Pik Botha, and the Mozambican Foreign Minister, Mr Mario Machungo.

In conjunction with the agreement, South Africa will sign a contract to receive up to 1 450 megawatts annually from the station.

In turn, South Africa will supply Mozambique, whose capital Maputo is almost entirely dependent on electricity from its white-ruled neighbour, with 90 megawatts of power from Escom this year.

The communique said the supply contract established a new tariff for power supplied to South Africa from Cahora Bassa, which was built while Mozambique was a Portuguese colony, principally to meet South African electricty requirements.

Portugal incurred heavy debts in the construction of the dam and repayments were to be met by the sale of power to South Africa. But a low tariff rate and disrupted supplies due to guerilla action by the Mozambique National Resistance cut the level of anticipated income.

Under the new agreement, South Africa would receive 8 percent of its electricity needs from Cahora Bassa. — Sapa-Reuter

Oil row: PM slams down receiver on mystery calls

W/E ARGUS 20/4/84

SS

Parliamentary Staff

THE Prime Minister, Mr P W Botha, has rejected Opposition calls to appoint a parliamentary select committee to investigate an alleged multimillion rand oil scandal.

Replying to his budget vote in the Assembly, Mr Botha said he had nothing to submit to such a committee.

The controversy over the alleged oil scandal took a new twist when the Leader of the Opposition, Dr Frederik van Zyl Slabbert, said more irregularities had been alleged in anonymous telephone calls to Opposition members.

Two types of allegations were being made. One was about alleged irregularities through which people enriched themselves. The other was about inefficent State actions in the spending of public money.

Replying, Mr Botha said the allegations had been referred to the Attorney-General.

"No new facts"

Dr Slabbert did not have new facts on the matter, he added.

"He wants to submit anonymous telephone calls to the select committee.

"We have not got anything to submit to a select committee."

Earlier Dr Slabbert had said he was satisfied with the way he (Mr Botha) had handled the matter, the Prime Minister said.

He then suggested that Dr Slabbert was under pressure from certain members in his party to call for a select committee.

Mr Botha said he had found that no Cabinet minister nor senior civil servant was under suspicion.

Select committee must investigate 'serious allegations' — Slabbert

Call for oil probe

Argus 25/4/84 (55)

By TOS WENTZEL, Political Correspondent

THE Leader of the Opposition, Dr F van Zyl Slabbert, today called for a parliamentary select committee to investigate whether oil deals had involved wasteful or irregular expenditure of public money.

Speaking at the start of a three-day debate on the Prime Minister's Vote in the Assembly this afternoon, he made it clear that such an investigation would deal with "extremely serious allegations" about the Strategic Fuel Fund, which procures South Africa's oil supplies overseas.

He confirmed that he had brought these allegations to the attention of the Prime Minister, Mr P W Botha.

Mr Botha has already announced that these allegations have been referred to the Advocate-General.

Anonymous

Dr Slabbert said the allegations had come to him privately and anonymously.

They were of an extremely serious nature and appeared to come from an authentic source.

They involved the use of public money in an irregular manner on a vast scale in a strategically sensitive area for South Africa.

"I believe unsubstantiated allegations of this kind should not become part of an attempt to get short-term party political gain, particularly if it could be at the expense of the ordinary taxpayer.

"Correct thing"

"It was therefore the correct thing to do to seek a confidential briefing with the Prime Minister in order to draw his attention to these allegations.

"I did this and urged him to have them investigated as soon as possible. Within days the Prime Minister announced that he had referred these allegations for investigation to the Advocate-General."

Dr Slabbert said that having acted in this way did not mean that the Leader of the Opposition and the Prime Minister were involved in a cover-up.

On the contrary, private allegations had now become part of an official investigation which had to report back to Parliament and he urged those who had relevant information to make it available to the Advocate-General.

Two issues were involved, he said. One was the specific allegations being investigated by the Advocate-General.

"All power to his arm"

"All power to his arm and I would ask the Prime Minister whether he was satisfied that this gentleman has all the help and assistance he needs to facilitate his investigations."

The second issue was a much broader one, namely whether public money had been expended in a wasteful or irregular manner and whether this could have been avoided with stricter and better control.

If newspaper reports on the matter had any substance, the amounts were "astronomical".

He believed this was a matter which directly concerned Parliament and he therefore believed that it should be dealt with by a select committee of Parliament.

'Time to seize new initiatives . . .'

Dr Frederik van Zyl Slabbert . . . call on Govt to act.

Political Correspondent

THE Leader of the Opposition, Dr Frederik van Zyl Slabbert, today called on the Government to use the more favourable international attitude towards South Africa to deal with pressing internal problems, especially the position of blacks.

Speaking at the start of the debate on the Prime Minister's vote in the Assembly, Dr Slabbert said South Africa was experiencing the most favourable foreign atmosphere since it became a republic.

Signs of this were attempts to have better relations with neighbouring states and Mr P W Botha's planned visit to West Germany and possibly other countries.

As far as breakthroughs involving the West were concerned, these should be regarded as the calm before the storm. Now was the time to seize new initiatives.

"Whichever way we look at it, these new initiatives must be applicable to the internal situation. Our breakthrough on the foreign level increases the attention on our internal situation."

EXTREMELY UNSATISFACTORY SITUATION

All the efforts at constitutional development only emphasised one overwhelming fact — the unsatisfactory and untenable position of the black man.

An extremely unsatisfactory situation was developing. The black man in South Africa was being drawn nearer as a worker, while he was being disowned as a citizen.

This was the oldest formula for conflict in a society.

In South Africa it would mean only one thing: the work place would be where the black man would fight for his political rights.

TAKE SYMBOLIC STEP

A new initiative was urgently needed.

Just as little as the Government had surrendered the rights of whites by accepting common citizenship with coloured people and Indians, just as little would this be done if it accepted the same in the case of blacks.

If the Government was prepared to take this symbolic step of common citizenship, planning on a new South Africa could really start.

Oil deals: No contractors have benefited irregularly — Botha

ARGUS 26/4/84 55

By TOS WENTZEL,
Political Correspondent

THE Prime Minister, Mr P W Botha, said today that allegations that contractors in oil deals had been irregularly benefited were being investigated by the Advocate-General.

Speaking on the second day of his vote in the Assembly this afternoon, Mr Botha said the Leader of the Opposition, Dr F van Zyl Slabbert, had referred these allegations to him.

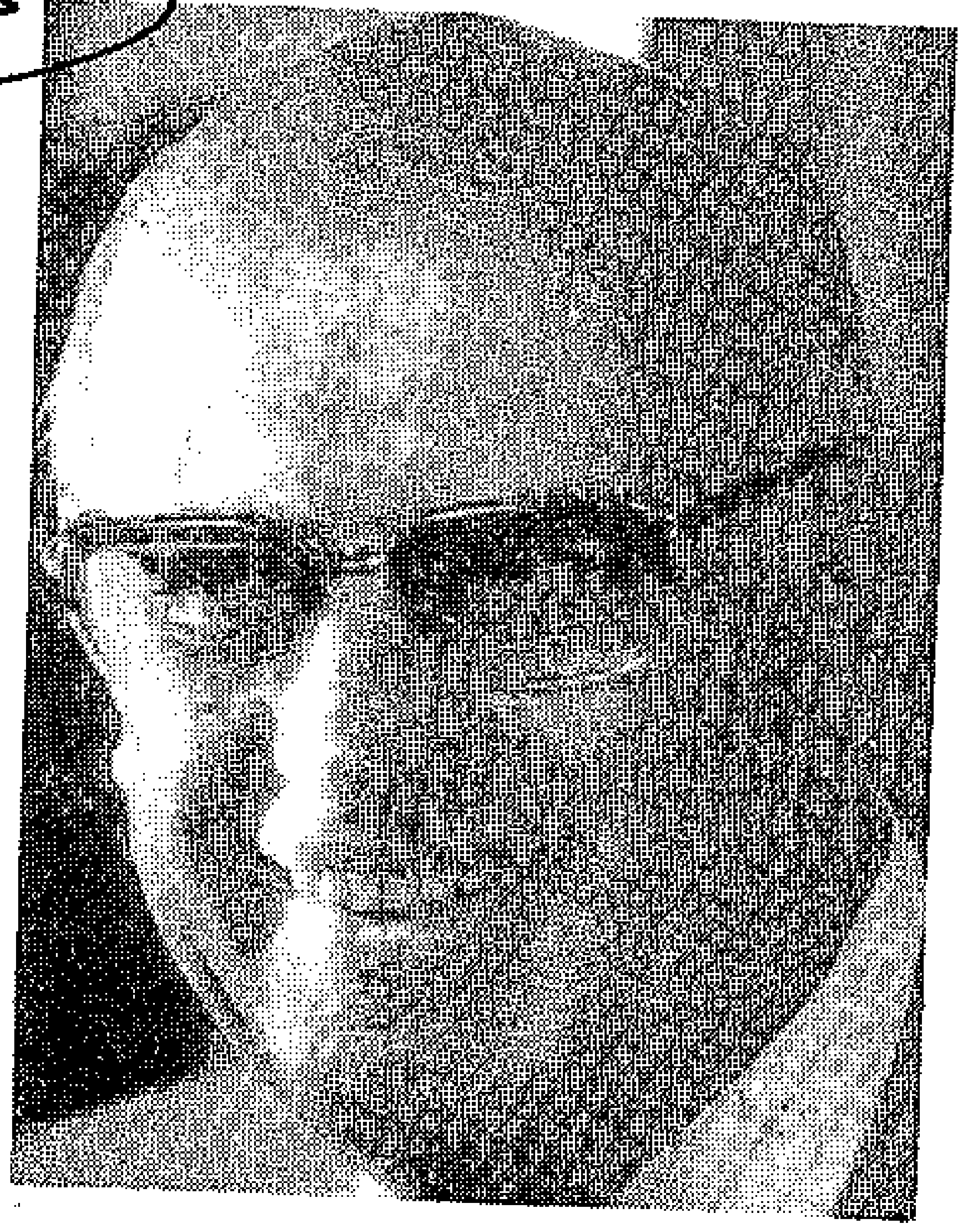
He rejected a call by Dr Slabbert for a parliamentary select committee.

He was satisfied that the Attorney-General had all the necessary powers.

The Prime Minister said the Advocate-General could order people to give evidence before him and to submit documents.

He was being assisted by a senior barrister and all such people he may deem necessary for the execution of his task.

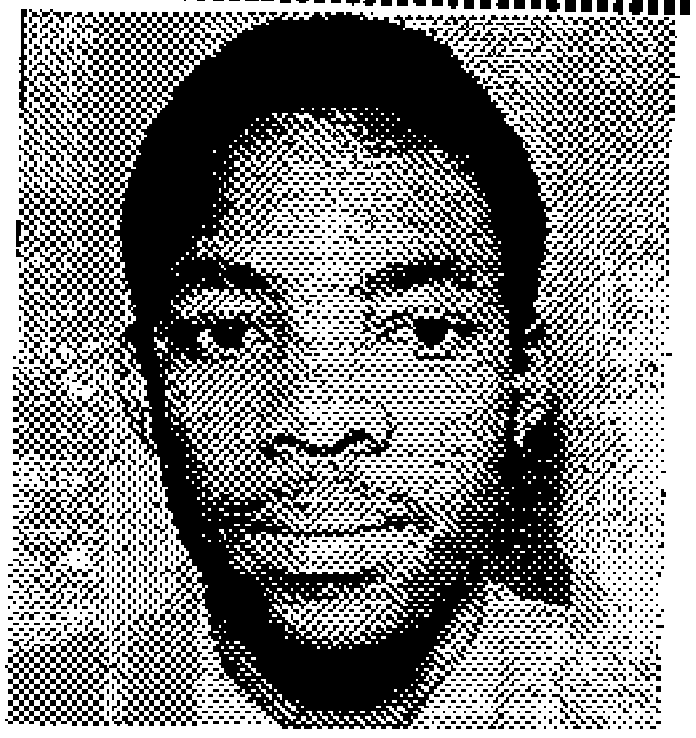
The Advocate-General Act in case lay down that he must report to Parliament and on the receipt of such a report Parliament had the right to say how it should be handled.



Mr P W Botha

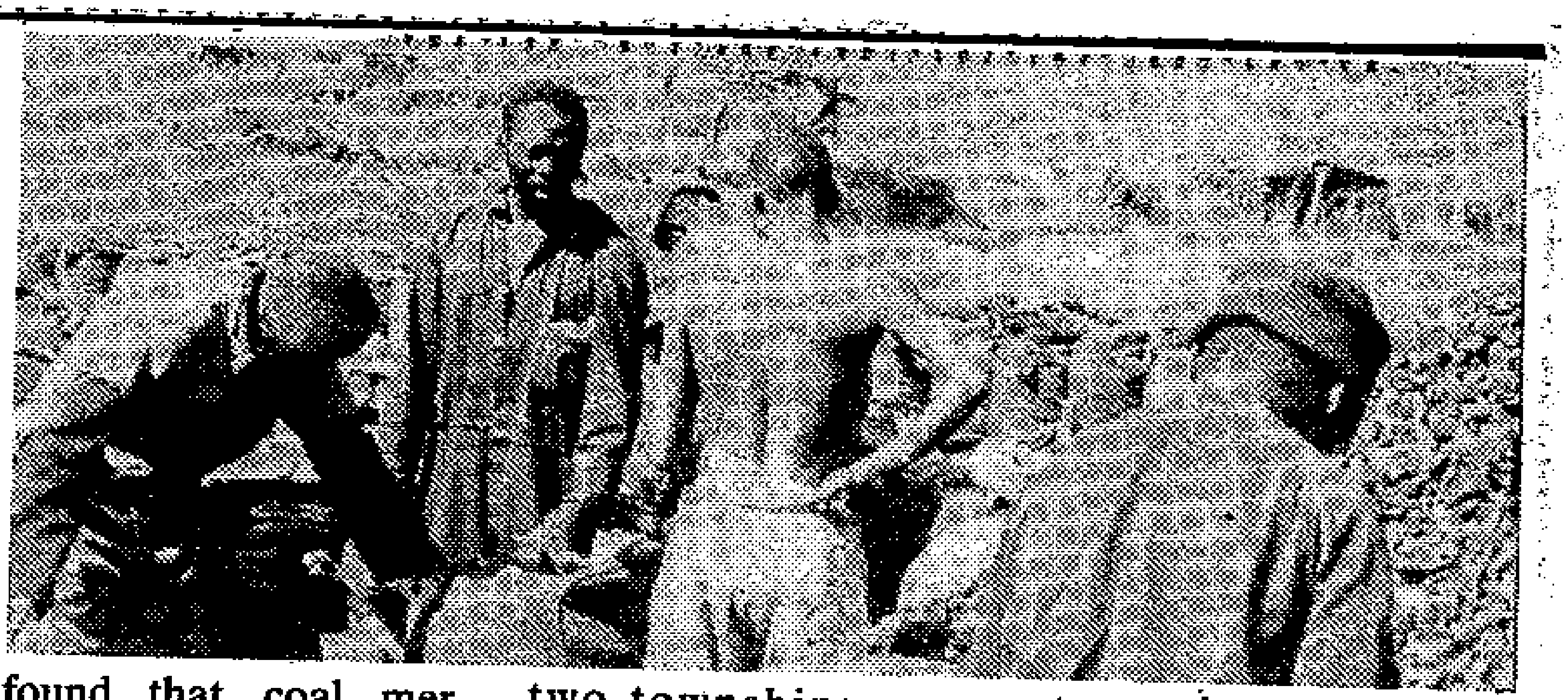
Furthermore, the Act lay down that if it was a confidential report it had to be referred to a select commission for consideration and a report to Parliament.

Coal rip off



Consumer Corner

By LEN MASEKO



PRETORIA coal dealers, and some of their Soweto counterparts, are charging R4,20 for a 70kg bag of coal — about 10,5 percent more than the recommended price.

This emerged during a Consumer check which revealed that the new price of R4,20 — which came into effect on April 1 as a result of a nine percent hike — was 44 cents more than that recommended by the Department of Mineral and Energy Affairs.

The controlled price of a 70kg bag of coal is R3,76, according to Mr J Roets, price-controller of the Mineral and Energy Affairs Department.

But Consumer Corner found that coal merchants in Atteridgeville and its neighbouring townships, and in some parts of Soweto, were charging 44 cents more for a 70kg bag than the recommended price.

A survey around Orlando East and Nancefield, Soweto, revealed that all dealers in the two townships were charging R4,20.

One Orlando East dealer, who said he was not aware that he was overcharging, told Consumer Corner that the Orlando East/Nancefield branch of the Soweto Coal Merchants Association (SCMA) had approved the price at a meeting recently.

By charging consumers 44 cents more than the recommended price coal dealers were risking prosecution, Mr C T Cloete, regional inspector of the Department of Commerce and Industries, told Consumer Corner.

"They are definitely overcharging by selling the 70kg bag at R4,20. We will start investigations as soon as possible. I will send my men to the townships to investigate this racket," Mr Cloete said.

Consumer Corner also discovered that in most Greater Soweto townships — that is, excluding Orlando East and Nancefield — there was confusion and uncertainty among dealers, who still charge the old price of R3,80. Those interviewed said they were still waiting for the SCMA to inform them of the new prices.

Price

In terms of the old official price list, the R3,80 these dealers are charging for a 70kg bag of coal is 38 cents more than the old recommended price. The old official price, before the nine percent hike was announced, was R3,42. Still, the R3,80 price Soweto consumers are charged for the 70kg bag is four cents higher than the new official price (R3,76).

The SCMA chairman, Mr Joseph Mamashila, could not be reached for comment by the time of going to Press.

Meanwhile a survey on the East Rand revealed that coal was cheaper in the area. Local coal merchants charge R4,30 for a 90kg bag of coal — 23 cents less than the official price.

Residents in Duduza and Vosloorus, the survey revealed, paid R4,30 for the same size of coal. Those in Springs pay 10 cents less for the 90kg.

Consumer organisations have reacted with shcok and anger at the news that some coal dealers were overcharging.

Mrs Dorothy Maubane, secretary of the newly-formed Black Consumer Union, said it was "unfair" of merchants to overcharge on the price of coal, and urged coal dealer associations to investigate the matter.

Our organisation will look into the matter. We will try to find ways of solving the problem, and perhaps call their associations to a meeting. Perhaps this will help us find out why they are overcharging," Mrs Maubane said.

Parliament and Politics

Call for probe into SFF 'irregularities'

CAPE TIMES 26/4/84 (55)

Political Staff

HOUSE OF ASSEMBLY. — Aspects of allegations of irregularities in the activities of the Strategic Fuel Fund should be investigated by a parliamentary select committee, the Leader of the Opposition, Dr Van Zyl Slabbert, said yesterday.

Speaking in Parliament in the debate on the Prime Minister's Budget Vote, Dr Slabbert said the Prime Minister, Mr P W Botha, should appoint a select committee "forthwith".

Allegations involving the SFF were given to Dr Slabbert anonymously recently. He consulted with Mr Botha who announced later that the matter had been referred to the Advocate General for investigation.

Dr Slabbert said yesterday the allegations "were of an extremely serious nature" and appeared to be authentic.

"I believe unsubstantiated allegations of this kind should not become part of an attempt to get short-term party-political gain. Particularly if it could be at the expense of the ordinary taxpayer," he said.

He had therefore drawn the allegations to the Prime Minister's attention on a confidential basis.

'Two issues'

"Having acted in this way on anonymous and private allegations rather than public ones does not mean the Leader of the Opposition or the Prime Minister are involved in a cover-up.

"On the contrary, private allegations have now become part of an official investigation which must report back to Parliament and I urge those who have relevant information to make it available to the Advocate General," he said.

However, there were two issues involved.

One was the specific allegations being investigated by the AG.

But the second was much broader, namely whether public money had been expended in a wasteful or irregular manner and whether that could have been avoided with stricter and better control.

"I believe this is a matter which directly concerns Parliament and I therefore believe it should be dealt with by a select committee of Parliament," Dr Slabbert said.

He also urged Mr Botha to give more answers to allegations about executive control by the State Security Council.

major surgery. child's air fare.

o school bodies set at ‘snub’ by ucation officials

By Jean Hey, Education Reporter

bodies at two Rosettenville schools were offended when education officials visiting the yesterday failed to discuss problems they be- e officials have ignored for decades.

school committees of Rosettenville Central (RCS) and Rosettenville Junior Primary l (RJPS) claim they have fought “for 23 years” nalgamation and renovation of the schools.

caters for children from Grade 1 to Standard le less than a kilometre away. RCS teaches her primary school classes.

er a three-year period of correspondence with Transvaal Education Department (TED), the committees turned to provincial councillor Mr Fanie Schoeman for help.

when Mr Schoeman visited the school yester- with the TED's director, Professor J H Jooste, ther TED officials, the school committee mem- claim they were ignored.

ne TED asked us to attend the meeting but no notice of us. It was a waste of time,” said Mr asmus, chairman of the RCS committee.

rents wanted to know whether the TED would vate the schools' broken gutters, jammed win- and poor buildings, and whether the two schools be amalgamated.

ked to reply, Mr Schoeman said he was not e the school committee wanted to discuss any- . The officials had to visit five schools yesterday ing and were pressed for time, he said.

he plan for amalgamating the schools was ac- ed long ago. As for renovation, we are aware schools are in a bad condition but a lack of s has prevented us from improving them.”

‘water wasters’

night

He was replying to a comment by Mr Nic Gay that the new punitive tariffs appeared to be “pretty drastic”.

Mr Gay asked for further details as nany people were exceeding before a decision could be to the necessity for such a increase.

lder said the present level of Dam was no guarantee that would not be introduced be- end of the year.

pter

Sasol clarifies SFF role

(55)

Star 27/4/84

The withdrawal of Sasol directors from the management of the State Fuel Fund (SFF) took place on March 15, this year — and not the day before Dr Van Zyl Slabbert saw the Prime Minister, a Sasol spokesman has told The Star.

He was clarifying a statement which appeared in The Star on Wednesday which referred to the political row over South Africa's oil deals and which said: “The day before Dr Slabbert saw the Prime Minister, the Government had stripped Sasol of its oil-buying powers — but Dr Slabbert was not told about that.”

The spokesman said that by saying Sasol was “stripped” of its powers implied that it had been “fired”.

“In fact the pending transfer of SFF from Sasol to the Industrial Development Corporation was reported in the Press in December last year. It was made clear that Sasol itself had requested a separation of the SFF from Sasol.

“Sasol recommended to the Government as early as 1981 that it be permitted to withdraw from the management of SFF, because Sasol was to become a publicly-owned company. This request was followed up by a formal written request in January 1983.”

He said the formal transfer took place on March 15 and not the day before Dr Slabbert's meeting with the Prime Minister.

CAPE TOWN, FRIDAY APRIL 27 1984

New claims of big oil swindle

ARGUS 27/4/84 55

Angry exchanges in House

Parliamentary Staff

THE Leader of the Opposition, Dr Frederik van Zyl Slabbert, disclosed in Parliament today that since he first raised the oil-deals issue in the Assembly, more irregularities had been alleged in anonymous telephone calls to Opposition members.

The allegations included:

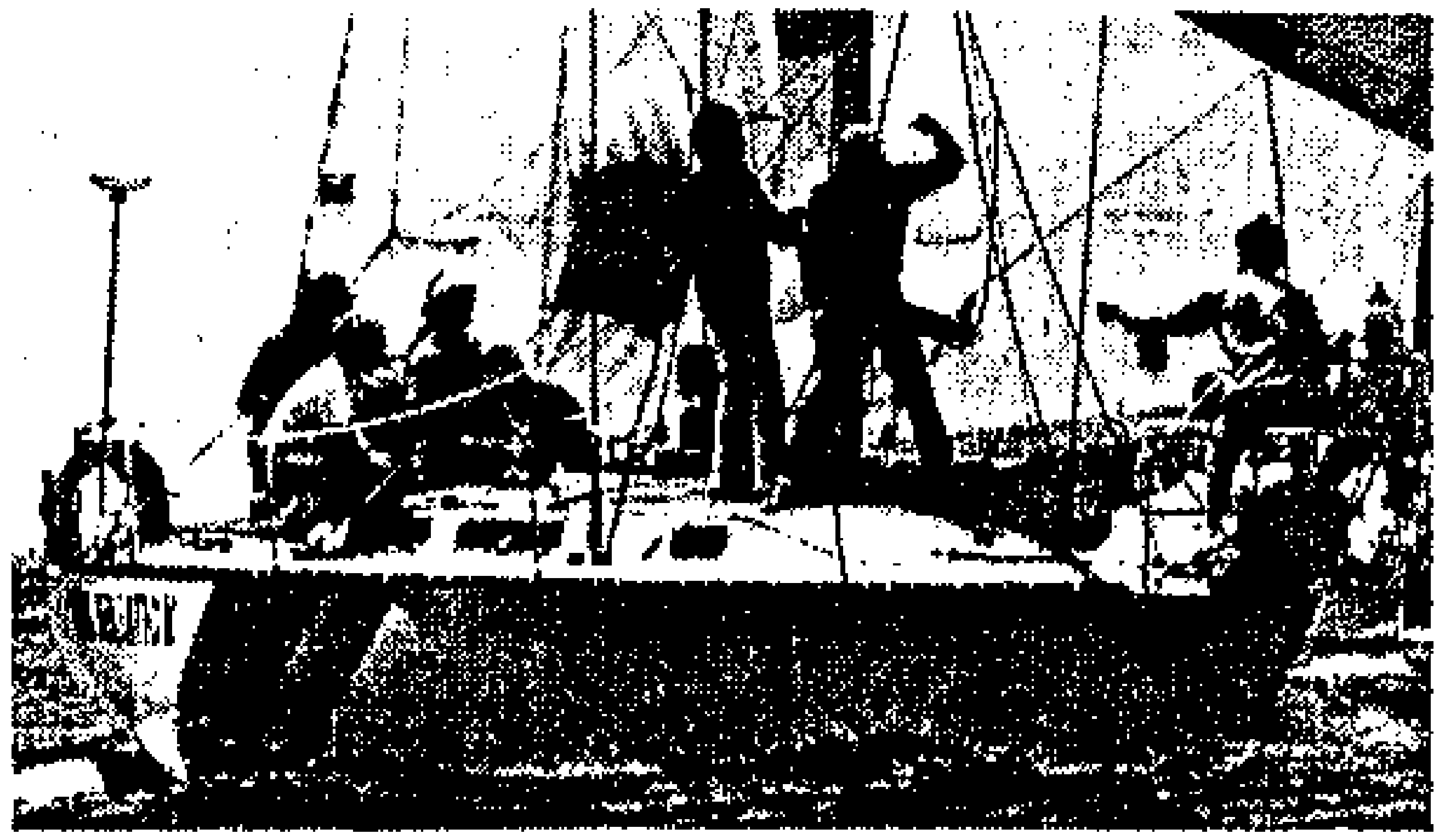
- That the Strategic Fuel Fund (SFF) had bought oil through a Swiss firm in spite of numerous offers of cheaper oil.
- That the deals had been done through the Swiss firm in order to open bank accounts in Switzerland.

Dr Slabbert told Parliament that the amount involved was claimed to be R385-million more for the oil than the original contract price.

He said profits amounting to hundreds of millions of rands were alleged to have been made, without a cent going to the Receiver of Revenue for tax.

Sharp clash

There was a sharp clash between Dr Slabbert and the Prime Minister, Mr P W Botha, when Dr Slabbert again called for a Parliamentary select committee inquiry into the alleged multi-million-rand oil



BMW Sensation, which has run aground.

Race yacht sinks in gale — three dismasted

Argus Correspondent

DURBAN. — A South African Navy yacht, The Cape of Good Hope, sank off Scottburgh, another yacht has run aground on the Wild Coast and three have been dismasted in a 50-knot gale which lashed participants in the Vasco da Gama race.

ARGUS RACEGOER

Exciting new punter service

Tomorrow Weekend Argus introduces a new winner, Argus Racegoer — a bright new section that will become a must for every punter.

Argus Racegoer has been specially designed to cater for the needs of Cape racegoers. It is a handy pullout section that you can carry with you to the track, tote or Tattersalls.

Argus Racegoer will be packed with information to make your betting more profitable. It will contain a career summary and assessment of every runner in the R300 000 Sun International at Turffontein tomorrow. It will also be packed with the Argus racing team's betting guides and tips.

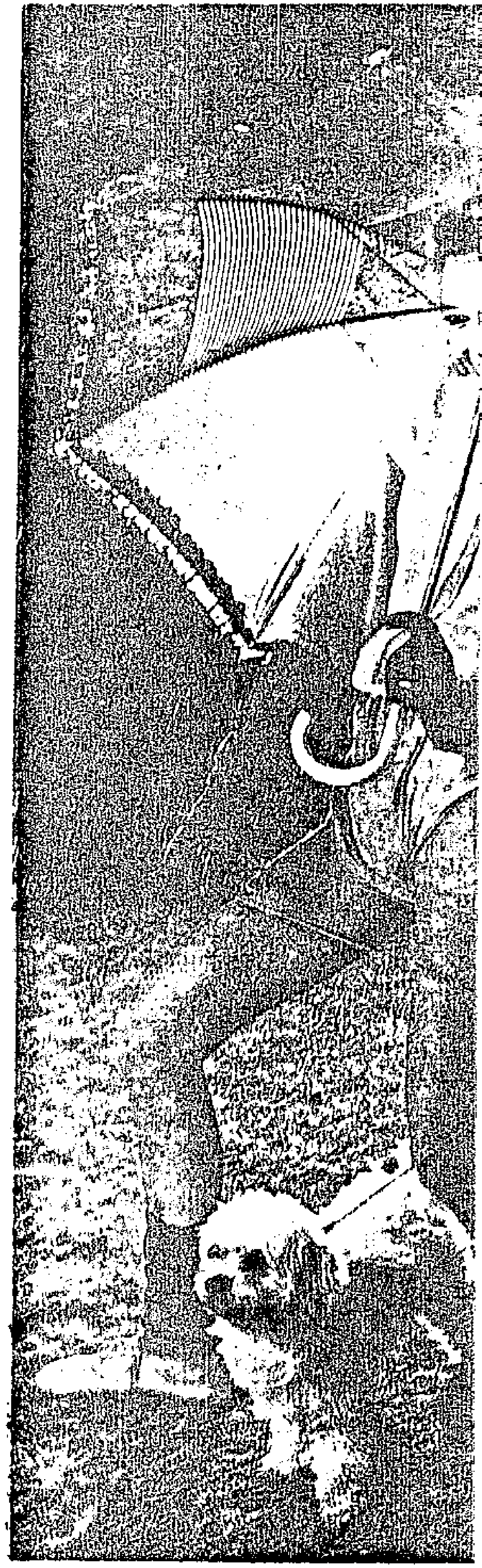
And Argus Racegoer has picked another winner for its readers. Starting tomorrow it will carry the time-rating column TIMETABLE, compiled by Robbyn Ramsay, the first full-time woman newspaper tipster in South Africa. She has been doing the TIMETABLE rating for Natal meetings for four years, during which time she has built up a reputation of being the country's leading time-rating expert.

Don't miss your Argus Racegoer in the early Weekend Argus tomorrow.

INSIDE TODAY

Matie shocks — what the Doc says

The shock dropping of Springboks Divan Serfontein, Hennie Bekker and Shaun Povey from the Stellenbosch first team is not regarded by Dr Danie Craven as necessarily prejudicial to their prospects of selection for The Rest of South Africa XV — against Northern Transvaal on May 5. In an interview with A C Parker, Dr Craven — who has to approve the selection of all Matie first teams — comments on the



Why shut yourself inside when it rain and cold? Nelda Ellis 16

BMW Sensation, which has run aground.

Race yacht sinks in gale — three dismasted

Argus Correspondent

DURBAN. — A South African Navy yacht, The Cape of Good Hope, sank off Scottburgh, another yacht has run aground on the Wild Coast and three have been dismasted in a 50-knot gale which lashed participants in the Vasco da Gama race.

The four men on board The Cape of Good Hope were plucked from the sea by an SAAF helicopter today.

BMW Sensation, the leader of the Vasco da Gama Durban-to-East London yacht race, ran aground near Port Edward during the storm and the yachts Rollerball, Reaction and Spiffero were dismasted.

Concern is growing for those aboard Spiffero as they include two children, one of whom is Brad Bendall, 14. The name of the other is unknown.

The men on board are Mr Peter Spreckley, the captain, Mr Jacklin, Mr Haining Mr Johan Bendall, Mr Coetzer and Mr Horn.

A Port Office spokesman said three ships were looking for the yacht, and that an Albatross reconnaissance aircraft was being readied in Cape Town and a Kuswag vessel had been sent from East London.

Reaction is being towned back to Durban.

The Natal University yacht Transformer lost its steering and is drifting near Port Edward while at least six other yachts have abandoned the race and are returning to Durban.

A spokesman for Durban's Port Captain's office reported BMW Sensation to be aground north of South Sands Bluff. The owner of the yacht, Mr Neil Bailey, and 10 other crew members were on board.

All are safe, but no further details are available.

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es today, he added: "It
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Sapa-Reuter.

Two shot dead after escape on way to court

Argus Correspondent

GERMISTON. — Two awaiting-trial prisoners have been shot dead in an escape attempt near here. A third man is still being sought by police.

A spokesman said the three were among a group being taken yesterday to Katlehong Magistrate's Court.

They sawed through bars on the lorry and leapt to the ground.

GAVE CHASE

Two detectives from the East Rand Murder and Robbery Squad who were following in another vehicle chased the three into nearby veld and opened fire, killing two. The other man escaped into the bush.

The names of the dead men have not yet been released but police named the escaper as Mr Moses Sukele, 26.

All were due to appear on charges of armed robbery, rape and escaping from custody.

that the amount involved was claimed to be R385-million more for the oil than the original contract price.

He said profits amounting to hundreds of millions of rands were alleged to have been made, without a cent going to the Receiver of Revenue for tax.

Sharp clash

There was a sharp clash between Dr Slabbert and the Prime Minister, Mr P W Botha, when Dr Slabbert again called for a Parliamentary select committee inquiry into the alleged multi-million-rand oil scandal.

Dr Slabbert said it was impossible to refer every complaint and every telephone call to the Advocate-General, and that was why he was calling for a select committee inquiry.

In addition there was the problem that the SFF was not scrutinised by the Parliamentary select committee on public accounts.

It seemed as if the confidential position of the SFF was being abused on a "massive scale", he said.

Interjection

At one stage when Dr Slabbert referred to the allegations, the Prime Minister interjected: "Did you submit the allegations to the Advocate-General ?"

Before Dr Slabbert had completed his response, the Prime Minister interjected again: "I will stamp on you". (Ek sal jou trap dat jy bars.)

Mr Horace van Rensburg (PFP Bryanston) interjected: "Big mouth". (Groot bek). He was ordered to withdraw the remark.

"Threat"

Mr van Rensburg then asked on a point of order whether the Prime Minister was allowed to make a threat to the Leader of the Opposition. The Chairman, Mr Adriaan Volk, ruled that Dr Slabbert could continue his speech.

Dr Slabbert said earlier that from the outset it had not been his intention to start a fight about the oil issue.

He was disappointed at the Prime Minister's response after he (Dr Slabbert) had first raised the matter in the debate on the Prime Minister's budget vote.

Two types

Two types of allegations were being made. One was about alleged irregularities through which people enriched themselves. The other was about inefficient State actions in the spending of public money.

There was nothing strange about his suggestion that more than one inquiry into the matter be held at the same time.

This had been the case during the investigation into the

(Turn to Page 3, col 1)

Pictur

Why shut yourself inside when it's so m
rain and cold? Nelda Ellis, 16, and Sno
tainly weren't going to let the element
tional bliss. Nelda is an entrant in the
petition, being organised by Tygerber

City's wintry weather ma

Staff Reporter

ICY air, swept from the south by a south-westerly wind, sent temperatures plummeting today in the wake of the first wet weather of the winter.

Today's maximum temperature in Cape Town was expected to be 16 deg C — a massive 20 deg C drop from Tuesday's 36 deg C.

The weather office forecast partly cloudy, cold weather with occasional

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Cocaine traces found in Kennedy's body fluids

NEW YORK. — Cocaine and the pain-killer Demerol have been found in David Kennedy's body fluids, chemists in West Palm Beach, Florida, said.

In a report last night, they said 1,3 grams of "high purity" cocaine were found in his Palm Beach hotel room.

"We've found all sorts of interesting things in the urine. We're on the trail of something that may lead us to the cause of death," said Mr Jay Pintacuda, chief chemist at the police crime laboratory in Palm Beach.

HIGHER LEVELS

Mr Pintacuda said the levels of Demerol, a common opiate, found in Mr Kennedy's fluids were generally higher than those of cocaine.

Mr Pintacuda said his findings did not establish a cause of death and warned it was "premature" to say the drugs caused the death on Wednesday of the 28-year-old son of the late Senator Robert F Kennedy. — Argus Foreign Service and Sapa AP.

● See Pages 7 and 17.

R10 000 Bonus win

PRETORIA. — This week's R10 000 Bonus Bonanza has been won by the holder of certificate number 3408165540, bought at the Linden Post Office in Johannesburg. — Sapa.

CAPE TIMES 27/4/84 Parliament and Politics

PM's text on 'irregularities'

THE following is the text of the statement by the Prime Minister, Mr P W Botha, yesterday on alleged irregularities in oil procurements:

The whole matter of alleged irregularities in relation to the oil trade started enjoying the government's attention some time ago. It resulted in an investigation by the National Intelligence Service and the reference of the Salem incident to the Attorney-General.

In addition the same investigation also brought to the fore other facets of the oil trade. According to the report to me no proof of corruption could be found.

Thereafter the Leader of the Opposition, in a private conversation and in correspondence, informed me he had been put in possession of documentation which made serious allegations.

Delicate

However he regarded the matter as a delicate one which should not be exploited for short-term political interests. The purpose of the correspondence was indeed:

"To determine whether an appropriate and effective procedure can be found to resolve the problem."

The issue raised by the Leader of the Opposition was that more money was paid for oil supplies than the true contract price.

Then, in a following paragraph, names of the contractors are given. And certain documentation was attached which was intended to substantiate this allegation.

These allegations by the Leader of the Opposition, supported by documentation, suggest that contractors benefited in an irregular way.

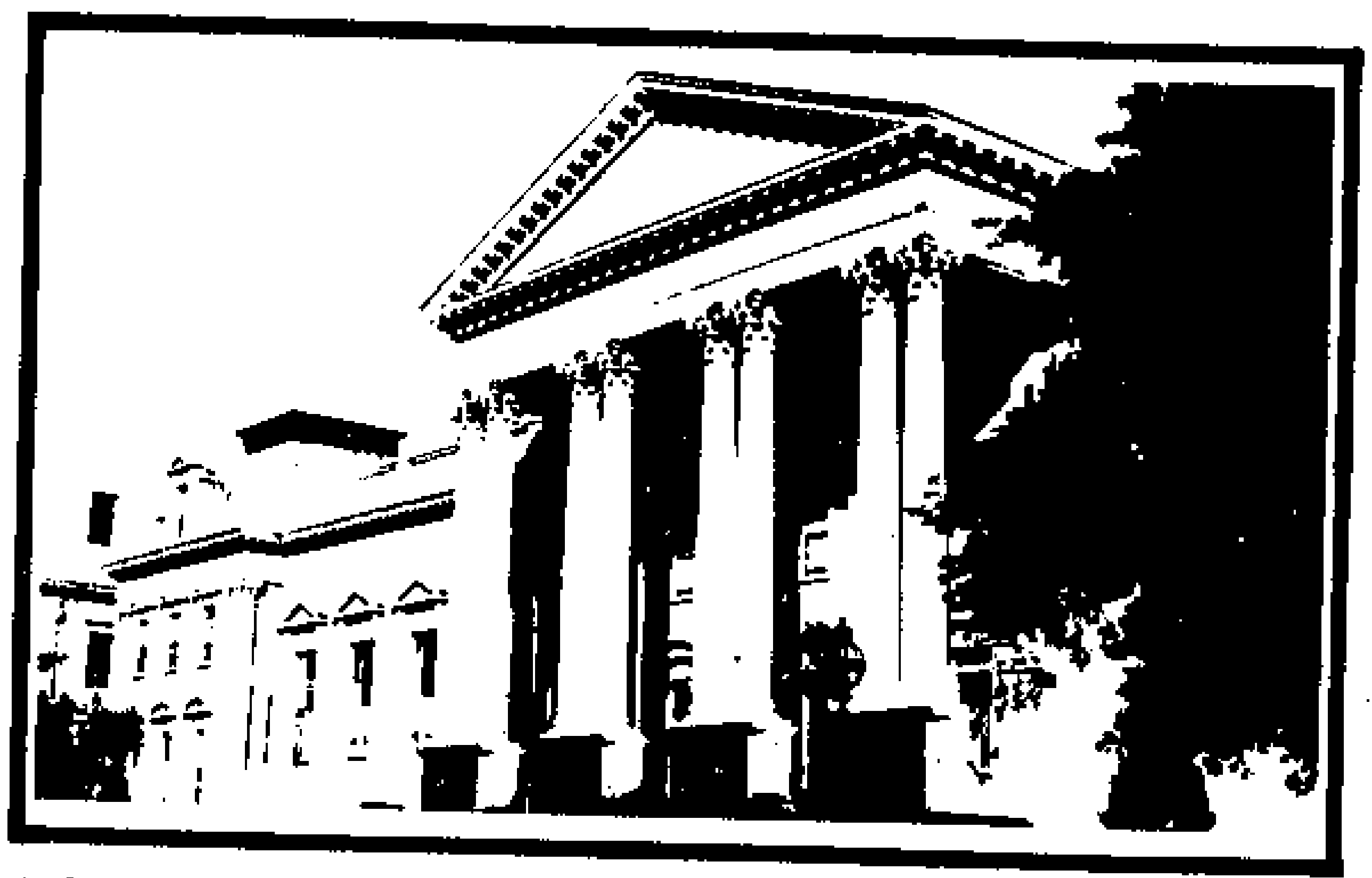
Then the letter goes on to say he believes a prima facie case has been made out for the Auditor-General and that his report should be sent to a select committee of Parliament for investigation.

Functionary

He concludes his letter in this way:

"I repeat in approaching you in this way. I am trying to find out whether there is a way in which this matter can be resolved."

After I considered the letter concerned in conjunction with the documentation, I was and still am of the opinion that the true functionary of Parliament who should handle the matter at this stage is the



Advocate-General, because he is empowered as the extension of Parliament to investigate the alleged dishonest handling of public money and the illegal or improper enrichment or benefiting at the expense of the State or of an institution or body handling public money.

The opposition agreed last year that the Advocate-general Act be amended to make provision for such matters in the widest possible sense.

A few days later I wrote to the Leader of the Opposition to inform him of my decision, namely that I had referred the matter to the Advocate-General for investigation and report to Parliament, and that I had referred to the Advocate-General the documents received from the Leader of the Opposition. Notwithstanding the fact that the National Intelligence Service investigation found no proof of corruption, I also referred that report to the Advocate-General.

And on April 9 1984 a happy and satisfied Leader of the Opposition wrote to me as follows:

Announcement

"Dear Prime Minister,

"I acknowledge receipt of your letter of April 5 1984 and wish to record my appreciation for the speedy way you have acted on the matter I raised.

"I believe that a great deal of misunderstanding and harmful speculation can be averted if you make an announcement about the investigation at the earliest possible opportunity. In the nature of the matter it is your prerogative to decide how, when and whether you wish to do this.

"I can assure you that all the information I and my colleagues have or which may come into our possession and which is relevant will be brought to the attention of the Advocate-General."

Note that here is a specific undertaking to refer to the Advocate-general all existing and future information which relates to the matter. Note further that this letter, without any reservation, expresses general agreement with my decision and action.

On April 11 1984 in reply to a question, I stated in the Assembly as was requested by the Leader of the Opposition that:

Other facets

"Certain further allegations relating to other facets of the oil trade have been referred to the Advocate-General for investigation and report."

There was no supplementary question, no indication orally or in writing that the Leader of the Opposition did not regard my action as adequate and correct.

In this letter dated April 9 from the Leader of the Opposition, as well as the first letter, there is no mention that he actually had in mind two different matters for investigation on the same facts. The one would be for the Advocate-General and the other for a select committee of Parliament.

Yesterday he came and said he was satisfied with the investigation by the Advocate-General, but he also wants, on the same allegation, with the same parties involved, the appointment of a select committee.

Am I correct that he has no new facts or information, that is since he wrote to me? If his answer is "yes", the following question arises:

Why did he substantially change his attitude? Why does he now demand a parallel investigation? Who is pushing him: his caucus or members of his caucus, or the media, or is it just politicking? If his answer is "no", if he has new information, why does he not meet his undertaking in his letter of April 9 that he and his colleagues will bring to the attention of the Advocate-General all information and evidence which they may have or which may come into their possession and which is relevant?

What does the Advocate-General Act say? According to Section 5 he must report to Parliament and, on receipt of such a report, Parliament has the right to say how such a report will be dealt with.

Capabilities

More, the same section specifies that if it is a confidential report, it must be referred to a select committee of Parliament for consideration and report to Parliament. In other words there is provision for a select committee. This matter will thus be taken further by Parliament itself as required by law.

I am further satisfied that the Advocate-General has all the capabilities to undertake a proper investigation. He can require people to appear before him to give evidence and also to produce documents. He is assisted by a senior advocate plus all such people as he may deem necessary for the execution of his task.

4 The Cape Times, Saturday, April 28, 1984

Parliament and Politics

55

Oil scandal: Tip of the iceberg?

Political Staff

HOUSE OF ASSEMBLY. — Allegations under investigation by the Advocate-General of a multi-million rand scandal involving the supply of South Africa's oil might be merely the tip of the iceberg, according to new claims made anonymously to Opposition MPs.

Speaking in Parliament yesterday, the Leader of the Opposition, Dr Van Zyl Slabbert, said the new claims made to him and two colleagues included that allegations already passed on to the Prime Minister, Mr P W Botha, "are only the tip of the iceberg".

Dr Slabbert also disclosed details of the allegations he passed on to Mr Botha. They included a claim that the Strategic Fuel Fund — which handles the country's oil purchases — paid R385-million more than the contract price to certain suppliers.

He said new allegations made anonymously by telephone to him and two colleagues, Mr John Malcomess and Mr Brian Goodall, since the earlier claims were passed on to Mr Botha included:

- That the SFF had received many offers of cheaper oil, but chose to work through the town of Zug in Switzerland with more expensive dealers.
- That officials worked through Zug because it was easier to open Swiss bank accounts.
- That dealers were making a profit of hundreds of millions of rands in South Africa without paying income tax.

Quoting from confidential correspondence between himself and Mr Botha, Dr Slabbert said the contracts in question were the Marc Rich and John Duess contracts.

He said in one letter to Mr Botha: "It is common knowledge that Mr Marc Rich, who is based in Zug, Switzerland, is wanted by the US authorities, who have issued a warrant for his arrest.

"He is charged with one of the biggest tax frauds in American history and he and his companies have been indicted for violating now defunct contracts for the supply of oil."

Dr Slabbert was responding yesterday to an attack on him by Mr Botha in Parliament on Thursday when his motives for urging the government to appoint a select committee into aspects of the alleged scandal were questioned.

Mr P W Botha

Dr Slabbert said he had not wanted to fight with Mr Botha on the issue, but Mr Botha had quoted from confidential correspondence between the two men "to drive him into a corner".

For the sake of completeness, he believed it was necessary to quote further from the letters, he said.

They concerned documents alleging oil deal irregularities given to him anonymously.

After consultations with Dr Slabbert, Mr Botha decided to refer the allegations to the Advocate-General for investigation, and he announced in Parliament earlier this month that he had done so.

On Wednesday during the debate on the Prime Minister's budget vote in Parliament, Dr Slabbert called for the appointment of a parliamentary select committee to investigate aspects of the allegations at the same time as the Advocate-General's investigation.

Mr Botha declined to do so. He said there was provision in the Advocate-Generals Act for a select committee probe of his report after it was presented to Parliament.

In an apparent link between the latest allegations and the R30-million Salem oil fraud in 1980, Dr Slabbert yesterday quoted further from a letter to Mr Botha in which he said: "We also know that with regard to the Salem affair, the SFF did not lay a complaint with the police or any other body to investigate the matter, nor have they done so to date, despite the magnitude of the sum of money they lost.

"The SFF refused to assist the lawyers of Shell, Lloyds or Scotland Yard. They only revealed certain information after instructions from Minister Pietie du Plessis who was then the relevant Minister.

"The Salem facts are well known, but the reasons for the considerable delay in investigating and reporting on this matter are not known."

The Swiss town of Zug is also the base for the company of one of the key figures in the Salem scandal.

Dr Slabbert has accepted that no cabinet minister is under suspicion in the latest alleged scandal. Mr Botha said yesterday that no senior State official was under suspicion either.

The Star / REVIEW

Saturday April 28 1984

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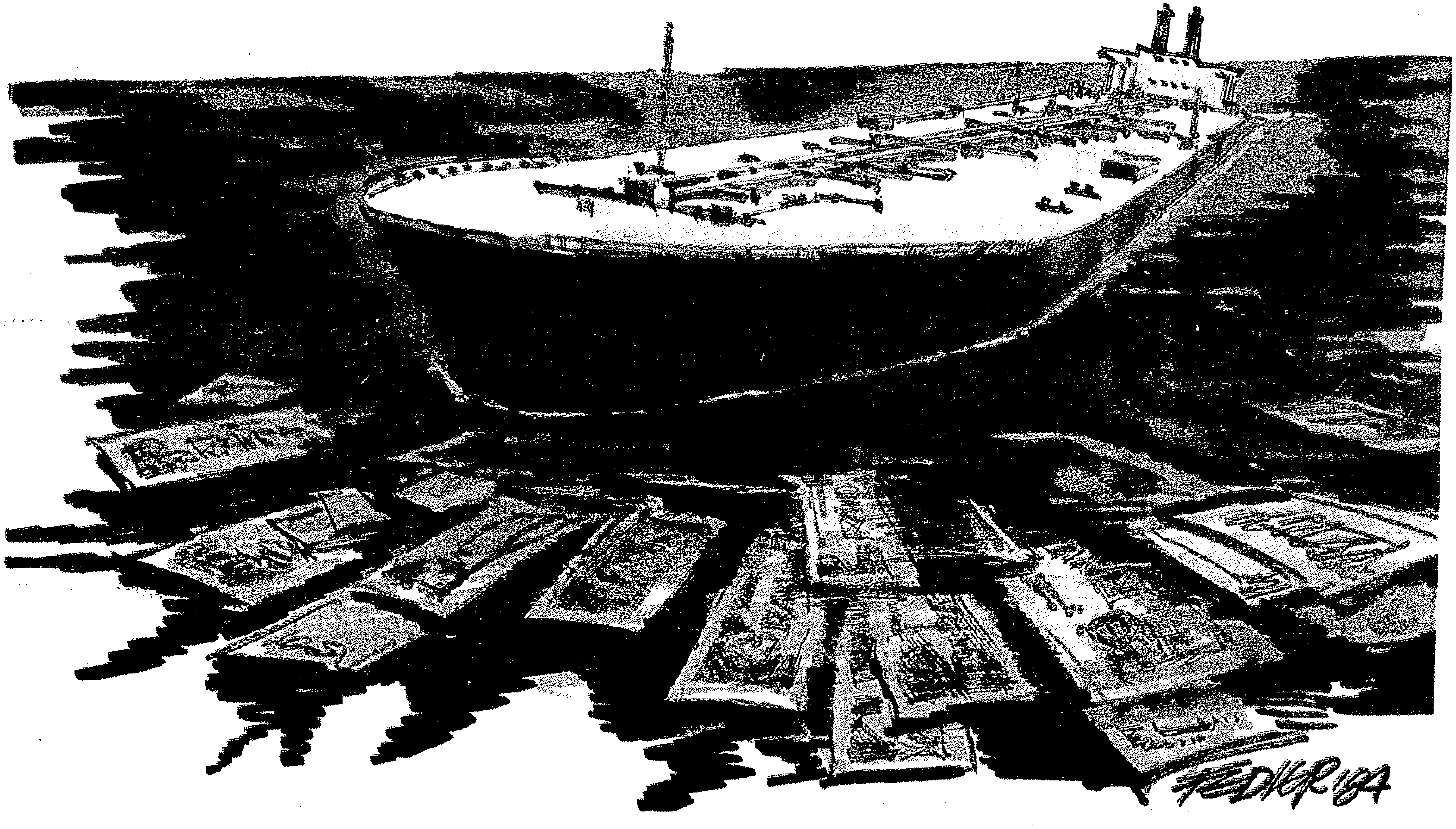
ISSUE OF THE WEEK: SECRECY AND SCANDAL



WEEKEND READING

The Star / WEEKEND

NOW PULL OUT YOUR ENTERTAINMENT GUIDE

Pull out your guide to

Pouring water on troubled oil

The Salem oil scandal has now spread to four other nations, all of whom have been provided with full information on the affair. South Africans on the other hand, remain in the dark.

Michael Chester reports.

55 Star 28/4/84

CONFIRMATION that the government has provided full dossiers on the 1980 Salem oil tanker scandal to four overseas countries, while holding the whole issue under a strict news blackout in South Africa, has added fresh fuel to the controversy about the secrecy that entwines so many national issues.

Informed sources hint that a batch of new frauds that have been unearthed since the Salem affair, all enmeshed in multi-million-rand deals to break the international oil embargo on supplies to South Africa, may dwarf even the infamous Info scandal — at least in the amounts involved.

The new allegations were marshalled into a dossier that Dr Van Zyl Slabbert, leader of the Progressive Federal Party opposition, handed to the Prime Minister, and which have since been sent to the Advocate-General for deeper investigation.

But no fewer than four sets of secrecy laws have been drawn across any details, even though PFP MP Mr John Malcomess, a long campaigner against government secrecy, claims that millions of rands have gone down the drain because of the excessive prices shelled out to oil trade middle men.

The mystery thickened when it was revealed that only the day before the Slabbert dossier was handed in, the government had stripped Sasol — now with a large private investment stake — of its control of the Strategic Fuel Fund, the buying agency responsible for financing oil imports.

"The timing may have been a coincidence — but it all looks very odd", remarked one source close to the Sasol oil-from-coal operation. "One can only be suspicious when no explanation or announcement was made."

Meantime, while South Africans themselves are left in the dark, the results of the government's investigations into the Salem scandal are being combed through by legal experts abroad.

Within two weeks of their release, the Greek government had mounted court prosecutions on the Salem's owner, captain and key crew members in what looked likely to be a

Turn to Page 2

Weekend fun.
And a four page section of your favourite comics, puzzles and games.

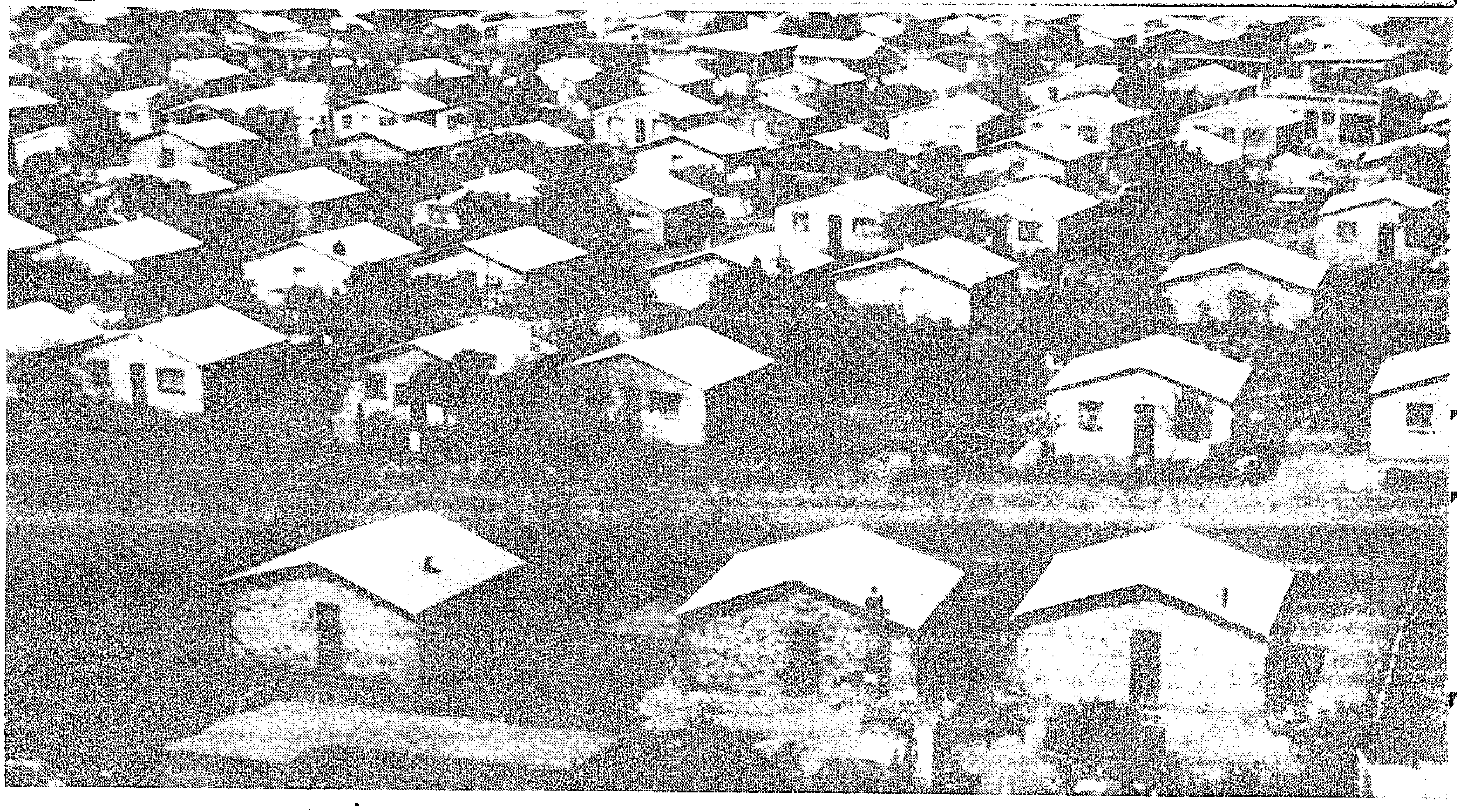
● **Page with Punch**
Red sales in the Sunset ....Page 7

● **Inside the KGB**
The second and final part of our series on the KGB today: A smile on the face of a Frankenstein ....Pages 8 and 9

● **Science Pages**
20 000 leagues under the sea — and beyond! Plus what makes a remarkable animal ....Pages 10 and 11

●**Back Page**
The art of using humour to insult your peers.

(55) City Press 29/4/84



Dealing with electricit

SINCE the Government decided to electrify Soweto, residents have been faced with a string of problems.

These include the danger of open trenches and huge electricity bills.

Lawyers have begun to issue summonses for claims made against the Soweto Council and contractors by several people who have fallen into trenches dug for installing electricity.

In the past two years more than 50 cases have been reported to lawyers by people who have fallen into trenches.

Sometimes children have drowned. Sometimes people especially old people have fallen, and broken arms or legs. Cars have driven into the trenches. At least eight Sowetans have been killed by falling into trenches.

These trenches have allegedly often remained uncovered for long time. Sowetans claim they fill with water and rubbish and after a while become a threat to residents' health.

There are also claims that when contractors come and wire houses, they sometimes damage houses and gardens. They are allegedly not prepared to pay for the damage they have caused, leaving residents to foot the bill.

But the biggest complaint is that electricity is very expensive. Residents have to pay an electricity levy, they have to pay for their houses to be wired and they have to pay monthly bills which are often very high.

Residents have to pay an electricity levy whether or not they have electricity installed in their homes. This levy is to pay back loans taken from banks or from overseas to pay for digging trenches and installing cables.

Residents in different townships pay different amounts. In Soweto, residents are charged a monthly levy of R17 while in Katlehong the levy is R6.

If residents want electricity in their houses they have to pay for the houses to be wired. Sometimes they have to wire their houses themselves.

Many residents who have paid to have their houses wired still have no electricity.

Monthly electricity bills are often very high – often absurdly so. It is not clear why the bills are so high. The administration boards and the community councillors often blame the residents for wasting electricity.

However, in places like Soweto the meters are kept in locked boxes, and only Wrab has the keys. Residents are not able to read their own meters.

This means that if meter readers are too lazy to read the meters properly, or if they make a mistake, there is no way residents can check up on them.

Many of the meters were hastily installed and may be faulty. They may not register the amount of electricity correctly. In some areas, such as Atteridgeville, the meters are very old and give problems.

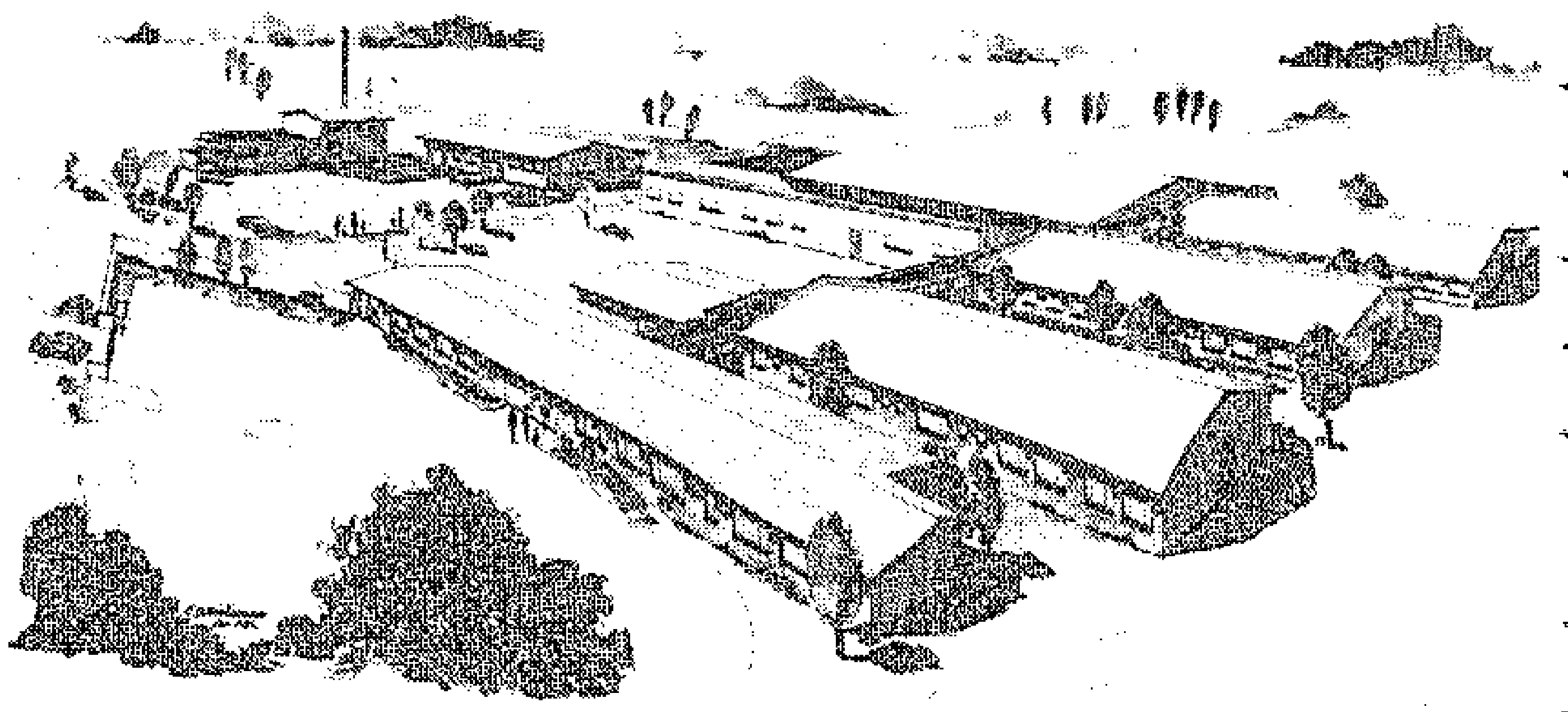
Unless residents are able to check their own meters, they can not be blamed for the high bills.

If you think you are paying too much for electricity and if you *have a meter inside your house, you can check it yourself.*

At the beginning of the month write down the number on the dial of the meter. At the end of the month wri down the new numb which appears on t' dial. Ignore the la figure because it is on a tenth of a unit.

Now subtract t' bigger number from t' smaller number. Tł will give the number electricity units th you have used duri the month.

To find out ho much your electrici bill should be, multip the number by 6 cent This will not be accurate figure b should give you idea of how much yo



An artist's impression of the completed Lesedi Clinic

R3,5 million clinic on the way

The R3,5-million Lesedi Clinic – the first privately owned black health care centre – is now under construction.

The clinic, in Soweto, will cater for private patients – at present there are no real facilities for private patients at Baragwanath, although patients in a certain wage bracket are charged private rates.

The clinic is being built by the Sechaba Trust, made up of businessman and Urban Foundation.

Dr Nthato Motlana, spokesman for trust, said at the first sod ceremony: "Over the last twenty years many young black South African doctors have acquired specialist skills in such disciplines as orthopaedics, neuro-surgery, general surgery and so on.

"All of them are living and working overseas because there are no facilities here where they can practice their chosen profession."

Lesedi will be built in several phases, the first of which will comprise 78 beds, three operating threatres, an obsevation ward and full administration facilities

Eventually there will be 250 beds, as well as complete intensive care, paediatric and radiology sections.

The first patient is expected to be admitted to the clinic early in 1985.

Debenture holders in the trust include Barclays Bank, South African Breweries, the Anglo American Corporation, Barlow

Enter

HULLO out there kids. . .

What a long long week-end that was! What have some of you been doing since last Friday morning? No schooling and no singing and drawing at day nurseries.

Since Friday, days have been up for grabs – with people going to church, parties and doing things. And you, what have you been doing with yourselves?

I know for a fact that lots and lots of you will have visited the zoo before Tuesday morning, when school bells started ringing again.

I hope you paid special attention to the different kinds of wild animals you saw because from today, I will be running an ongoing kiddies' drawing competition! The contest is only open to children 14 and under.

Draw us a picture of any wild animal you

bills

bill should be.

WAYS OF SAVING ELECTRICITY

- Always switch off lights, stoves, heaters and kettles when not needed.
- It costs less money to boil water for tea and coffee in a kettle than boiling it in a pot on the stove.
- Electric geysers use a lot of electricity. It is a good idea to switch off geysers when they are not in use. If the family washes mainly in the morning, then switch the geyser off during the day and switch it on at night to heat water for the morning. Make sure geysers are not turned up too high.
- Try to use more than one pot on a stove plate at a time. Triangular shaped pots are a good idea because more than one will fit on the plate.
- If a heater is on in a room keep the doors to other non-heated rooms shut so that the room will warm up quickly and it will be possible to switch the heater off.

Women tackle cancer

Cancer of the cervix is rife — and the Ikageng Women's Club is doing something about it NANA KUTUMELA reports.

RAMPANT cancer of the cervix amongst women at the Mzimhlophe hostel is the major reason why the Diepkloof branch of the Ikageng Women's club has built a health centre there.

The centre, which will operate along similar lines to the state — funded clinics, will be known as the Ikageng Health Education Centre.

Mrs Winnie Serebe, chairlady of the Ikageng Diepkloof branch, and who works for the Family Planning Association, explained that her work brought her into contact with the hostel.

Large numbers of cancer cases, malnourished children, tuburculosis and a boom in teenage pregnancies were four basic factors which actually got Mrs Serobe thinking about the idea of putting up a health centre at the hostel.

"Living conditions at the hostel are bad. There are just not sufficient words for me to describe what I know to be happening there," said Mrs Serobe.

The Ikageng Club felt it would take some time for them to build a proper clinic and instead of engaging architects and building contractors, they decided to renovate one of the communal toilets and washrooms at the hostel and turn it into a health centre.

The project has been approved by the Diepmeadow Council and it is hoped the centre will be fully operational by May 1.

According to Mrs Serobe, the centre will offer free medical treatment.

The centre will be run by doctors, nurses and clerks.

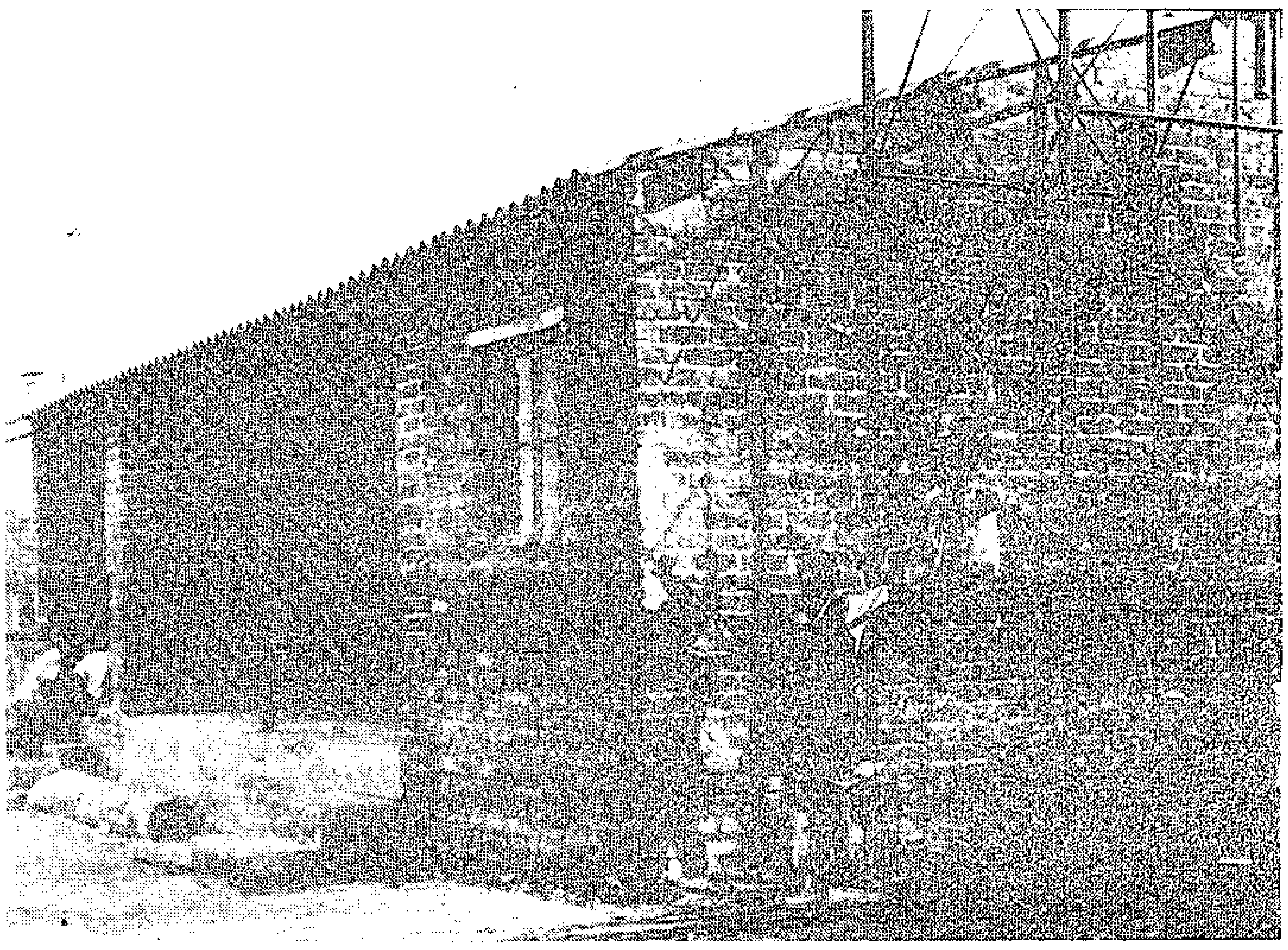
While the State will provide the centre with medicine, the overall maintenance of the project will remain the responsibility of the club.

The club is also going to teach the basics of child care and the need to plan a family that would be easy to maintain.

Sewing and other skills will be taught.

One of the issues of prime importance to the club is that family planning sisters will be able to screen for cancer cases.

"We of the Ikageng Club are grateful that eventually our project has come off the ground and many lives may now be saved — particularly those of women who are silently suffering from the cancer of the cervix and the malnourished children," Mrs Serobe said.



Seminar on teenage sex

More and more teenagers engage in sex these days — and it seems as though more and more are utterly ignorant of its implications.

The Family Planning Association is running a two dav seminar from May 4 — 6 on "Teenage Sex — its difficulties and dangers".

Registration is R20 per person and the seminar will be held in the Lutheran Diocesan Centre, Jabavu.

There'll be films shown and talks given by doctors, lawyers and social workers.

Anyone interested should contact Mrs D Khoza at (011) 331-2695/6/7.

our drawing contest!

KIDDIES CORNER

with **Auntie Sontie**

can think of — a lion, a rhino or a hyena for that matter. So long as it's a good-looking, neat sketch.

Everyone of you must be sure to make an effort because the winner will get two big prizes — a drawing book and a set of colouring pencils. Try your luck you may be the lucky one!

Remember to enclose your full address when sending your drawing so that it should be easy for me to send your prizes by post.

And don't forget our birthday competition! All you must do, is write to me and give your name and address and your birthdate. I'll check my birthday calendar and if your birthday is on the day marked — you're a winner!

It's nearly May now, so all the kiddies born in May should write in and tell us all about themselves.

Winners will get a record from Auntie Sonti.

Before I forget, there are pen-pals galore out there waiting to hear from everyone of you. So if you want one, write to me giving your full particulars, age and hobbies.

For our new members, a big welcome to eight-year-old Suzan Lucky Mogale from 62-7th Avenue, Alexandra, 2090. Suzan, never get tired of writing to Aunt Sonti and perhaps get your friends to share the fun of writing with you.

Thank you for you letters Queeneth Mdluli of Meadowlands, aged 18 years and George Tiffen from King William's Town. Thanks for your letter George, but if you have problems why don't you write to Sis Zodwa in Home Press?

Write to Auntie Sonti at P O Box 57473, Springfield, 2137.

(95) S. Times 29/4/84

The oil row boils over

By BRIAN POTTINGER

BEHIND this week's denouement of alleged multi-million rand shenanigans in the oil business lies a fascinating tale of high-level power play between Government and Opposition.

Both sides sought to keep the lid on a series of explosive allegations until they could be tested.

But this week the bid foundered in a welter of accusations and counter-accusations between Prime Minister P W Botha and Dr F Van Zyl Slabbert, Leader of the Opposition.

The clash ended a month of secret contacts and brought allegations which could rock the Government from behind a battery of gag laws and the secrecy of an Advocate-General investigation into the public domain.

Bitterness between the two leading actors in the drama was so great at one point that the Prime Minister threatened to ride Dr Slabbert into the ground and Dr Slabbert angrily claimed: "This is what comes of behaving decently."

The lid on what could be the biggest scandal in the country's history was slightly lifted when Dr Slabbert used parliamentary privilege to reveal facts which newspapers have by law been prevented from publishing.

Stunning

At stake is a stunning claim that the Strategic Fuel Fund overpaid hundreds of millions of rands on oil contracts without ministerial approval to two major international oil dealers — Mark Rich and John Deuss.

It is also alleged that the SFF did not lay a complaint with the police over the Salem fraud in which the South African taxpayer was taken for a R30-million ride by crooks, baulked attempts by the lawyers of Shell, Lloyds and Scotland Yard to investigate the case and only revealed certain information at the insistence of Mr P T Du Plessis, then Minister of Mineral and Energy Affairs.

This week Dr Slabbert revealed he and his two chief lieutenants involved in oil issues have received further anonymous allegations of foreign Swiss bank accounts, unpaid taxes and consistent over-paying on oil contracts.

The strictly-applied secrecy laws relating to oil procurement have, however, prevented publication of details.

But now the Deuss and Rich allegations are reverberating in parliamentary circles and causing deep concern at Cabinet level, where three Ministers have at various times had responsibility for nursing the department through the oil procurement crises following the collapse of Iran in 1979.

The countdown to this week's denouement reads as follows:

- In late March Dr Slabbert receives an anonymous dossier containing allegations of irregularities in past oil procurement.

Much of the detail appears similiar to other information held by various newspapers.

The dossier is accompanied by a request that it be transmitetd to the Prime Minister and its contents not used for political gain.

Serious

Dr Slabbert consults with Mr John Malcomess, former PFP chief spokesman on Mineral and Energy Affairs, and Mr Brian Goodall, present chief spokesman.

They decide the allegations are so serious they should be discussed confidentially with the Prime Minister.

- On Monday April 2 Dr Slabbert arranges an interview with the Prime Minister and presents him with a letter detailing the main charges and suggesting it is a case for the Auditor-General, whose report should be sent to a select committee of Parliament.

The Prime Minister undertakes to look at the allegations.

The same day Dr Slabbert is urgently summoned by the acting Minister of Mineral and Energy Affairs, Mr P T Du Plessis, to discuss the allegations.

The talks are described later by Dr Slabbert as "innocuous".

- The next day, Tuesday April 3, the Prime Minister asks to see Dr Slabbert and tells him he has decided to submit the dossier to the Advocate-General.

He agrees to a suggestion that he make a statement — after talking to the Advocate-General.

- On Thursday April 5 Mr Botha writes to Dr Slabbert confirming he has decided to refer the PFP dossier, some other matters and an earlier NIS report, which had found no evidence of corruption in the oil procurement industry, to the Advocate-General.
- On Monday April 9 Dr Slabbert writes to the Prime Minister to thank him for his speedy response and to again call upon him to make a statement in Parliament on the issue.
- At question time on Wednesday April 11 — while Dr Slabbert is in Swaziland — the Prime Minister reveals that the Cape Attorney-General is investigating possible charges as a result of the Salem fraud.

Tucked in the end of the reply is a statement that other allegations relating to the oil trade have been referred to the Advocate-General.

Obscure

The announcement is so obscure that its significance is momentarily overlooked.

Opposition members in Cape Town initially do not believe it is the full statement they have been led to expect the Prime Minister will make.

Nonetheless, the statement results in a rash of Press stories — carefully worded not to fall foul of the law — concerning overpayment on oil contracts.

- A PFP caucus meeting discusses the issue — the details of the allegations are not revealed to the caucus — and concern is expressed that the issue will be discussed during the Petroleum Products Amendment Bill before the Prime Minister has made a full statement.

Dr Slabbert writes to the Prime Minister asking the Bill be moved down the order paper. The Prime Minister acquiesces.

- The issue simmers quietly until this week's debate on the Prime Minister's vote.

In his opening speech on Wednesday Dr Slabbert compliments the Prime Minister for referring allegations of corruption to the Advocate-General, but calls for a parliamentary select committee to look at the wider issue of Government accountability in the oil procurement industry.

- On Thursday the Prime Minister visibly angers Dr Slabbert by suggesting the demand for a parliamentar select committee is politically motivated.

He quotes from sections o Dr Slabbert's correspondence to indicate that th Leader of the Opposition wa happy with the Government' handling of the matter.

- Friday sees the issue bubbling into the open.

Negligence

It is Dr Slabbert's turn to anger the Prime Minister by quoting from other parts of his correspondence and thus revealing details of the allegations in the dossier, the names of the suppliers (until now their identities protected by law) and revealing new anonymous allegations of massive corruption.

The Prime Minister challenges him to put his allegations before the Advocate-General.

The Prime Minister responds in the afternoon by pointing out the Advocate-General's report would have to come to Parliament and could in any case be referred to a select committee.

Five officials linked to alleged oil scandal

SS

Cape Times 30/4/84

Political Staff

FIVE senior government or quasi-government officials have been linked to allegations of misappropriation of millions of rands in oil deals, the MP for Port Elizabeth, Mr John Malcomess, said yesterday.

The latest alleged oil scandal came to light in Parliament last week when the Leader of the Opposition, Dr Van Zyl Slabbert, disclosed that he had handed a dossier to the Prime Minister, Mr P W Botha, on the latest allegations.

The allegations have been referred by the Prime Minister to the Advocate-General.

Dr Slabbert said the most recent alleged irregularities involving R385 million could be "only the tip of the iceberg".

Among the other allegations he listed were:

- That the Strategic Fuel Fund (SFF) had bought oil through a Swiss company in spite of offers of cheaper oil.
- That the deals had been conducted with the Swiss firm in order to open Swiss bank accounts.
- That profits of millions of rands had been made without a cent being paid in tax.
- That the SFF paid R385 million more than the contract price for oil to certain suppliers. This did not refer to the difference between the official oil price and the price at which the Republic could obtain it "but the price we contracted at and the amount we actually paid. We believe this was done without ministerial approval".

Meanwhile the possibility has been raised that the Transvaal leader of the National Party and present Minister of Internal Affairs, Mr F W de Klerk, may be landed with a major portion of the blame for any irregularities in South Africa's oil deals.

While there is no suggestion that the Prime Minister or any member of the cabinet was in anyway involved, Mr De Klerk could be harmed if it is shown he was the minister in charge of Mineral and Energy Affairs when any of the irregularities took place.

It is understood that Mr De Klerk was minister when the contentious deal cited by Dr Slabbert last week took place.

It is further understood that the man who has pushed for investigation into South Africa's oil procurement and who initiated the inquiry into the Salem affair was Mr De Klerk's successor, Mr P T du Plessis.

Should Mr De Klerk's rise in the party be halted in terms of the principle of ministerial responsibility, it could well leave the stage open for either Mr Chris Heunis, Minister of Constitutional Development and Planning, or Foreign Minister Mr Pik Botha to become heir apparent to Mr P W Botha when the new dispensation comes into being in September.

(55) Star

Move to cut SA oil supply

1/5/84

The Star Bureau

LONDON — Christian Concern for Southern Africa is asking Shell to stop sending oil to South Africa.

It also wants to know how much oil Shell has sent to South Africa in the last five years.

Resolutions to this effect will be put at the annual shareholders' meeting of Shell Transport and Trading, the British parent company of the Royal Dutch Shell group, on May 17.

The Shell Board has asked shareholders to oppose them.

The man behind the move is the Rev John Johansen-Berg, who visited Namibia with a British Council of Churches mission two years ago and is vice-chairman of Christian Concern.

Mr Johansen-Berg said yesterday that he did not expect his resolutions to succeed.

"But they will ensure the matter will be debated fully.

"They will win a measure of support from a number of individual shareholders and church and local authorities who hold shares.

"The supply from other countries of arms, oil, investment capital, technical knowledge, skilled workers and bank loans is a means of sustaining apartheid."

The supply of oil and oil products was a "blatant contribution" to South African inhumanity and aggression against neighbours, he said.

A spokesman for Shell Transport and Trading said there was a United Nations embargo on arms supplies to South Africa but there was no general oil embargo.

'Oil deals': Names of officials sent to AG

CAPE TIMES 1/5/84 55

Political Staff

THE NAMES of five senior government or quasi-government officials allegedly involved in the misappropriation of millions of rands in oil deals were forwarded to the Advocate-General yesterday by Mr John Malcomess (PFP Port Elizabeth Central).

The latest alleged oil scandal emerged last week in Parliament when the Leader of the Opposition, Dr Van Zyl Slabbert, disclosed that he had handed a dossier to the Prime Minister, Mr P W Botha, on the latest allegations.

The allegations have been referred by the Prime Minister to the Advocate-General.

Dr Slabbert said the most recent alleged irregularities involved a sum of R385 million and might be "only the tip of the iceberg".

In a statement issued yesterday, Mr Malcomess said that during the parliamentary recess he had stated he would be passing on information with regard to allegations about the supply of oil to the Advocate-General.

This information, he stated, was in regard to "the names of people allegedly involved".

He had received the information from more than one source and considered them to be "reasonably knowledgeable".

'Discreet'

"Whatever the origin, I believe that it is in the interests of the people concerned if they are not implicated that they should be cleared of any involvement. I am sure that the Advocate-General will be discreet in his inquiries and I hope that his report will not take too long."

Meanwhile it is understood that the allegations referred to the Advocate-General involve several oil deals and numerous shipments of the commodity to the Republic spread over several years.

Among allegations listed by Dr Slabbert in Parliament on Friday were:

- That the Strategic Fuel Fund (SFF) had bought oil through a Swiss company in spite of offers of cheaper oil
- That the deals had been conducted with the Swiss firm in order to open Swiss bank accounts

The whole question of the procurement of oil is likely to be raised again on Friday during the debate on the Mineral and Energy Affairs vote during the committee stage of the Budget.

And one point which Opposition spokesmen are likely to raise is why control of the SFF was moved from Sasol to the Industrial Development Corporation about two months ago.

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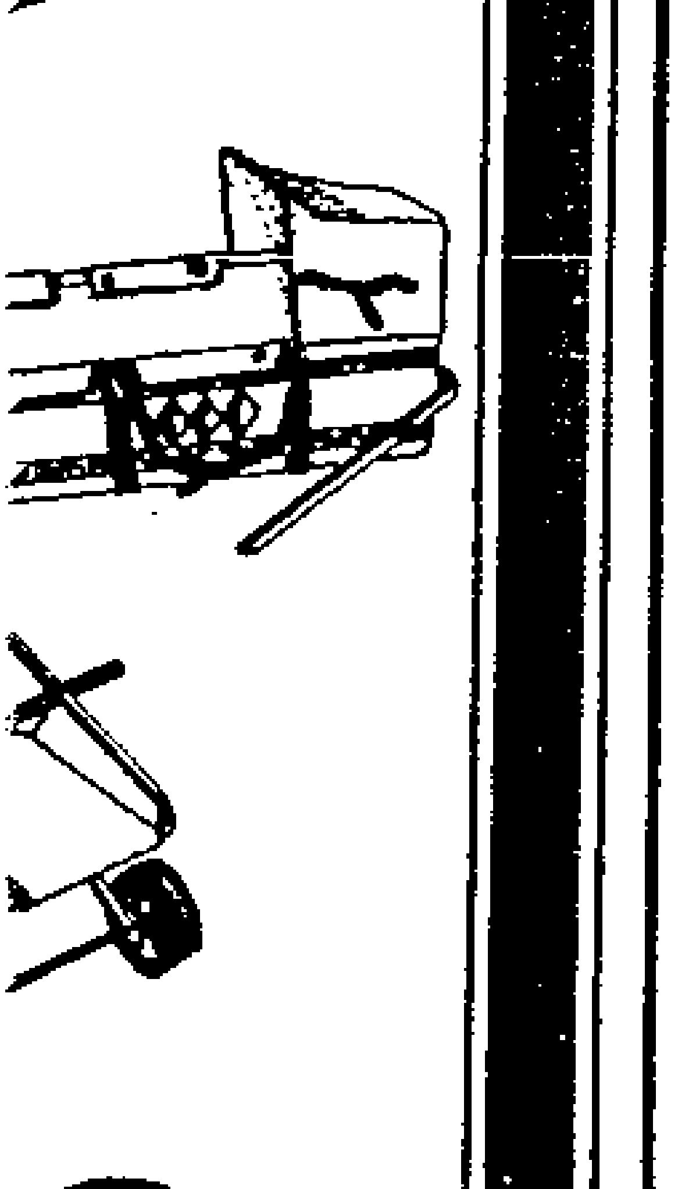

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Botha attacks oil fraud reports

CAPE TIMES 1/5/84

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By MICHAEL ACOTT
Political Correspondent

THE Prime Minister, Mr P W Botha, last night accused newspapers of an unfair attempt to discredit Cabinet ministers in new oil scandal allegations.

His hard-hitting statement followed Sunday and daily newspaper speculation about the implications of alleged overpayments totalling R385-million on oil procurement deals.

News of the allegations broke last week when the Leader of the Opposition, Dr Van Zyl Slabbert, said they had been referred to Mr Botha. The Prime Minister told Parliament he had referred them to the Advocate-General, whose function is to investigate allegations of corruption or maladministration of public funds.

Subsequent newspaper reports have included speculation on the effect the scandal could have on the political career of the present Transvaal Nationalist leader and Minister of Internal Affairs, Mr F W de Klerk, because he was a former Minister of Mineral and Energy Affairs.

Mr Botha last night defended Mr De Klerk specifically against what he termed "blatant untruths". He also condemned speculative, erroneous and irresponsible reporting in certain English newspapers despite a briefing of editors on the situation.

The Prime Mi

General's investigation show malpractices or corruption, the culprits would be prosecuted and the public would be informed fully.

"I wish to express my strongest objection to unfair attempts to discredit some ministers through reporting based on anonymous accusations," he said.

"Clearly the objective of all this reporting has been to embarrass the government and the National Party.

"As leader of the ruling party I must express my strongest disapproval of these obvious attempts to sow, by subtle means, discord in the ranks of the Cabinet under the pretext of the subject of oil procurement but which in effect has no relevance thereto whatsoever."

'Special target'

Mr De Klerk had apparently been selected as "a special target" by a particular newspaper.

The report concerned had contained blatant untruths, the best example of which was the incorrect statement that he was the responsible minister at the time of the Salem incident. Mr Botha said the minister then was Dr Schalk van der Merwe, "who fully

"I would like to point out that it was during the office of Minister De Klerk that more favourable contracts, a diversification or sources and a greater degree of security with respect to deliveries of crude oil to the Republic were achieved," Mr Botha said.

"During his term of office particular success was also achieved with the renegotiation and improvement of restrictive provisions in contracts which of necessity had to be accepted in difficult times."

'Speculation'

Mr De Klerk's tenure of office had also seen rationalization of management and control regarding crude oil procurement.

Mr Botha said "speculative and erroneous reporting" had occurred despite the present Minister of Mineral and Energy Affairs, Mr Danie Steyn, informing editors of certain aspects of South Africa's oil procurement.

"These editors were furthermore furnished with detailed background information regarding South Africa's procurement actions since 1973. Notwith

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Mr Botha last night defended Mr De Klerk specifically against what he termed "blatant untruths". He also condemned speculative, erroneous and irresponsible reporting in certain English newspapers despite a briefing of editors on the situation.

The Prime Minister gave the assurance that, should the Advocate-General's investigation show malpractices or corruption, the culprits would be prosecuted and the public would be informed fully.

"I wish to express my strongest objection to unfair attempts to discredit some ministers through reporting based on anonymous accusations," he said.

"Clearly the objective of all this reporting has been to embarrass the government and the National Party.

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"These editors were furthermore furnished with detailed background information regarding South Africa's procurement actions since 1973. Notwithstanding this, certain newspapers over the weekend persevered with the publishing of blatant erroneous reports."

'Irresponsible'

The reports were "extremely irresponsible" in the light of the pending investigation by the Advocate-General of alleged irregularities.

Noting that he had urged anybody with relevant information to place it before the Advocate-General, Mr Botha called on all concerned to refrain from comment and speculation until this investigation had been completed and given to Parliament.

"I wish to give the assurance that, should it be established that malpractices occurred or that acts of corruption have been committed, the culprits will be prosecuted and the public will be fully informed," Mr Botha said.

● **Govt men 'involved in oil deal', A-G told, page 4**

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AMENT ARGUS 2/5/84 (55

Petrol price system outdated, says Sive

Parliamentary Staff

THE SYSTEM used for calculating the price of petrol was completely wrong and outdated, Major Reuben Sive (PFP Bezuidenhout) told the Assembly.

He said the formula used by the Government failed to take into account the ravages of inflation.

Speaking in the budget debate on the transport vote, Major Sive said Press reports had indicated that the Minister of Transport, Mr Hendrik Schoeman, intended to ask for an increase in the price of fuel to ensure a bigger levy for his department. Such an increase would only add to inflation.

Major Sive said it was obvious that the basis on which revenue was accumulated by the national road fund was outdated and could not be applied to present-day conditions.

DIRECTLY RESPONSIBLE

Figures showed that the percentage of the total cost of petrol allocated to the National Transport Commission had declined from 10,06 percent in 1976 to 4,29 percent in 1984.

This indicated that the percentage allocation of the collection from the petrol pump had been directly responsible for the financial crisis faced by the National Transport Commission.

Even with the recent addition of 0,7 cents a litre for the National Transport Commission the percentage was still "absurdly low" — 5,57 percent.

The price of petrol had been reduced by 1,5c a litre in February last year. Just before the referendum, on August 22 last year, petrol prices were reduced by 3,8c a litre, making a total reduction of 5,3c a litre.

"Where was the Minister of Transport when it was decided that the funding of Sasol 2 and Sasol 3 was no longer required?" Major Sive asked.

"Surely the minister should have said the production of petrol was to allow vehicles to proceed along roads..."

NEW TRANSPORT PROBLEMS

Major Sive then suggested the financial problems now facing the National Transport Commission could be solved by examining the whole structure of the petrol price.

Referring to transport problems, Major Sive said the white electorate had for the past 36 years elected a government which had the political policy of apartheid.

The Government, therefore, had to carry out this policy which involved a rigid ethnic separation in terms of the Group Areas Act. This had resulted in a complete change in the spatial structure of South African cities, resulting in new transport problems.

The State had to pay for the consequences of that policy. Contrary to some Government arguments, not only commerce and industry but every taxpayer had to pay for electing a government with that policy, Major Sive said.

SA, Mozambique to defend powerlines against rebel attacks

ARGUS 2/5/84

55

Political Staff

THE trilateral agreement on Cahora Bassa signed today commits both South Africa and Mozambique to take "immediate steps" to protect the transmission lines for the electricity from attack or interference.

Portugal will be paid more than double the 1977 tariff it was paid in 1977.

The inter-state agreement, with 17 articles, gives South Africa and Mozambique 90 days to secure the transmission lines, failing which any of the parties will be able to demand an immediate meeting.

This agreement was signed today in the Lady Anne Barnard Room at the Castle in Cape Town by South Africa's Minister of Foreign Affairs, Mr Pik Botha, the Minister of Planning of Mozambique, Mr Mario da Graca Machungo, and Dr Jaime Gama, Portugal's Minister of Foreign Affairs.

A separate document, the highly technical supply contract, was signed by representatives of Escom and Hidroelectrica de Cahora Bassa.

This agreement pegs the price for power at 0,75 cents a kilowatt-hour, compared to the old tariff of 0,5 cents. However, a new premium has been introduced whereby South Africa will pay an extra 0,35 cents a kilowatt hour for reliable power.

A STATEMENT

In a statement released today the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said the inter-state agreement demands that South Africa and Mozambique protect the lines.

Article 8 of the trilateral agreement — dealing with protection of lines — also says Mozambique and South Africa must safeguard "in the execution of their duties, the personnel responsible for the maintenance and repair of the lines and all costs therewith . . ."

Effectively, this means South Africa will have to stop the rebel resistance movement, Renamo, from blowing up the lines and help the Mozambicans protect themselves.

TERROR ACTS

After the ceremony Mr Pik Botha said South Africa deplored "recent acts of terrorism in Mozambique designed to sabotage the transmission lines of the Cahora Bassa project".

While the supply contract is binding from today, it becomes operative only when maximum power is again delivered.

● Picture, Page 2.

tion of the buildings cannot at this stage be furnished, nor the ultimate area to be served by the station.

Rent control

*19. Mr G B D McINTOSH asked the Minister of Community Development:

How many dwelling units were subject to rent control in (a) the Republic and (b) the East London region as at the latest specified date for which figures are available?

†The DEPUTY MINISTER OF COMMUNITY DEVELOPMENT:

No statistics are kept on dwellings which are subject to rent control.

Soetwater holiday camp: charges

*20. Dr A L BORAINE asked the Minister of Law and Order:

(1) Whether any charges have been laid with the South African Police concerning an incident at the Soetwater holiday camp near Kommetjie on or about 23 April 1984; if so, what are the particulars of these charges;

(2) whether these charges have been investigated; if not, why not; if so,

(3) whether the investigation has been completed; if not, when is it anticipated that it will be completed; if so, what were the findings?

The MINISTER OF LAW AND ORDER:

(1) Yes. Malicious damage to a tent and the use of obscene language in public.

(2) Yes. The complaints are being investigated.

(3) No. It is anticipated that the investigation will be completed within the next few days.

(55) Hansard 2/5/84 Q. Col. 1080

Petrol: pump price

*21. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

What is the breakdown of the costs and disbursements which comprised the pump price of petrol sold in the Republic during the latest specified period for which figures are available?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS (Reply laid upon the Table with leave of House):

The pump price of petrol is as follows:

Coastal areas	98 Octane—56,2 c/ℓ 93 Octane—54,8 c/ℓ
Pretoria/Reef/ Vereeniging Area	93 Octane—61,8 c/ℓ 87 Octane—61,1 c/ℓ

The composition of the price of 93 Octane petrol is as follows:

—Posted price including the wholesale profit margin	31,820 c/ℓ
—Freight	2,214 c/ℓ
—Insurance	0,030 c/ℓ
—Leakage and ocean loss	0,090 c/ℓ
Cost-, Insurance and Freight	34,154 c/ℓ
—Landed cost	0,505 c/ℓ
In bond landed cost	34,659 c/ℓ
—Customs and excise duty	10,341 c/ℓ
Total landed cost	45,000 c/ℓ
—Nett Equalization Fund Levy	1,300 c/ℓ
—Service differential cost from depot to point of resale	1,100 c/ℓ
Wholesale price in coastal areas	47,400 c/ℓ
—Transport cost to the Reef	6,500 c/ℓ
Wholesale price in the interior	53,900 c/ℓ
—Retail profit margin	3,800 c/ℓ
—General sales tax	4,100 c/ℓ
Pump price	61,800 c/ℓ

—Customs and excise duty of 10,341 c/ℓ exists of:

—Customs duty	0,091 c/ℓ
—Excise duty	5,896 c/ℓ
—State Oil Fund	1,725 c/ℓ
—Combating of oil pollution	0,055 c/ℓ
—Financing of facilities for strategic stock-piling	0,220 c/ℓ
—National Road Fund Levy	2,354 c/ℓ

—The gross Equalization Fund levy amounts to 8,8 c/ℓ of which 7,5 c/ℓ is paid to the oil companies as a price subsidy. From the 7,5 c/ℓ the oil companies pay 0,7 c/ℓ to the National Road Fund.

Defence Force: temporary rank

*22. Mr P A MYBURGH asked the Minister of Defence:

Whether it is practice in the South African Defence Force to confer temporary commissioned rank on its members; if so, (a) how many members had such rank conferred on them during the latest specified period of five years for which figures are available and (b) how many of these members subsequently reverted to the ranks?

The MINISTER OF DEFENCE:

Yes, the figures for the period 1979 to 1983 are as follows:

(a) 17 614.

(b) SA Army—45 (this figure is only applicable for the years 1980 to 1983 as the figure for 1979 is not avaiable).

SA Air Force	11
SA Navy	2
SA Medical Service	7
Total	65

Saudi Arabia: postal service

*23. Mr A B WIDMAN asked the Minister of Posts and Telecommunications:

(1) Whether there is a postal service between South Africa and Saudi Arabia at present; if not,

(2) whether there was a postal service of this nature; if so,

(3) whether this service was suspended: if so, (a) when and (b) why;

(4) whether he intends to (a) introduce or (b) re-introduce this service; if not, why not; if so, when?

The MINISTER OF POSTS AND TELECOMMUNICATIONS:

(1) No;

(2) yes;

(3) yes;

- (a) on 25 November 1983, and
- (b) because the Jeddah post office requested the London post office, through which mail matter from South Africa to Saudi Arabia used to circulate, not to forward mail matter of South African origin to Saudi Arabia;

(4) the South African Post Office would like to re-introduce the service, but the Postal Administration of Saudi Arabia does not respond to inquiries from the South African Postal Administration in this connection.

Mr A B WIDMAN: Mr Speaker, arising out of the reply of the hon the Minister, has he considered any other way of getting post to Saudi Arabia? [Interjections.]

The SPEAKER: Order!

The MINISTER: Mr Speaker, as far as we are concerned, we have done our best, and I do not know of any other way, except perhaps sending it to somebody in Great Britain and asking him to post the letter if the hon member is anxious to get a letter through to Saudi Arabia.

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To Page 3 ☛

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POWER SHOCK

THOUSANDS of Diepmeadow residents are in for a shock — 40 percent of the 28 597 houses in the area will not have electricity when the current electrification scheme is completed in July.

Phase Two of the scheme, involving about 11 439 houses, is to be shelved because of lack of funds, Diepmeadow Town Council's acting town clerk, Mr F J C Knott, told The SOWETAN.

No lights for over 10 000

By LEN MASEKO

Other upgrading projects planned for the area will also be affected.

"The Council is still working out ways of raising more funds so that we can install electricity in all houses in the area. We are not sure yet whether to raise the money locally or from overseas countries," Mr Knott said.

The Greater Soweto R232-million electrification project is scheduled for completion at the end of July.

Spokesmen for the Soweto and Dobsonville Councils told **The SOWETAN** yesterday that all was well in their areas, and expected the massive electrification project to be completed by July.

Meanwhile Soweto residents should brace themselves for another increase — the R12 monthly levy will go up by R5 as from July 1.

Levy

This levy is for the repayment of loans used in the Greater Soweto upgrading schemes, and residents will be required to pay the money within the next 20 years.

The Soweto Council finance director, Mr Irwin Florence, said the electricity levy will go up in phases, from R17 to R23 in July 1985, and from R23 to R29 in July 1986.

"The Council will assess the position from time to time," Mr Florence said.

THE No. 1

- Another Man's Wife - PAGE 11
- Germiston race results - PAGE 18
- Samora Khulu fined - PAGE 20

AMENDMENT BILL Argus 3/5/84 (55)

New oil legislation

By TOS WENTZEL, Political Correspondent

DRAFT legislation coming before Parliament this session has again focused attention on South Africa's extremely strict curbs on information on oil procurement and distribution.

The Petroleum Products Amendment Bill, which will come before the Assembly by the end of this month, tightens up the provisions of the original Petroleum Products Act of 1977.

That Act in turn took over from the National Supplies Procurement Act of 1970.

This latter measure was a wide-ranging one which gave the then Minister of Economic Affairs powers to manufacture, acquire or import what was regarded as strategic goods.

It also prohibited the disclosure of certain information about such goods.

The 1977 Act took the control, specifically over petroleum products, and the prohibitions on information, further.

Penalties of up to R7 000 or seven years' imprisonment or both, as well as the cancellation of trading licences and property used to commit an offence, were laid down.

The Government's argument at the time was that the country was faced with threats of an oil boycott and that the secrecy provisions were needed to keep vital information away from South Africa's enemies.

Instead of doing this the Act created a situation where details of the major oil scandal, the Salem affair, were kept from the South African public four years ago while a great deal was known and published in the outside world.

South African newspapers were prevented from keeping their readers abreast of developments in the Salem affair as the Petroleum Products Act forbids the publication of practically any information about oil supplies without the permission of the Minister of Mineral and Energy Affairs and the Controller of Petroleum Products.

It was only last year that the Opposition managed to force a debate on the affair in Parliament and details of an oil deal which cost the taxpayers some R30 million were published in South Africa for the first time.

Even then the Government clearly resented the long-delayed public debate on the matter and some uncertainty arose about the privileged position of MPs discussing issues regulated by such strict legislation.

A ruling by the Speaker underlined the privileged position of MPs when speaking in the Assembly and the right of the Press to report on such speeches.

Renewed uncertainty has arisen over the extension of the secrecy provisions in the Petroleum Products Amendment Bill.

It seeks to introduce virtual total secrecy over South Africa's oil resources and trade.

The release of even consumption or about any business transaction in connection with any petroleum products is prohibited.

To the existing prohibition on the publications of such information is added a prohibition of the publication of such information "in any other way."

The Opposition has asked for this Bill to be moved down the order paper of the Assembly and the Government has agreed.

The reason for the Opposition request is that it hopes more details of allegations about an oil scandal, may have emerged by then.

The allegations have been referrred to the Advocate General.

In terms of the Advocate General Act matters being investigated by the AG become sub judice.

Oil debate: Fireworks likely today

CAPE TIMES 4/5/84

55

Political Staff

THERE could be fireworks in Parliament today when the Department of Mineral and Energy Affairs vote is discussed during the committee stage of the Budget.

The debate comes in the wake of disclosures made in Parliament by the Leader of the Opposition, Dr Van Zyl Slabbert, of a second alleged oil scandal involving R385 million.

And, he added, this might be "only the tip of the iceberg".

The allegations, which were initially handed privately by Dr Slabbert to the Prime Minister, Mr P W Botha, have been referred to the Advocate-General.

Among the allegations were:

- That the Strategic Fuel Fund had bought oil through a Swiss company in spite of offers of cheaper oil.
- That the deals had been conducted with a Swiss firm in order to open Swiss bank accounts.
- That profits of millions of rands were made without a cent being paid in tax.
- That the SFF paid R385 million more than the contract price for oil to certain suppliers. This did not refer to the difference between the official oil price and that at which the Republic could obtain it "but the price we contracted at and the amount we actually paid".
- That these contracts were with an American oil millionaire, Marc Rich, who was currently being charged with one of the biggest tax frauds in American history, and Mr John Deuss.

Officials allegedly linked to scandal

In addition, the names of five senior government or quasi-government officials allegedly linked with the scandal have been forwarded to the Advocate-General by the MP for Port Elizabeth Central, Mr John Malcomess.

World War II veteran Mr Johnn

oy killed trying disco stunt

Own Correspondent

IDON. — Schoolboy Stephen Wakling died ex-
imenting with the latest disco craze.

ephen, 14, landed head-first on a stone dance
r after attempting a 360 degree body flop. He
l from brain damage caused by a fractured
l, an inquest at Abergavenny in Wales heard.

hoolfriend Andrew Reeks told the inquest he
encouraged Stephen to try out the somersault
e after completing the flop himself.

Koeberg turns on the power

Cape Times 5/4/84

55

Staff Reporter

THE first generator of the Koeberg nuclear power station to function began feeding power into the national grid at 1.14pm yesterday.

The supply of power began after Koeberg's first turbo-generator unit was synchronized with Escom's national transmission grid.

This is the next important step in the starting-up of Koeberg and follows the switch-on of the first nuclear reactor three weeks ago. Four months ago, initial fuel loading was started.

Since loading, tests have been conducted to satisfy the requirements of the Atomic Energy Corporation (AEC), the Council for Nuclear Safety and Escom.

At present, the AEC allows only 30 percent power generation. Further approval must be obtained before the power can be raised above 30 percent.

The first unit is expected to supply full power by mid-July. Synchronization of the second unit with the national grid is expected by December.

Although acclaimed as one of South Africa's most outstanding civil engineering achievements, Koeberg has come under fire, mainly because of its proximity to Cape Town.

Meeting

Three weeks ago, Koeberg Alert called a public meeting to oppose the switch-on. They called on the AEC to withdraw the operator licence for Koeberg until several safety aspects had been dealt with.

They also said that Escom should not control the emergency plan and that a permanent solution for nuclear waste should be made public.

Koeberg came in for further criticism after it was disclosed that the cost of generating power at Koeberg was estimated at 300 percent higher than the present cost of power from the country's coal-fired stations.

There's nothing like a cold showe
good scrub to revive a girl after
weeks in a blazing heatwave. Ma
Riebeeck is treated to an unse
springclean so she will look her
tomorrow's Cape Town Festival
through the city. ● It's Festival
Cape Town again, page 1

Jogger in island swim feat

Staff Reporter

SWIMMING up and down a pool to help heal a severely fractured foot became boring for company director Mr Barry Cutler, so on Tuesday he swam from Robben Island to Bloubergstrand "just so that I felt I was going somewhere".

A jog-a-holic for 15 years, Mr Cutler fractured his foot in a trampoline accident and doctors advised him to give up running. A friend suggested swimming for both therapy and enjoyment and Mr Cutler, of Sea Point, swam up to 2km a day for two years.

Cape Show dog-jumping

Staff Reporter

A NEW spectator sport has come to the Cape Show at Goodwood — dog-jumping.

This new doggie sport — based on equestrian show jumping — originated in England.

A leading dog-food company introduced dog-jumping in South Africa in 1982 and the public will be able to see the sport at the show on Saturday.

Two preliminary competitions will take place at 2pm and the Western Province Championship will be at 4pm — all in the Main Arena at the showgrounds.

Four dogs will go on to the national championships in Johannesburg later this year.

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Editor's office,
24-2233 ext 22
9.15am and 5p
days to Fridays,**

Koeberg output rises to 50 pc

ARGUS 17/4/84

55

Staff Reporter

KOEBERG nuclear power station has increased its first turbo-generator's power output from 30 percent to 50 percent after successful completion of a series of tests.

Escom spokesman Mr Andre van Heerden said 50 percent power production was achieved late yesterday afternoon.

"The Atomic Energy Corporation yesterday gave permission for Koeberg to increase power from its first generator to 50 percent," he said in a statement.

"This follows a period when its first generator was limited to 30 percent power production while tests were being conducted.

"These tests were completed successfully and production reached the 50 percent mark late yesterday afternoon," he said.

Before production from the reactor was allowed to reach 75 percent, a further series of tests would be conducted, he added.

The first generator started feeding power into the national electricity grid at 1.14pm on April 14.

Initial nuclear fuel loading started four months ago.

Rigid tests are conducted during every switch-on stage, to satisfy the requirements of the Atomic Energy Corporation (AEC), the Council for Nuclear Safety and Escom.

The first generator unit now undergoing a series of tests is expected to supply full power by mid-July.

Synchronisation of the second unit with the national electricity grid is expected by December.

Passengers beat man to death after alleged bus-stoning

Argus Bureau

EAST LONDON. — An unidentified young man has been beaten to death after allegedly stoning a bus in Mdantsane.

Ciskei's police liaison officer, Lieutenant-Colonel Avery Ngaki, said some passengers had alighted from the bus when the man, believed to be in his 20s, allegedly stoned it.

The passengers caught the man before he could run away and beat and kicked him to death.

Colonel Ngaki warned "trouble-makers" against stone-throwing as "people were obviously sick and tired of it".

The boycott of Ciskei Transport Corporation buses is now in its ninth month. Buses are carrying only 25 percent of

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An artist's impression of Michael Bettaney.

Tight guard on dangerous MI5 traitor

Argus Foreign Service

LONDON — MI5's first convicted traitor, Michael Bettaney, has begun a 23-year jail sentence in tightly guarded confinement.

He is being kept isolated from other prisoners in a cell converted to provide what the Home Office described as "specially controlled conditions of very, very high security".

The reason is that Bettaney possesses dangerously sensitive information and "for the time being it is not right to allow him to associate with other prisoners," according to the Home Office.

Britain's spymasters, embarrassed and appalled that a politically unstable loner like Bettaney could fool their security system, are worried that he will still try to spill some of the secrets he tried to pass to the Russians.

HELD IN CAMERA

But Bettaney, convicted of 10 charges under the Official Secrets Act at an Old Bailey trial held largely in camera, is unrepentant.

In an extraordinary statement issued through a solicitor after the case he denounced the British and American governments, the secret services and the judiciary and called on "comrades everywhere" to work for "a victory which is historically inevitable".

A huge political row has broken here over the question: How could such a man get a job in MI5's Russian section?

It is known that the classified information he obtained and stored in his photographic memory included names and addresses of agents abroad and British security's analysis of KGB operations in this country.

SENSITIVE INFORMATION

Media Council attacks SABC

Staff Reporter

THE Media Council has attacked the SABC for screening a Midweek television programme alleging corruption in horse-racing without giving the Jockey Club a fair chance to react.

The council today released its report on a complaint submitted to it by the Jockey Club in February following the screening of a Midweek item on February 1 entitled Horse-racing: Is it the sport of kings or crooks?

The SABC, not being a member of the Newspaper Press Union, is not subject to disciplinary action by the council unless it voluntarily places itself under the council's jurisdiction. This it has so far refused to do.

"CONDONED"

Among the allegations made in the Midweek programme were:

- The Jockey Club, the controlling body in horse-racing, is riven by corruption from top to bottom, condones malpractices on a vast scale and is incapable of reform.
- There is a conspiracy of jockeys, trainers and bookies to lengthen the odds by racing unfit and unraced horses.
- Stipendiary stewards, the "policemen" of horse-racing, "see what they want to see" and are not efficient at fighting corruption.

The Media Council found that the programme fell "lamentably short" of standards of fairness and balance in the NPU's code of conduct.

The council said that although Midweek had approached the Jockey Club for comment, it had not explained that the whole thrust of the programme was to be corruption, nor given the club the chance to reply to specific allegations.

Jockey Club officials testified that they were misled into believing that the programme would be

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AA welcomes 120 km/h speed limit on freeways

Weekend Argus Reporters

THE Automobile Association has welcomed the Government's decision in principle to raise the speed limit on some freeways to 120km/h.

Mr Barney Mostert, area manager for the AA in the Western Cape, said today this decision was in line with the AA's thinking.

"We certainly do welcome it," he said. "A survey carried out in our motoring magazine a while back was very clear on this. The majority of people in South Africa want it."

Not in city

"They are going to increase the limit to 120 km/h only on roads which are designed for that kind of speed. We do not propose increased speeds on roads where it is not safe to do so."

Mr Harry Attwood, Cape Town's traffic department manager, said the proposed increases fell outside the jurisdiction of the municipality. Speeds would not be increased on freeways through the city.

He believed the increased limits were not a "bad idea".

Negotiations

Dr Danie Steyn, Minister of Mineral and Energy Affairs, said yesterday in the Assembly during the debate on his portfolio that the new limit on freeways would "most probably" be 120km/h, but in the interests of safety it would be lower on single-lane national roads.

The new limits would be introduced once negotiations between the provincial authorities and the Department of Justice about admission-of-guilt fines for speeding offences had been completed.

Mr Steyn said the Government had decided in principle that speed limits no longer needed to be used as a fuel-saving measure and this cleared the way for a revision of the present restrictions.

He also announced an increase of 0,1c a litre on the profit margins of petrol stations. This would be effective retrospectively from April 19, the Minister said.

The Government was also investigating alternatives to the R5 levy on after-hours sales of petrol.

Mr Steyn said he would like to have the levy scrapped, but a study had shown that petrol prices would have to be increased by 0,5c a litre to compensate filling station owners for outlays on extra staff and security.

The minister also said that steps will also be taken soon to reduce the lead levels in fuel sold in South Africa.

As a first step it was envisaged that the availability of high-octane petrol would be reduced.

CAPE Times 5/5/84 55

Oil scandal: Another Info?

Political Staff

HOUSE OF ASSEMBLY. — There was a dramatic turn in the latest alleged oil scandal yesterday when it was suggested excess money mighty have been "syphoned off" in a manner similar to the Information Scandal.

Speaking in the vote on the Department of Mineral and Energy Affairs, the Progressive Federal Party MP for Constantia, Mr Roger Hulley, said the possibility existed that the excess money had been used for some other undisclosed purpose by the government or a government agency.

In the Information Scandal which rocked South Africa, and which resulted in the resignation of the then State President, Mr B J Vorster, and the crown prince of the National Party, Dr Connie Mulder, funds were channelled from the defence budget to fund National Party projects.

Mr Hulley said the critically important question was what happened to the actual premium money that was paid in excess of the contract price.

Suggesting that one possibility was that it had been "syphoned off" for use on other projects, he listed three other possibilities:

- That the supplier country or company of origin received a greater price than they contracted to receive.
- That the broker received far more brokerage that he was contractually entitled to.
- That other middlemen were the beneficiaries which would raise grave questions of propriety and unlawful personal enrichment.

Mr Hulley said these were possibilities which would have to be fully explored and explained to the general public before they would feel satisfied about the government's financial control of oil matters.

And he warned, citing the Watergate scandal as an example, that any attempt at a cover up would fail.

The clue in the Watergate scandal had been to "follow the money", he said and this the Opposition would do until the story was told and the culprits, if any, were brought to book, no matter who they were.

Mr Hulley said the evidence which the Opposition had to hand related to the period when Mr Chris Heunis and Mr F W de Klerk controlled the portfolio.

He said he had been advised recently by a person knowledgeable in international oil trading that South Africa had received offers in the recent past from reputable dealers and brokers to supply crude oil to the country at prices lower than that which had been quoted by the minister.

He added that if it was true that the government had turned away more favourable offers of oil and persisted in paying higher than necessary prices, the implications would once again be far-reaching.

Speed limits: Govt decides

Cape Times 5/5/84

55

Political Staff

THE government has decided in principle to raise maximum speed limits on freeways.

There is also likely to be a 0,1c a litre increase in profit margins for petrol stations and the government is going into the possibility of reducing lead levels in petrol.

This was announced yesterday by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, who suggested that the maximum limits would be increased to 120km/h.

As a safety factor, the limit on single-carriage roads would not be increased by as much.

Replying to the debate on his department's budget vote, he said there were still administrative and legal problems to be sorted out.

Mr Steyn said the current speed limits were introduced originally as a petrol-saving measure, but this was no longer necessary.

The government had, therefore, decided in principle that the limits could be increased, but the provincial administrations had legal problems connected with fines and admissions of guilt to sort out before the new limits could be implemented.

- Assocom welcomed the likely relaxation of speed limits on freeways, the chief executive of Assocom, Mr Raymond Parsons, said in a statement yesterday.

Chiavelli 'may have made R1 200m' in SA oil deals

Cape Times 5/5/84 (55)

Political Staff

HOUSE OF ASSEMBLY. — Controversial oil millionaire Mr Marino Chiavelli may have made more than R1 200-million from oil deals with South Africa in three years.

This was alleged by the MP for Port Elizabeth Central, Mr John Malcomess, during the vote on the Department of Mineral and Energy Affairs in the committee stage of the Budget.

Yet, he said, reports had stated that the authorities were emphatic in their insistence that South Africa had never had any dealings with Mr Chiavelli.

But an authoritative publication, Africa Confidential, stated that the main intermediary between the Republic and one of the countries from which oil was obtained was Mr Chiavelli.

The article stated that Mr Chiavelli's oil dealings "leaked out because of a court case involving one of his former associates, Taki Xenopolous, who is claiming a R108-million commission for helping arrange a R5 400-million three-year contract for oil".

Mr Malcomess said that if Mr Chiavelli had paid the Official Government Selling Price (OGSP) for oil at the time, he would have paid about $25.50 (R30.60).

"As the Strategic Fuel Fund believes $34.50 (R41.40) was a good price to pay in 1979, then it is possible that they paid Chiavelli a premium of $9 (R10.8) per barrel.

"If this was the case then Chiavelli has profited to the tune of somewhere in excess of $1 000-million (R1 200-million) in three years."

Yet, Mr Malcomess said, one read on Sunday that his tax payment to the Receiver of Revenue in South Africa was R196.75 over two years.

Looking at the other people with whom South Africa had been connected in procuring oil, he was "surprised that we dealt with them".

John Deuss, the owner of the Bermuda-registered company Transworld, had been a car dealer in Nijmegan, Holland, till he was declared bankrupt in 1967.

Quoting from the article, Mr Malcomess said: "After a large oil deal with the Soviet Union (which led to a R120-million court case) Deuss turned to South Africa after the fall of the Shah of Iran.

"Last year (1982) he bought Gary Player's former mansion in South Africa for R870 000."

And there was also Marc Rich, Mr Malcomess said, who was involved in a number of oil deals with South Africa and who joined a Denver millionaire in 1982 to buy a R960-million stake in Twentieth Century Fox film studios.

Mr Malcomess said there were several questions still outstanding regarding the "Salem Affair".

- Why had no investigation, even now, been instituted by the South African Police into this matter?
- Why did the Strategic Fuel Fund never lay a complaint with the South African Police after being defrauded of R30-million?
- Why did the Strategic Fuel Fund refuse assistance to Shell, Lloyds of London and Scotland Yard? Was it only after Minister P T du Plessis gave instructions in 1983 that the SFF disclosed information about their involvement in the Salem Affair?
- Why did Minister F W de Klerk, when he controlled the portfolio, not order a proper investigation?
- How did Dr D F Mostert, a Sasol director who served on the SFF, convince the cabinet to pay Shell R30-million with no proper investigation?
- Why did the SFF pay out $46-million (R55,2-million) to Beets Trading in Zug without prior possession of the Bill of Lading?

Mr Malcomess said two oil traders had spoken to a previous minister and some of his officials offering oil at cheaper prices than was being paid. Yet, he said, nothing was done.

He believed there was undoubtedly a case for:

- An end to secrecy of this kind.
- Better parliamentary control of funds.
- A Select Committee of Parliament to investigate the supply of oil to South Africa over the past five years.

SA 'should pay less for petrol'

Political Staff

SOUTH AFRICANS would be paying between 3c and 5c a litre less for petrol if the government had not rejected recent offers of cheaper oil deals, according to Mr Roger Hulley, Progressive Federal Party MP for Constantia.

Mr Hulley's claim yesterday came amid mounting pressure on the government in the wake of the latest allegations of a multimillion-rand scandal surrounding the purchase of South Africa's crude oil.

In a debate on mineral and energy affairs in Parliament on Friday, Mr Hulley said he had been advised by someone with a knowledge of international oil deals that South Africa had received recent offers from reputable dealers and brokers to supply crude oil at prices below those being paid at present.

If it was true that the government had turned down offers of cheaper oil, the implications were far-reaching.

If this had been the case, the government should say why and for whose benefit.

Yesterday, Mr Hulley said he had calculated that the price of petrol in South Africa increased by between 1c and 2c a litre for every dollar increase in the price per barrel of crude oil.

This meant that if the government had bought oil at the lower prices which had apparently been available, the price of petrol could be significantly lower.

Mr Danie Steyn, Minister of Mineral and Energy Affairs, yesterday declined to comment on Mr Hulley's claim, or on the latest allegations that the government had oil dealings with Mr Marino Chiavelli, in spite of official denials. He said he made his last comment on the matter in Parliament on Friday and was not prepared to say any more.

It has been suggested by the Opposition that Mr Chiavelli made a R1 000-million profit over three years in oil deals involving South Africa.

Swiss accounts

The key allegations to have emerged so far in the latest scandal are that prices paid were higher than the contract price for oil and that the destination of the excess money was unknown.

It has been suggested that the money might have been paid into Swiss bank accounts of South African officials involved in the oil purchases, or that it might have been syphoned off and used by the government or its agencies for secret operations.

A dossier of the allegations and related documents was sent anonymously to the Leader of the Opposition, Dr Van Zyl Slabbert, who passed them on to the Prime Minister, Mr P W Botha.

Mr Botha has asked the Advocate-General to investigate the matter, but has refused repeated Opposition demands that a parliamentary select committee be appointed to investigate aspects of the allegations concurrently.

RDM 7/5/84 (55)

Order sought against Escom

By SAM MASEKO
Pretoria Bureau

AN AMERICAN citizen has lodged an application with the Pretoria Supreme Court asking for an order preventing the Electricity Supply Commission and Framatec from operating a condensate polishing plant at Koeberg Power Station.

The application, if successful, could have far-reaching consequences for Escom and the power station.

Mr Charles W Reed of California said in papers before the court that Escom had infringed Patent No 776295 by using the plant, of which he was the registered proprietor.

The condensate polishing plant was designed and built by Framatec or its associates, according to papers before the court.

In an action brought brought before Mr Justice Van der Walt, Mr Reed has asked for an inquiry into the damages he has suffered, and an order restraining Escom from operating the plant "by a method which infringes the patent".

He also seeks an order restraining Framatec, the second defendant, from disposing of the plant and from inciting others to acquire the plant, claiming damages and the delivery up for destruction of the plant infringing the patent.

Escom, on the other hand, claimed in papers before the court that if the order sought by Mr Reed were to succeed, it would suffer "serious consequences, far more serious than the consequences for the plaintiff".

Escom argued that an order should be granted staying Mr Reed's action until he had provided security for costs.

Mr Justice Van der Walt ruled that Mr Reed should furnish security totalling R20 000 before June 19 this year.

CAPE TIMES 8/5/84

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SA oil: Cheaper deal claim

Political Staff

A DURBAN-BASED oil dealer yesterday claimed he could supply large quantities of suitable crude oil to South Africa at a price significantly lower than that at present being paid by the Strategic Fuel Fund Association, the government's oil-purchasing agency.

The claim was made to a PFP MP, Mr John Malcomess, in a telephone call in response to a weekend appeal he made for people with cheaper oil on offer to contact him. He declined to disclose the dealer's name and telephone number.

The dealer said he could supply 1,8-million barrels of light crude oil a month at a premium of around one dollar as opposed to the premium of 1,9 dollars at present being paid by South Africa.

As far as the dealer was concerned the oil would be suitable for South Africa's needs and could be handled by the country's refineries.

Mr Malcomess said he had asked the dealer to supply him with written details of the offer, and he would pass them on to the Minister of Mineral and Energy Affairs, Mr Danie Steyn. Mr Malcomess said he hoped to receive the information he had requested within a week or two.

Earlier offers 'were rejected'

The dealer also claimed in his discussion with Mr Malcomess that he had tried "for some time" to sell oil to South Africa, but that his offers had been rejected.

Last week during the debate in Parliament on Mineral and Energy Affairs, the PFP MP for Constantia, Mr Roger Hulley, claimed offers of cheaper oil had been made to South Africa by reputable dealers, but had been turned down.

Mr Hulley said at the weekend that he had calculated that there could be a significant saving on the price per litre of petrol if the government accepted the cheaper offers.

Mr Steyn said at the weekend that he had no comment to make on Mr Hulley's claims and wished to comment no further on the oil-scandal allegations.

Allegations from anonymous source

Yesterday's development was the latest in a series of claims surrounding allegations of a multi-million-rand oil scandal involving the supply of South Africa's crude oil.

The allegations are being investigated by the Advocate-General. They were originally received by the Leader of the Opposition, Dr Van Zyl Slabbert, from an anonymous source.

Dr Slabbert passed them on to the Prime Minister, Mr P W Botha, who asked the AG to investigate them.

It has been alleged that as much as R385-million more than the contract price may have been paid for oil over a period of three years.

The PFP believes that the vital questions to be answered in the matter are: Was the extra money paid out, and if so, who authorized the extra payments and who received the money?

RAND DAILY MAIL, Tuesday, May 8, 1984

SS

New Bill gives stricter control of oil fund

Govt turns down cheaper oil offer

By CHRIS FREIMOND
Political Correspondent

CAPE TOWN. — A Durban-based oil dealer yesterday claimed he could supply large quantities of suitable crude oil to South Africa at a price significantly lower than that at present being paid by the Strategic Fuel Fund Association, the Government's oil purchasing agency.

The claim was made to a Progressive Federal Party MP, Mr John Malcomess, in a telephone call in response to a weekend appeal he made for people with cheaper oil on offer to contact him.

And Sapa reports that a Bill is to be introduced today to give the Government stricter control over the State Oil Fund (SOF).

The Minister of Mineral and Energy Affairs, Mr Danie Steyn, gave notice yesterday that he would introduce the State Oil Fund Amendment Act today, which would further regulate the use and disposal of money in the SOF.

It would also provide for the amount to be paid into both the SOF, as a charge to the State Revenue Fund, and the Equalisation Fund, and how that money should be invested.

Mr Malcomess said the dealer told him he could supply 1 800 000 barrels of light crude oil a month at a premium of around $1 as opposed to the premium of $1,90 at present paid by South Africa.

The dealer claimed he tried to sell oil to South Africa but his offers had been rejected.

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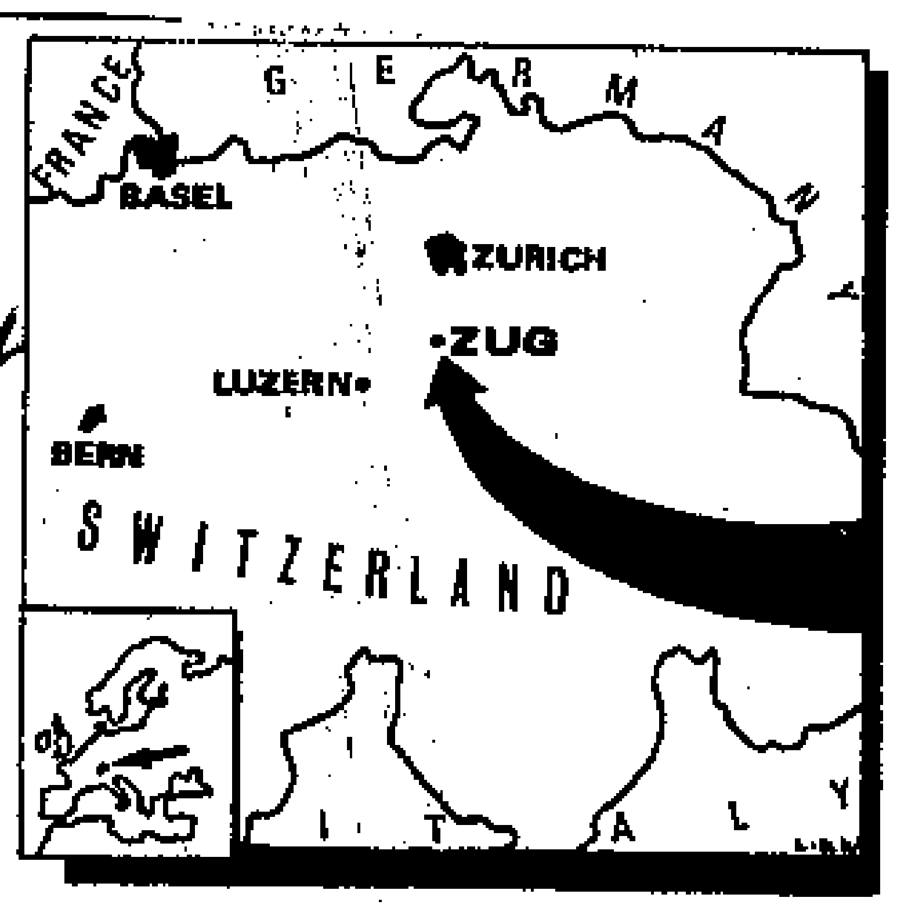
Oil saga: Govt to unmask Zug Connection?

55 8/5/84



By Michael Chester and Russell Gault

24 HOURS
The team that wraps up the news

The Government is coming under pressure to unmask what has been dubbed the "Zug Connection" in the controversy over the sky-high prices paid by South Africa to sanctions-busters bringing in oil supplies.

Answers about the mysterious role of Zug, a small town in Switzerland where many of the oil deals were plotted, will be urged in Parliament by the Progressive Federal Party in a renewed debate over profiteering in oil deals.

Mr Brian Goodall, MP for Edenvale and PFP spokesman on energy affairs, said today that crucial questions will be posed when the House of Assembly debates the new Petroleum Products Amendment Act in the current session.

"We are uncovering so many angles it is almost unbelievable," he told the 24 Hours team. "So far the debate in Parliament has only scratched the surface. Now we want the full story.

"What puzzles us still is the number of leads that keep taking us back to Zug. More information is coming in almost daily about the massive fortunes made there out of South African oil supplies."

Mr Marc Rich . . . believed to have made huge profits.

Zug, only a few kilometres south of Zurich, the hub of the Swiss banking world, was the centre of the operations run by the American commodities trader, Mr Marc Rich, who is believed to have been deeply involved in making huge profits as a middle-man in oil deals.

Mr Rich is already wanted by the United States Department of Justice on accusations that he swindled the US Government out of $48 million in tax dodges linked with buying and selling oil.

It is also the base of Beets Trading AG, run by Mr Anton Reidel, the Dutch businessman facing criminal charges in Amsterdam over his alleged role in the sinking of the Salem supertanker off the Senegal coast in 1980.

R70 m OIL THEFT

Mr Reidel is charged with stealing R70 million worth of oil from Shell International, which was reported to have been in turn sold to Sasol in shipments to South Africa.

And Mr Goodall believes that Zug may also yield the answers to allegations that a number of senior people in South Africa run secret Swiss bank accounts.

"The Advocate General has already stated there appears to be a prima facie case of 'undue enrichment' in the huge oil deals and taxpayers are entitled to a full explanation.

"If the answers about Zug and other issues have not yet been found, we shall propose that the National Intelligence Service starts a special investigation."

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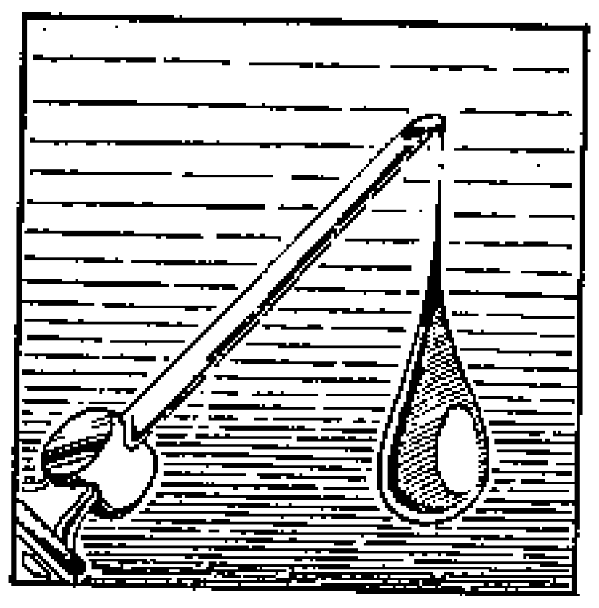
11/5/84
FM

OIL PROCUREMENT

The dirty hands innuendo



There is an oil slick lapping at government's door. Over at Mineral and Energy Affairs, there is an unfamiliar paranoia about the press. Top-level officials are no longer accessible. Inquiries are fielded by a cautious agent.

Little wonder. Acres of newsprint hint at portentous disclosures that would make the Info scandals seem trivial by comparison. The Advocate General has been heaped with documented evidence to assist him in his investigations. "Last week, the PFP's John Malcomess sent the names of five government or quasi-government officials allegedly involved in the scandal to the Advocate General," reports the *Rand Daily Mail*. All eyes are on Zug, Switzerland, the town that gave us the *Salem* debacle.

Heads will roll, the PM has warned, if it is found that politicians and/or government officials dirtied their hands with oil money. The latter is about the only relevant thing that has been said about the brouhaha so far.

Allegations about irregularities involving people who purchased oil for SA in the panic after the Shah's collapse are flying thick and fast. The fact is that at certain periods it was probably necessary to go to the greyer fringes of the oil market. But on no account must there be a cover-up of any official misdemeanours.

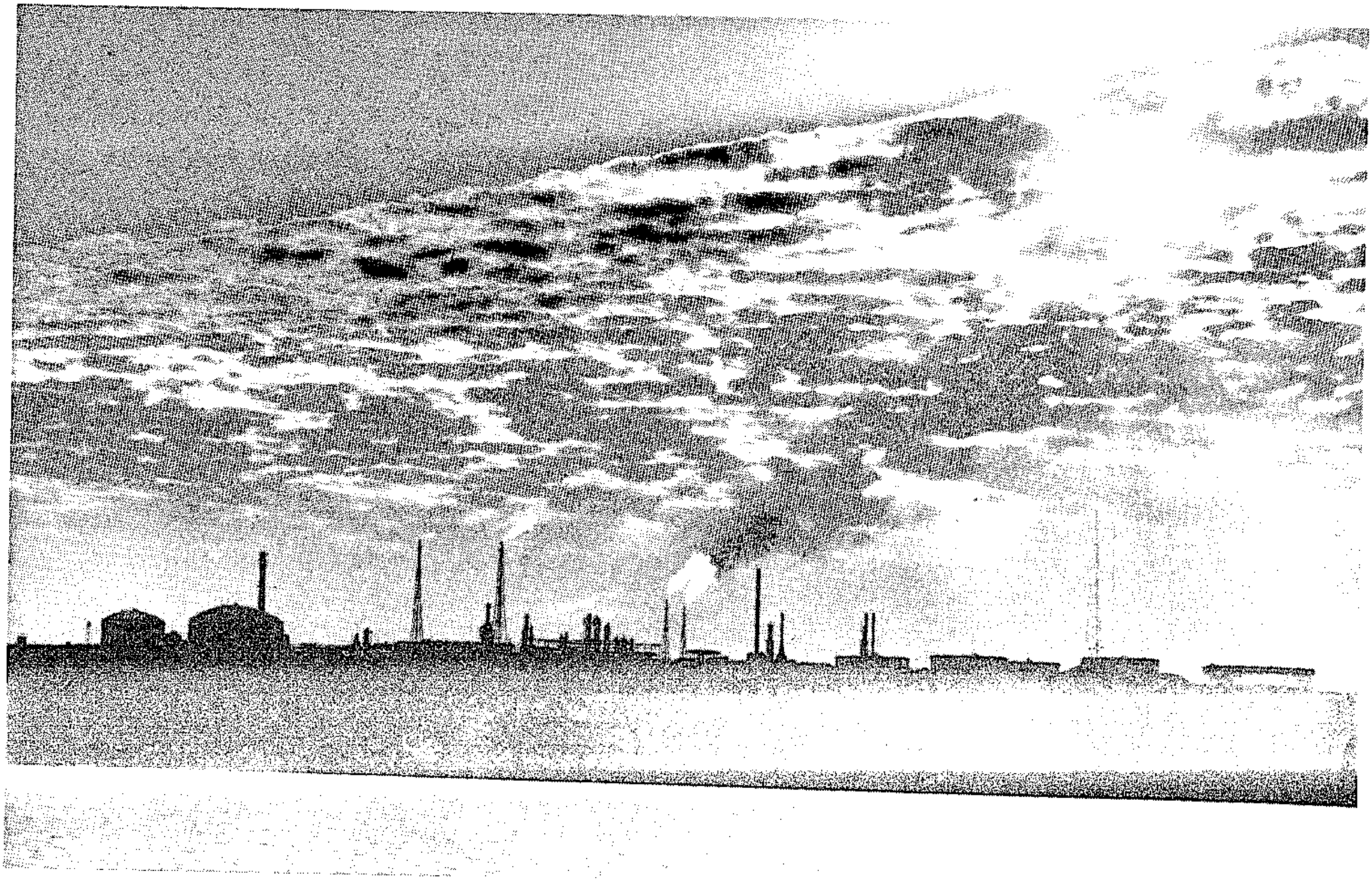
The *FM*'s view is that on no account must there be a cover-up. That is what killed John Vorster — literally. On published claims, it is difficult to see how there *can* be a cover-up. The PFP's oil investigators, fed with a daily stream of allegedly incriminating evidence from brokers and oil traders, may well know all there is to know. And from this there can be no escape. Or so it would seem.

Yet it is difficult to get excited about much of what is being put about. Much of it has been ignited by evidence of fall-outs among oil procurers, intermediaries and other shadowy individuals who make their moves in the international oil business. Two such cases are being heard *in camera* in the Johannesburg Supreme Court. In both cases, plaintiffs appear to be claiming that respondents fiddled them out of their rightful cut. There may be any number of cases abroad — which may never come before the courts — in which other shadowy individuals enriched themselves at the expense of equally shadowy partners.

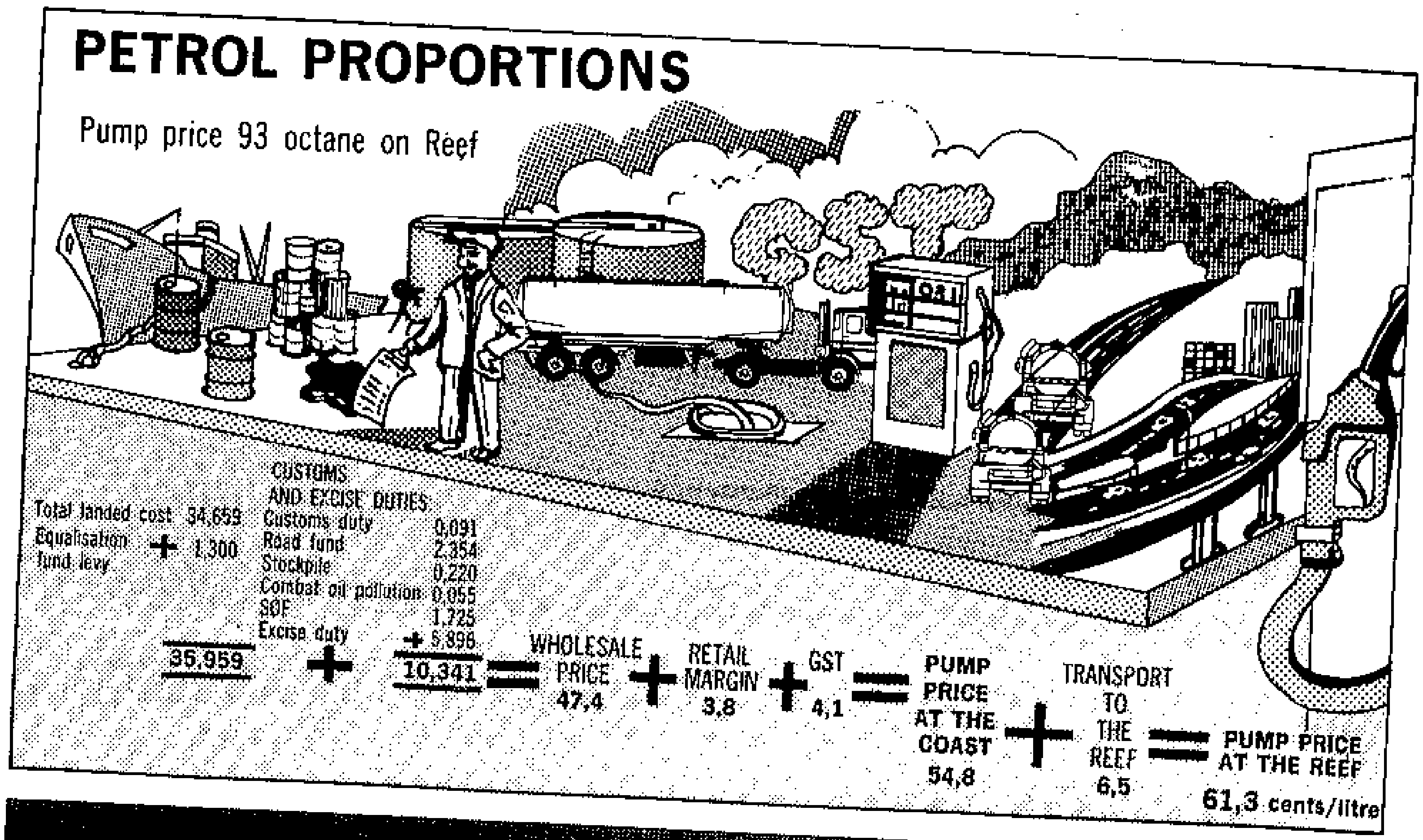
Such differences are often settled out of the barrel of a gun. So why the excitement over suggestions that SA's oil procurement agencies frequently resorted to underworld tactics? Or even that they acted, unwittingly, as a fence for stolen oil — and paid massive premiums, often as much as 100% over posted Opec prices, to get oil when the going was tough?

Likewise, now that the going is good, evidence that SA crude oil importers continue to pay a few dollars a barrel over the top of reference prices fails to impress. Even with Opec price unity under severe pressure as more and more exporting nations try to restore payments equilibrium by resorting to illicit price-cutting (and embargo-busting), SA must continue to pay a "pariah premium" in order to secure long-run continuity of supply of the right kind of crude.

To resort now to the catch-as-catch-can



Iranian oilfields . . . things were not so bright after 1978



PETROL PROPORTIONS

Pump price 93 octane on Reef

procurement tactics of 1978-1980 on promises of cheap parcels of oil from hustlers and carpet-baggers seems senseless. It would be opting for chaos and panic of the kind that followed the fall of the Shah of Iran six years ago. Overnight, a long-term supplier, accounting for 96% of the country's crude imports of around 350 000 barrels/day, fell away.

In the final quarter of 1978, SA was importing about 250 000 barrels/day, owing largely to strikes at Iranian wells and refineries. In the first quarter of 1979, imports slumped to 150 000 barrels/day, and, heaven knows, may have fallen to 30% of that at certain periods afterwards.

SA subsidiaries of the international oil majors batted bravely, for although they were not cut off immediately from the integrated supply systems of their parents, the sudden loss of Iran as a worldwide supplier wiped 6m barrels/day off the market. In the circumstances, they were forced to apply the principle of "equality of misery," the ground rules of which were laid during the 1973 oil crisis. In practice, this meant adding up all available supplies and sharing production among consuming nations on the basis of "normal offtake" — while adhering to destination embargoes imposed by exporting countries.

This arrangement meant that blacklisted countries like SA and Israel were reasonably assured of *some* supply in times of crisis. To accommodate what oil companies like to call their system of prorating, SA had to make great sacrifices. The country had no bargaining power, for although SA is a stable, lucrative market, it is a tiny one — maybe no more than 17 Mt/year compared with the free world's consumption of about 35m barrels/day.

Markets confused

International markets were confused and panic-stricken because, herdlike, buyers decided that prices could only go one way — up. At the same time, oil exporting countries got greedy. Saudi Arabia's efforts to moderate price increases and stabilise the market were fruitless. Price hawks merely diverted even larger percentages of their production away from the international majors, with whom they had supply contracts, to the spot market (which was boiling over). This crazy situation forced the international majors onto the open market, where they bid up prices against governments and independent refiners.

Usually, spot markets account for a marginal portion of total oil trades — 3%-4%. However, they can, as in the dark years of 1979-1980, generate as much frenzy as a boom stock exchange with a shortage of scrip — and many of the cargoes sold change hands many times. Buyers like SA and Israel, on whom there are political constraints, often find themselves the fall guys in such market conditions. The knowledge of their special problems, plus the fact that a buyer like SA (which had massive gold

(55) FM 11/5/84

revenues in 1979) was known to have the wherewithal, fed the greed of sellers and their agents.

For two years, oil producers kept spot markets on the boil by cutting back on their "underpriced" supply agreements and diverting supplies to the Rotterdam market, in particular, to keep the increasing number of spot cargo buyers, including SA agents, on the edge of panic.

This, in turn, fired up the profit expectations of oil traders, who took positions on the market rising even further. This led to a good deal of tension between European consumers, who have always regarded the Rotterdam market as their private preserve, and a proliferation of "outside" buyers like SA, Israel, New Zealand, Japan and even the US.

With countries like SA given little option but to take up offers at $35-$45/barrel, producing countries reacted to such transactions with mock horror, often accusing the oil majors of redirecting crude obtained at official posted prices (then averaging $18/barrel) and selling at huge premiums.

In such conditions, there was always the risk that when price reports moved out of the trading area into a largely uncomprehending outside world, they would acquire a new and monstrous — and quite unintended — existence as the sole arbiter of free market functioning. This seems to have happened to SA, which became the target of hustlers and conmen at home and abroad.

Offers of oil poured into the Ministry of Economic Affairs. Much of the buying was uncoordinated. People got stung. In the end, a panel of buyers comprising experts from the oil majors, Sasol and the Department of Industries was established. All oil purchases had to be approved by the panel. This task is now performed by the Strategic Fuel Fund Association (SFFA), on whose board officers of Sasol predominate.

And now questions of rectitude have arisen. The suspicion exists, fuelled by the *Salem* affair, that the clearly unavoidable process of enrichment of agents and go-betweens (who collect their rewards for uniting a willing buyer and a willing seller, subject to appropriate risk premiums) may have extended to people entrusted with the job of *buying* crude on behalf of SA.

That is a serious allegation and should be investigated with all the vigour and resources at government's disposal. The reason for this is all the more compelling because the SA oil business operates under a cloak of secrecy. SA consumers, who are called upon to pay whopping premiums and levies in order to safeguard continuity of supply, have, by and large, acquiesced in what now seems unnecessary secretiveness.

If, behind this cloak of secrecy, some official, or politician, was enriching himself, the sense of betrayal would be particularly intense — and the political consequences for the Botha administration would be disastrous.

NEW CONSTITUTION

Inflation and the need to spend

The new constitution is going to place an enormous strain on resources. If this is not to lead to renewed inflation, the central bank may need to examine its discretionary role.

The Johannesburg branch of the Economic Society last week discussed some economic and legislative issues likely to arise from the new constitution. It became clear as the debate progressed that central to the issue is the role of the Reserve Bank.

There is very little certainty about the economic issues likely to be thrown up by the new constitution. The only certainties appear to be that:

☐ The expanded democracy will enable larger numbers to make their claims on the available sources of State revenue;

☐ The level of aspirations of certain racial groups will be raised;

☐ The public sector will grow even larger; and

☐ There will undoubtedly be increased inflationary pressures.

Assocom's Parsons ... a price tag to reform

As pointed out by Raymond Parsons of Assocom, there is indeed a price tag associated with the practical implementation of the Constitution Act, but white South Africans have shown that they are willing to pay the price necessary for this brand of political reform. Furthermore, it must be accepted that we are embarking on an era of evolutionary change, and the inevitable practical teething problems in this process will not be without cost.

However, it is important that, as far as possible, that price is not presented in the form of renewed inflation.

Against the milieu that lies ahead, it will be more important than ever before for the monetary authorities to exert a tight control over the money supply. Professor Jan Lombard pointed out that in many countries it had become accepted practice for the monetary and fiscal authorities to work closely together. "Accordingly, the view has crystallised that monetary policy starts at the Treasury."

The monetary and fiscal authorities have worked in close harmony with one another in this country in recent years. But, under the proposed new arrangements, it may become increasingly difficult for the monetary authorities to influence the fiscus, because there will be three houses making claims on the Treasury.

Even though there will be only one Treasury equipped with taxing and borrowing powers, it will come under pressure to meet the (inflationary) demands of the three sectional interests. And it must be

No place to hide on nuclear D-Day

Report: MICHAEL STENT

IMAGINE a pile of TNT stretching from Johannesburg to Durban, 200m wide and about 100m high. Then consider that one cubic metre of that pile would ruin a building the size of the Carlton Centre.

That gives some idea of the destructive potential of the world's arsenal of nuclear weapons.

Or, if that is too difficult, consider that one modern nuclear weapon can have an explosive power greater than that of all explosives used in all wars since the invention of gunpowder.

The mere numbers involved in considering thermonuclear weapons are virtually beyond conception. What would happen to people in the event of even the most limited form of nuclear warfare is equally difficult to imagine.

The extent of death, injury and destruction in nuclear warfare, and the ability of medical services to cope with them, are the subjects of a recently released report of a committee established by the World Health Organisation.

It makes chilling reading. Compiled by a committee of scientists and doctors from Sweden, Britain, Russia, Austria, the Netherlands, the United States, Nigeria, Japan, France and Venezeula, the report focuses on three possible types of nuclear warfare:

- The explosion of a one megaton bomb (the equivalent of one million tons of TNT) over a large city — they use London as an example. More than 1,5-million people would die and as many would be injured;
- "Limited" nuclear warfare with smaller tactical nuclear weapons totalling 20Mt, aimed at military targets in a relatively densely populated area. About nine million people would be killed or seriously injured, of whom more than eight million would be civilians;
- An all-out nuclear war using at least half the estimated stockpile of 20 000Mt (the equivalent of 20 000-million tons, or about 14 000-million cubic metres of TNT). More than 1 000-million people would be killed and another 1 000-million injured.

The committee concedes much of its work is guesswork. The primitive atomic bombs exploded by the United States over Hiroshima and Nagasaki were tiny in comparison to modern nuclear weapons — only 12,5 kilotons, the equivalent of 12 500 tons of TNT.

There has been no natural disaster in which anywhere near a million people have died and as many have been injured — and all that in the space of minutes.

But then who would quibble if the report is a couple of hundred thousand people out either way.

The basic problem in making predictions about nuclear warfare is that it would not simply be something like the Second World War but on a larger scale.

In sheer quantity of explosive power there has, of course, been a huge increase. The nuclear arsenal has about 5 000 times the power of all the explosives used in the Second World War.

And while the huge "blockbuster" bombs of the Second World War contained 10 tons of TNT, a modern nuclear weapon of the same weight could have an explosive power equivalent to 20-million tons of TNT. With modern rocketry, this could be delivered anywhere in the world.

Wars would take days and not years. The measure of victory or defeat would be a contorted exercise in logic.

But the major difference between nuclear and conventional weapons is that the former adds another killer — radiation.

Conventional and nuclear weapons both kill and maim by blast and heat — and again there is a vast difference in the scale of destruction.

Almost half the total energy released by a nuclear explosion is in the form of a massive blast wave, at its most intense at the centre of the explosion and gradually diminishing until it is dissipated perhaps tens of kilometres from the blast.

With a 1Mt bomb exploded at a height of 2 400m, the wind speed 1,3km from the centre of explosion at ground level would be 750km/h, levelling reinforced concrete structures.

At 9,5km from the blast centre the wind speed would be 150km/h — a wind of 120km/h is classified as a hurricane — strong enough to kill people in the open and severely damaging houses.

Even 18km away, the wind speed would be 60km/h, causing damage to structures. People could be killed or seriously injured by collapsing buildings or flying glass and other debris.

The thermal wave, or heat flash, contains about a third of the energy released by a nuclear bomb. It is a result of the extremely high temperature generated at the moment of the explosion and lasts from between a second and 10 seconds.

It travels at the speed of light and again dissipates as it travels away from the centre of the blast. The effect of the immense heat is to vaporise everything within a certain distance (in Hiroshima nothing remained of some people but their outlines on stone benches) melt solids at greater distances, and start fires still further away.

These fires would start a fire storm, similar to those of Dresden and Hiroshima during the Second World War. Within the area of the fire storm temperatures would reach such heights that even people in secure shelters could be cremated or die from lack of oxygen.

To these "traditional" methods of warfare is added radiation, both an initial burst of neutrons and gamma-rays in the first minute, and local and global radioactive fallout over a longer period.

With the exception of neutron bombs, initial radiation would not contribute much to casualties. Radioactive fallout, however, continues killing after the actual detonation, can affect people far from the explosion, is a major obstacle to effective rescue operations and medical care, and can harm future generations long after a war ended.

Fallout is caused by radioactive particles falling back to earth after the explosion. Locally this consists of irradiated dust and debris, globally of radioactive particles injected into the upper atmosphere which fall over great areas weeks or months after the blast.

The proportion of people killed or injured by each of blast, heat and radiation depends on factors such as the height of the explosion and atmospheric conditions.

But the result, whatever the permutations, is much the same. A 1Mt bomb detonated over London at low altitude would kill 1 800 000 and injure 1 700 000; at high altitude would kill 1 600 000 and injure 1 600 000.

The management of casualties on this scale could only be haphazard. Switzerland boasts that most of its population would be housed in effective shelters in the event of nuclear war. It is the exception.

At best most countries have provided only for the government, military, and civil service elite. At worst, like Johannesburg, no provision for nuclear warfare has been made.

Cynically, Johannesburg might have made the correct decision. A study of a 1Mt blast over Boston, which has a similar population to the Johannesburg metropolitan area, shows half the people would be killed or injured initially.

If half of Boston's 5 200 doctors survived the blast, they would have to treat 700 000 injured in the 2 000 remaining beds. They would have no infrastructure to support them — blood supplies, water, electricity, communications, sanitation, transport, drug manufacture all would be more or less seriously disrupted or destroyed.

What medical care could be given would be ad hoc; thousands with injuries that could be treated, even relatively minor injuries in different circumstances, would die.

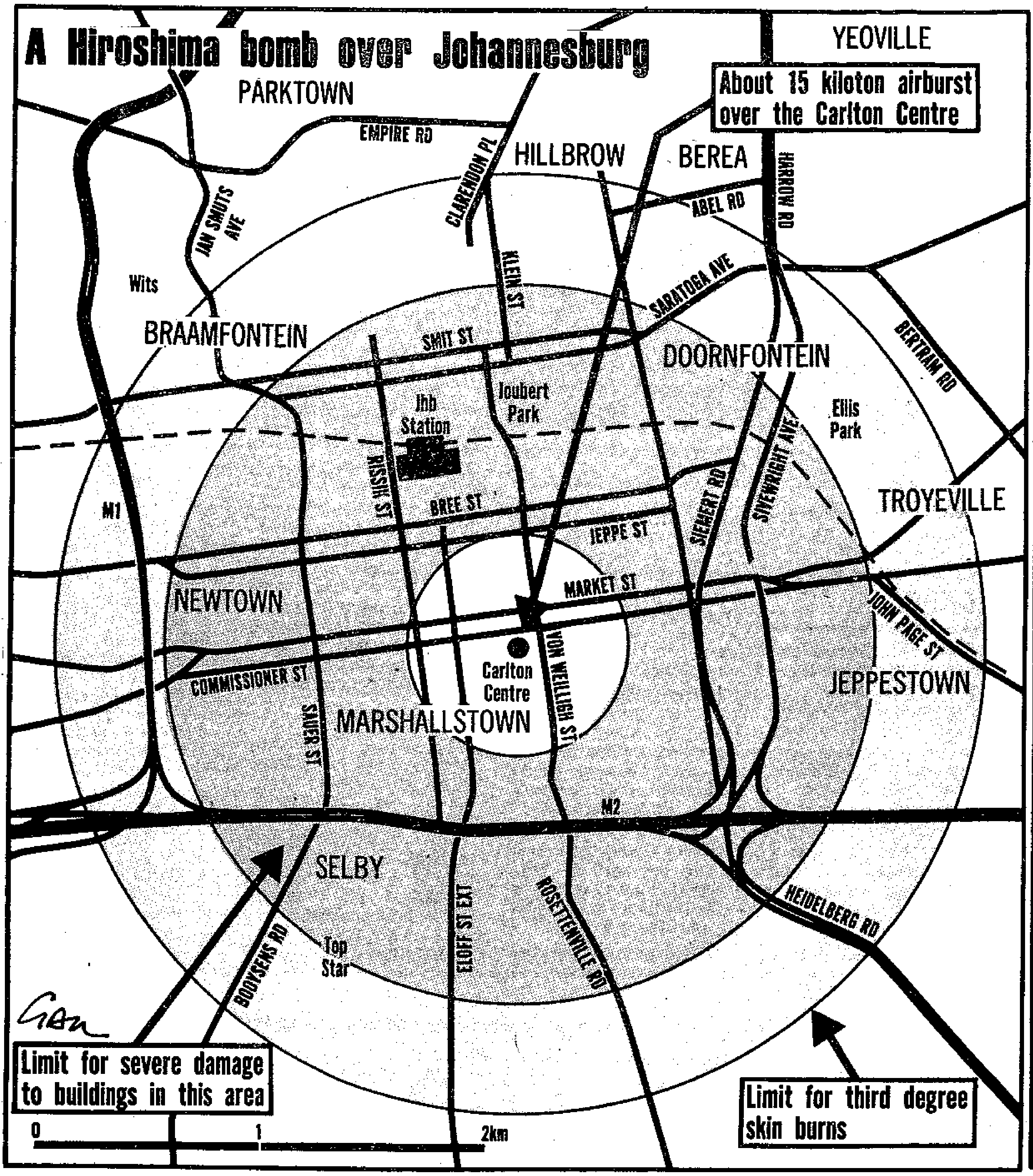
The report says that even if the rest of the United States was intact, its medical resources would be unable to deal adequately with disaster on this scale.

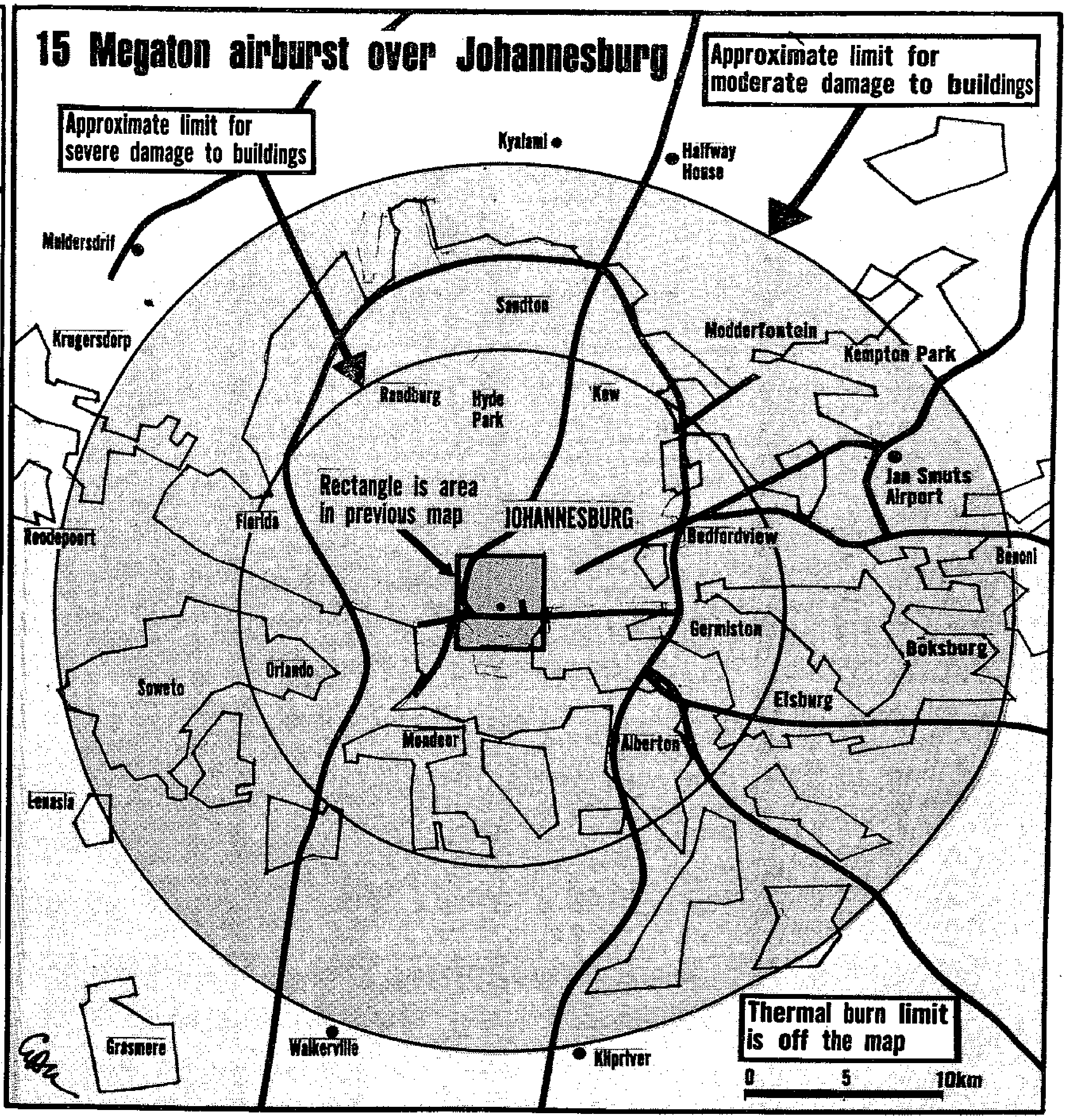
Perhaps the WHO spent a good deal of money answering a rather stupid question — like asking a doctor how to treat a person who has been decapitated in a car crash.

But it does reach a predictable conclusion:

"Therefore the only approach to the treatment of the health effects of nuclear explosions is primary prevention of such explosions, that is, the prevention of atomic war."

In other words, it's another way of paraphrasing the song that started back in the sixties about banning the bomb.





Graphics: GAIL IRWIN

Power: Mayor's warning

Cape Times
18/5/84

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By EVELYN VOSLOO

THE EXTENT of the storm damage to the City's power supply system is much worse than was first believed and some areas will be without electricity well into the weekend, and possibly beyond.

This was said yesterday by the Mayor, Mr Sol Kreiner, who has spent the past two days travelling around the worst-hit areas.

Mr Kreiner said that if the present weather held, 80 percent of the City's power should be restored by late tonight, and possibly 98 percent by Sunday.

Weary repair crews have worked nearly round the clock since Tuesday night. But difficult and even dangerous conditions caused by strong winds and rain complicated their tasks.

Affluent

The City Electrical Engineer, Mr Dennis Palser, said his men were working to capacity. Crews had been out until 3am on Wednesday, and until midnight last night.

Allegations that the council was giving priority to affluent areas such as Newlands and Claremont and ignoring the Cape Flats were denied by the council's public relations officer, Mr Kendal Jarvis.

"The only considerations are electrical engineering priorities," he said.

Consumers whose supplies are not restored by noon today should telephone their district officers in case they have been overlooked, Mr Palser said last night.

The six numbers to be called — one each for Cape Town, Mowbray, Vanguard, Mitchells Plain, Claremont and Muizenberg — are listed in the directory.

Areas still out included Klein Constantia, Langkloof towards Hout Bay, Brommersvlei Road in Constantia, the Hohenort area, Draper Street in Claremont, and Hiddingh Estate and Cannon Street in Newlands, he said.

Bitter cold

● Electricity supplies in the Escom areas outside Cape Town improved considerably yesterday, although repair teams were troubled by rain, hail, bitterly cold wind and flooded roads, an Escom spokesman said last night.

The Philadelphia, Klipheuwel and Ongegund areas were largely back on line, but Bottelary Road, Wellington, and farming schemes on the far side of the Overberg were still without electricity, he said.

"It is possible that some outlying areas will be without electricity until next week. I appeal to those in Escom areas who have electricity to be sparing in its use," he said.

● Boland towns assess damage
● Plea to help squatters
● Fishing boat, 8 yachts sink
● Gas supplies low
● Pictures
PAGE 13

More rain predicted

Staff Reporter

MORE rain is predicted this morning but skies are expected to clear later today.

A weather bureau spokesman said the record low-pressure system had moved south-eastward and by tomorrow conditions would have improved further. However, winds would remain moderate to fresh south-westerly.

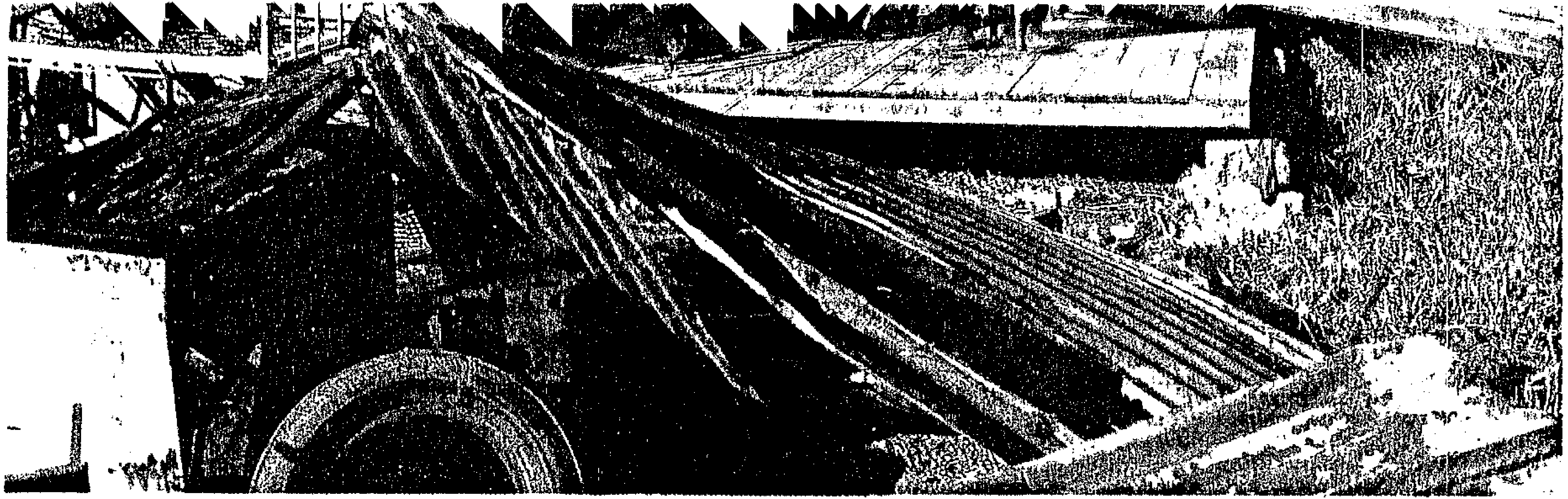
Snow fell at Sutherland at noon yesterday.

The highest rainfall recorded up until 8am yesterday was at D F Malan Airport (57mm).

All Peninsula roads, with the exception of Tafelberg Road, are now open to traffic, and trains are again running on schedule.

An Automobile Association spokesman warned motorists that gravel roads in many areas were impassable.

● Forecast, page 26



Mr Carel Williams, 73, on the stoep of what used to be his home in Suurbraak. The wooden house was wrecked when a roof from a house about 50 metres away was ripped off by Tuesday's violent storm and crashed into Mr Williams' home. No one was injured. Picture: Dan Bosman

CAPE Times 18/5/84 85

Historic village devastated

From COLIN HOWELL

LADISMITH. — Desperate pleas for help went out yesterday from the devastated village of Suurbraak, near Swellendam, where about 80 families were left homeless in the worst storm here in living memory on Tuesday night.

As army units moved into the historic village to erect tents yesterday, the chairman of the Suurbraak Management Board, Mr S Saville, sent a telegram to the Department of the Interior in Cape Town. It read: "Help urgent. Please try to have area declared a disaster area."

Mr Saville had good reason to send that message — nearly half of the village's buildings are damaged, some beyond repair, and about 500 people are homeless.

Further north, the storm caused damage estimated at millions of rands to houses, sheds and schools in the Ladismith district.

In Ladismith itself, a family had a narrow escape when the gables and roof of their home collapsed inward, sending hundreds of bricks crashing into their bedroom.

Mr Frans Scholtz told how his daughter Suzette, 9, had crawled under her bed seconds before rubble smashed into her room.

"She was screaming as we dug her out," Mr Scholtz said. "My mother-in-law, Mrs Aletta Hazel was hit by falling bricks. She is being treated for minor injuries."

A police spokesman in the town said locals estimated damage caused to structures in the district at R4-million.

But while the destruction at Suurbraak appears less spectacular, it has brought misery to nearly half the inhabitants.

Driving wind and rain buffeted the village from about 9pm on Tuesday. Roofs were ripped off about 80 mudbrick houses and flimsier structures were demolished.

Residents told how sheets of corrugated iron flew hundreds of metres through the air in the gale.

Miraculously, no-one was killed. Only two people received slight injuries.

Mr Johannes Sylvester was admitted to the Swellendam Hospital after a brick gable fell on him and Lisa Anne Louw, 3, received slight cuts when her roof collapsed.

Lisa's mother, Mrs Veronica Louw, told how she had helped dig into rubble to find her buried child.

"There was a sound like thunder outside and dust was everywhere. The roof started falling in on us. I managed to jump out of a window. We found Lisa about half an hour later — I was so relieved, I could only cry."

Mr Jacobus Philander, 72, who had "not left Suurbraak since the day I was born" described the storm as "the worst thing that has ever happened to this community."

A Swellendam businessman, Mr Eric Koch, said about 300 trees had been uprooted or snapped in half in Swellendam.

Army units from Western Province Command arrived at the devastated village yesterday afternoon and began erecting tents to shelter the homeless while Red Cross personnel and local community groups distributed food.

Snow on the nearby Langeberg Mountains kept temperatures low, but the rain had stopped and the air of gloom lifted.

Suurbraak, founded in 1812 by the London Missionary Society, is a ghost of the picturesque community it was.

Rubble lies everywhere, hundreds of metres of fencing have collapsed and only the sturdiest houses have escaped unscathed.

Father Noel Kow, an Anglican priest, yesterday highlighted some of the problems facing the homeless.

"The repairs are an enormous burden for these people, many of whom are old. There is no industry in the area and most of the people are very poor. Without help, they will be unable to rebuild their dwellings."

● The Department of Internal Affairs has started an investigation into whether Suurbraak should be declared a disaster area.

An official from the department said yesterday investigators had been sent to the area to establish the degree of hardship in the village and estimate the damage.

He said a decision would, at the soonest, only be taken some time today.

r had broken the " of the problem by yesterday afternoon. Men had again ked right through night — the fourth it in a row that this been done.

Praise

r Kreiner was lavish is praise of the work ws yesterday, as e many callers to the e Times and the City ncil. Mr Kreiner d a total of 250 men d worked in shifts ce Tuesday night to air the storm dame in difficult and etimes even dangers conditions.

Ir Palser said anyone l without electricity s morning should ephone one of the ergency electricity mbers listed in their ephone directories.

Isolated faults

A spokesman for Esm said yesterday that ost of the damage to power supply system d been repaired.

Mopping up was being one in the De Hoek d Citrusdal areas, but ost of the power had en restored.

There are still isolatd faults in the Kraaiontien, Bottelary, ulder's Vlei and Kli-

300 poles

According to Mr O P Meyer, postmaster at Ladismith, at least 300 telephone poles were uprooted or snapped in Tuesday night's gale. The road to Laingsburg was temporarily blocked by about 30 poles on Wednesday morning.

Communication with the town was restored on Thursday but only four lines were back in use before yesterday afternoon.

Yesterday, snow still covered the highest peaks in the Boland and heavy rains fell in the vicinity of Ceres, melting the previous day's snowfall.

● No decision had yet been made to declare the town of Suurbraak a disaster area, a spokesman for the Department of Internal Affairs announced yesterday.

He said the department had arranged for the Defence Force to provide tents and groundsheets to provide temporary housing for the homeless.

The SA Red Cross Society had provided mobile kitchens from where soup and hot meals were being dispensed.

Cpt Times 19/5/84

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New Koeberg crisis booklet

Environment Reporter

A NEW, more comprehensive information brochure outlining emergency procedures in the event of an accident at Koeberg has been produced for residents living within a 20km radius of the nuclear power station.

The document, produced jointly by Escom and the Cape Divisional Council, gives more frank and detailed information than the previous "Living with Nuclear Energy" pamphlet.

Produced in calendar form with the intention that it be hung near the telephone, the cover sports a gay picture of a family jogging along Blouberg beach, and gives a comprehensive list of emergency numbers.

The first section contains general information on how Koeberg operates, the type of fuel used and information on radiation and how it could affect people.

The second section specifies the three different levels of emergency situations, describes the emergency plan and gives a map outlining the various areas that would be affected in an emergency.

It stresses that the public would be involved only in the event of a general emergency — the third level.

The third section gives details of what people should do in the event of a general emergency, how they would be informed and where they should go.

A fourth section gives another detailed map in which 16 different zones have been indentified. A table below the map gives detailed directions on where to go in the event of an evacuation and which route to take.

The brochure will be posted to all residents within a 20km radius of Koeberg.

Navy anker gets new job

By ROBIN PARKER

HE 19 000-ton SA Navy leet replenishment vesel SAS Tafelberg is earing the end of a multi-million rand refit which will broaden her application to include ong-range search-and-escue operations and a imited anti-submarine warfare capability.

The 26-year-old forner Danish tanker was taken in hand by the Simon's Town Naval dockyard in June last year to undergo her conversion to an armed helicopter carrier while maintaining her fleet replenishment role.

Her commander, Captain Chris Moon, said the vessel, the largest in the SA Navy fleet, is due to begin sea trials within six weeks before being pressed into service as a stopgap measure to increase the SADF's search-and-rescue capability in the face of the retirement of

the facts

THE third event in the Western Province rally championship, the Tolken Toyota Cape Double 12 Rally, is not being run this weekend as stated in the Cape Times yesterday.

The report should have read "next Friday and Saturday". The event will start at 8pm on Friday, May 23, at Tolken Toyota in Kuils River and will be run mainly in the Malmesbury and Mooreesburg areas with the finish back at Kuils River on Saturday morning, May 24.

More care for nature

Environment Reporter

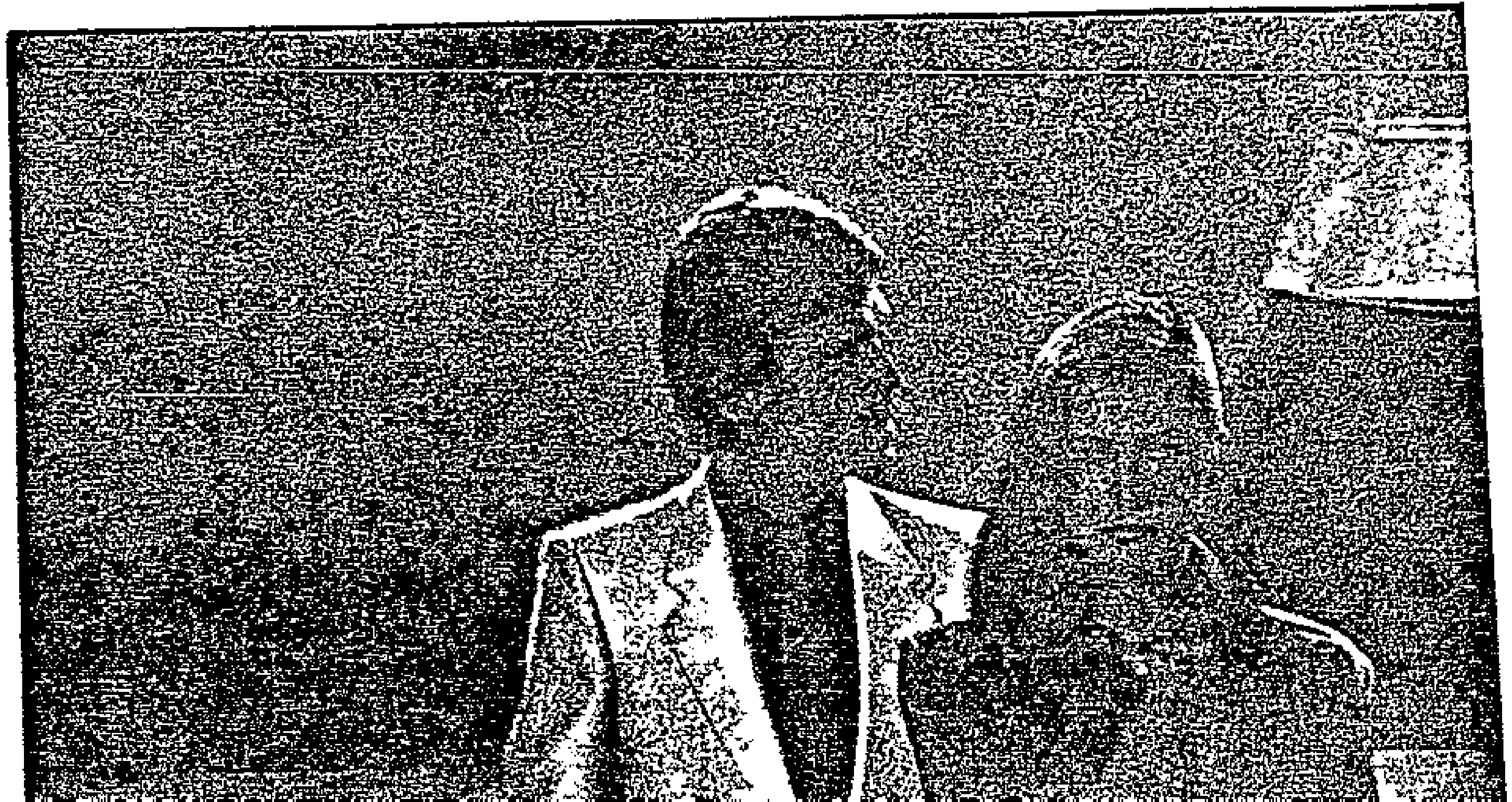
PUBLIC interest and concern about environmental matters had dramatically increased during the past year, the director of the Cape Department of Nature and Environmental Conservation said in his annual report, released on Thursday.

Mr W O Morsbach said environmental pollution in all its forms was of particular concern.

Mr Morsbach said Armscor's announcement of plans to establish a missile testing range in the De Hoop area between Arniston and Cape Infanta had given rise to the strongest public reaction ever.

He said the vehement reaction was partly the result of "genuine concern that a unique national heritage might be spoilt, and partly an emotional overreaction on the part of uninformed people and even subversive elements."

He said the timely appointment of the Hey Committee by the Minister of Environment Affairs and Fisheries, Mr S A S Hayward, had stemmed the reaction.



Argus 21/5/84 (38)

THE ARGUS CRIME FILE

Gangs still a scourge

Crime Reporter

ENDING gang activity on the Cape Flats remains a problem for the police, who are worried about increasing violence.

Although police disclosed that there was a marked decrease in gang activities over the past year, rapid population growth had led to an increase in serious crime — especially in Mitchell's Plain, said Brigadier Dries van der Heever, divisional criminal investigation officer for the Western Cape.

"It is a headache," he said.

"A lot has been said about the high crime rate in the Peninsula but there is no simple overnight solution.

High rate

"We cannot single out an underlying cause for the high rate of violent crime. We can talk about having more policemen and better housing and lighting. These will all help in this regard, but there is still a never-ending list of things that could be done to improve the socio-economic level of the community."

People with the most to say about the high crime rate were conspicuously absent when it came to finding a solution to the problem, Brigadier van der Heever said, referring to recent criticism levelled at the police force by the Cape Town Chamber of Commerce.

"This is not only a police problem. The community must also get involved."

Robberies

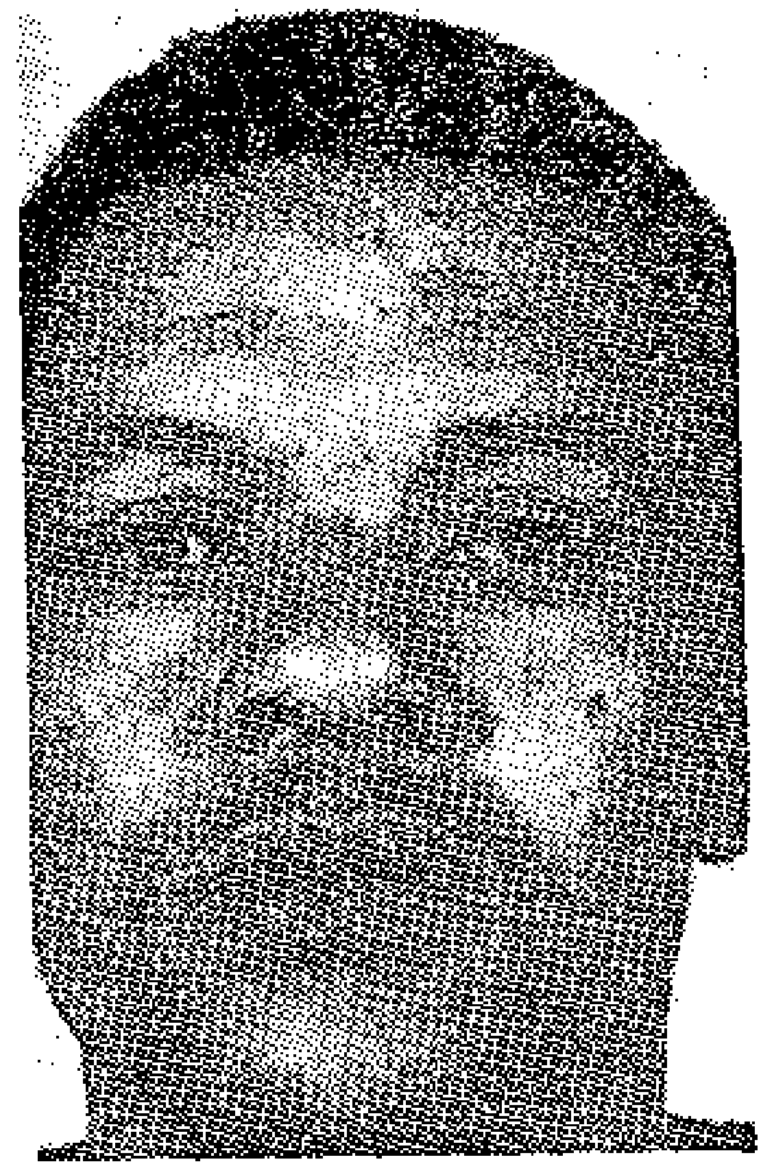
Although violent crime increased in Mitchell's Plain, statistics indicate a 10,5 percent decrease in violent crime in the whole of the Peninsula in the past year and a 34 percent decrease in armed robberies.

"We still say that even one murder is too many," said Brigadier van der Heever. "We cannot expect to live in a crime-free society, but we can curtail the activities of those most responsible."

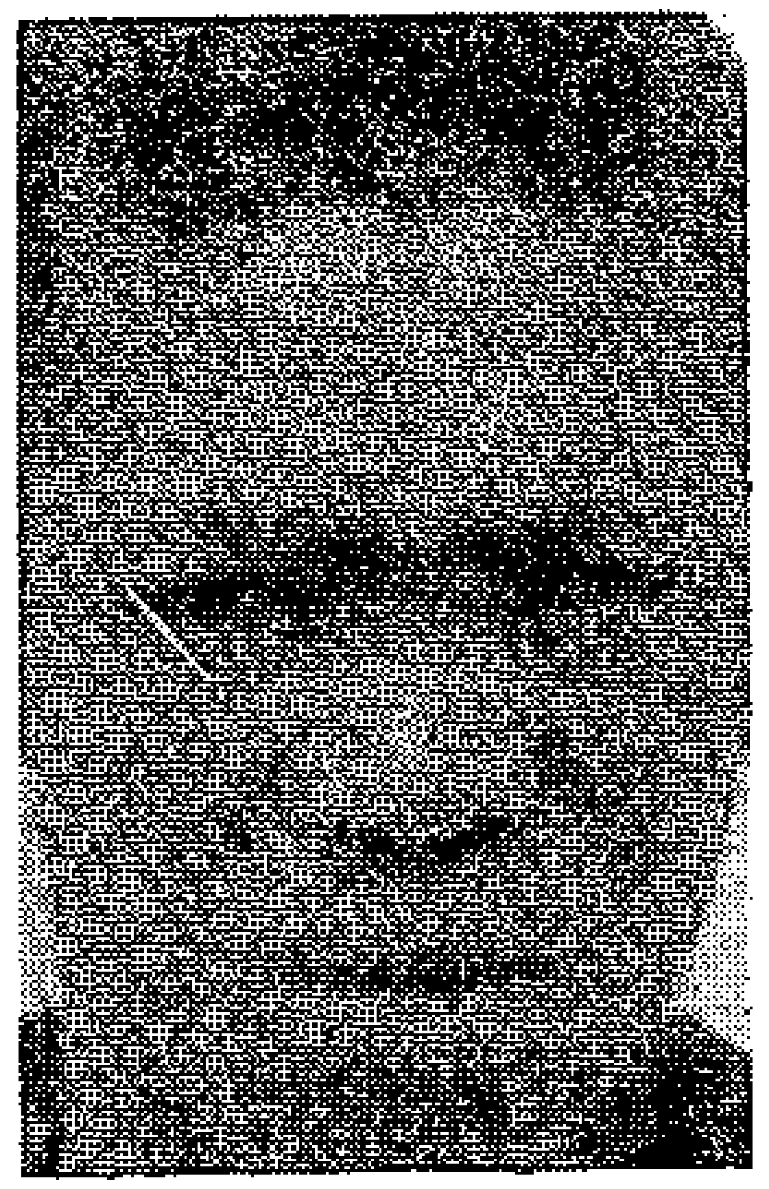
- ● In 1983, 4 400 motor vehicles were stolen — 3 531 of them were recovered and 728 people were arrested in connection with the thefts.
- ● In the past six months the narcotics unit has taken possession of Mandrax tablets worth R438 500 and dagga worth R1,5-million.

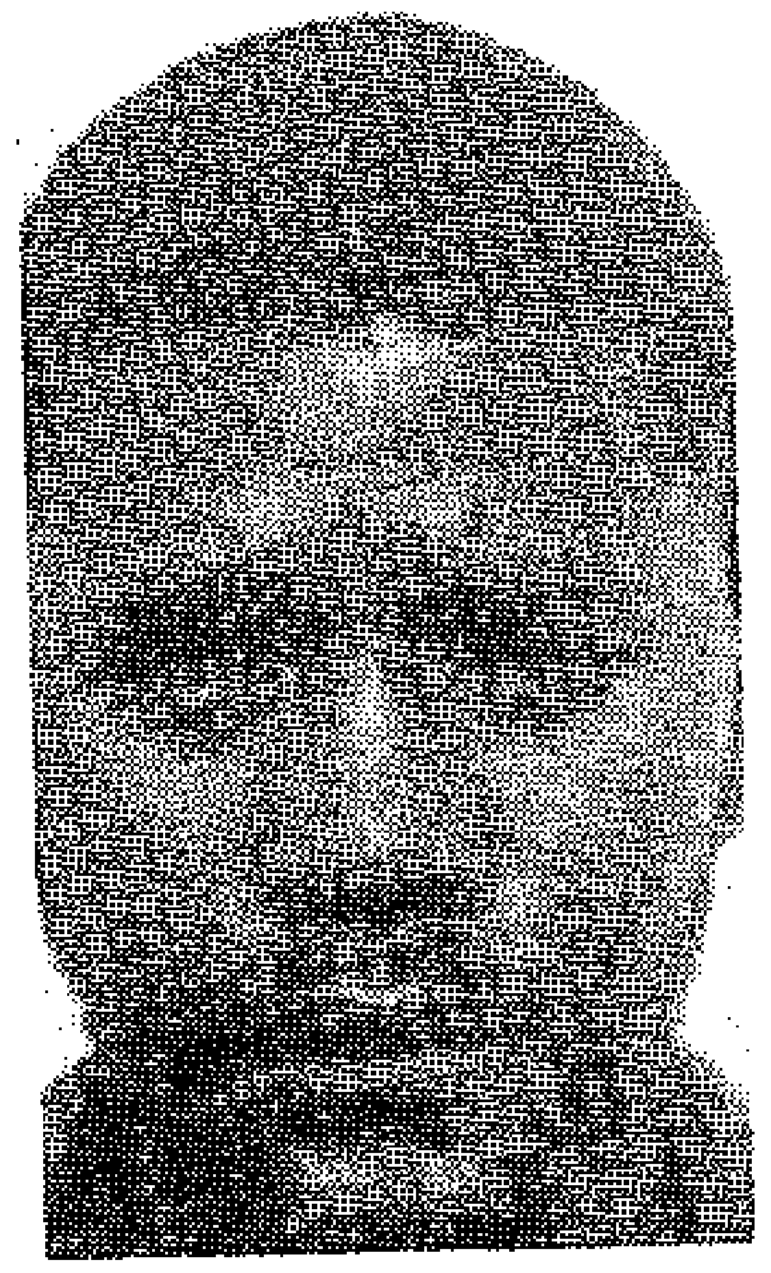

Mr Pieter Smuts


Mr Jan du Toit


Mr Johannes Hilliard

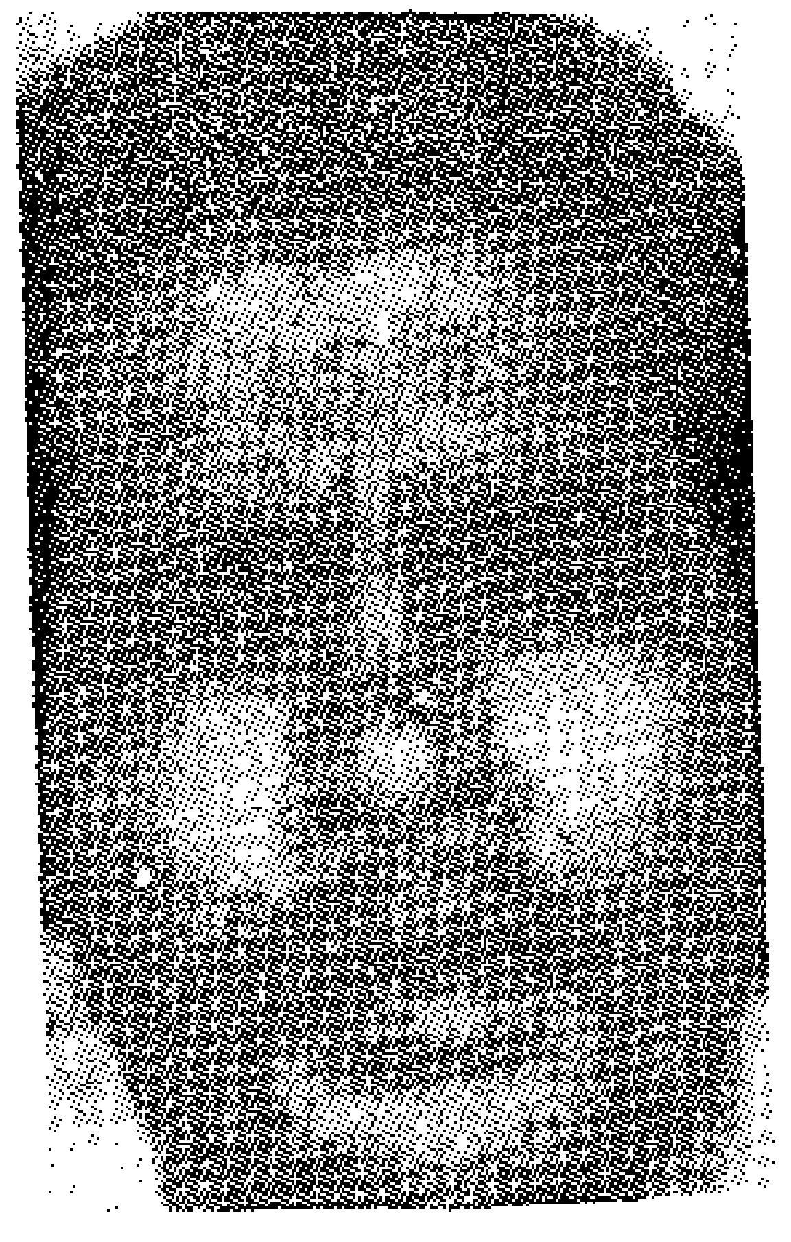

Mr Hilgard Smith

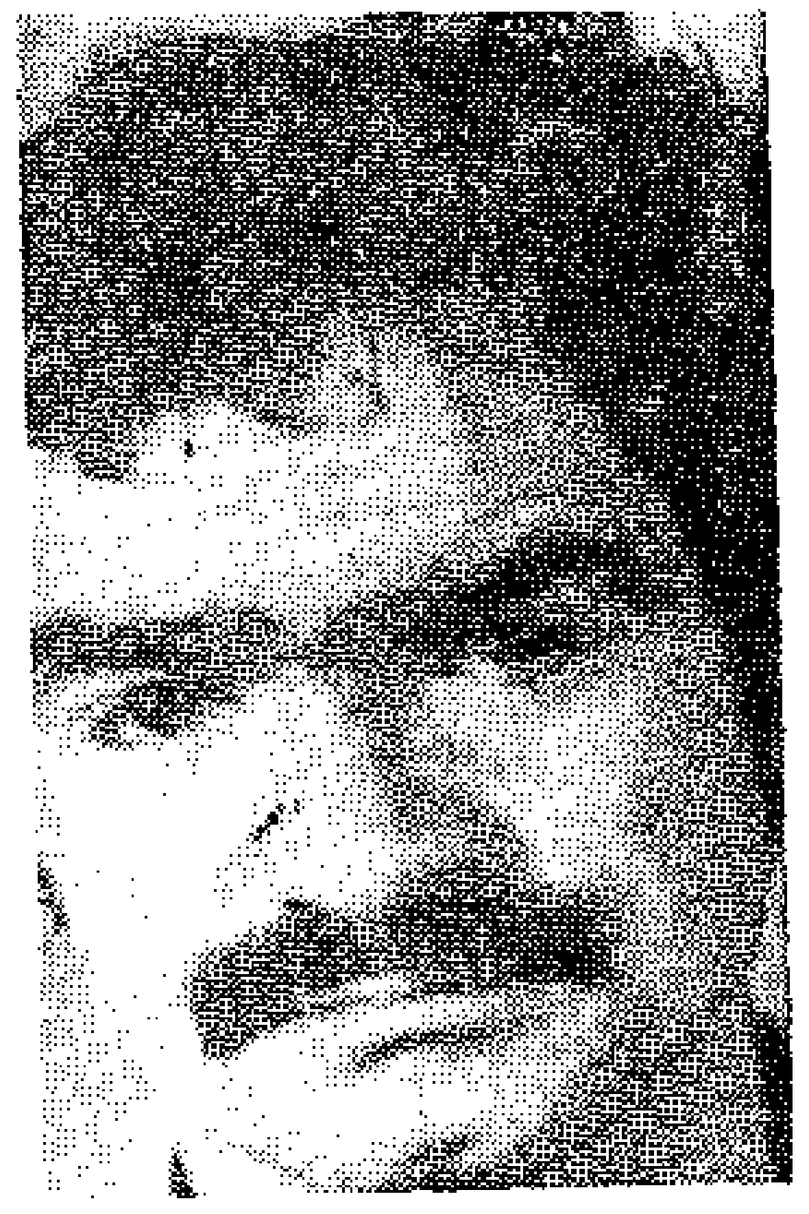

Mr Alfred Arries

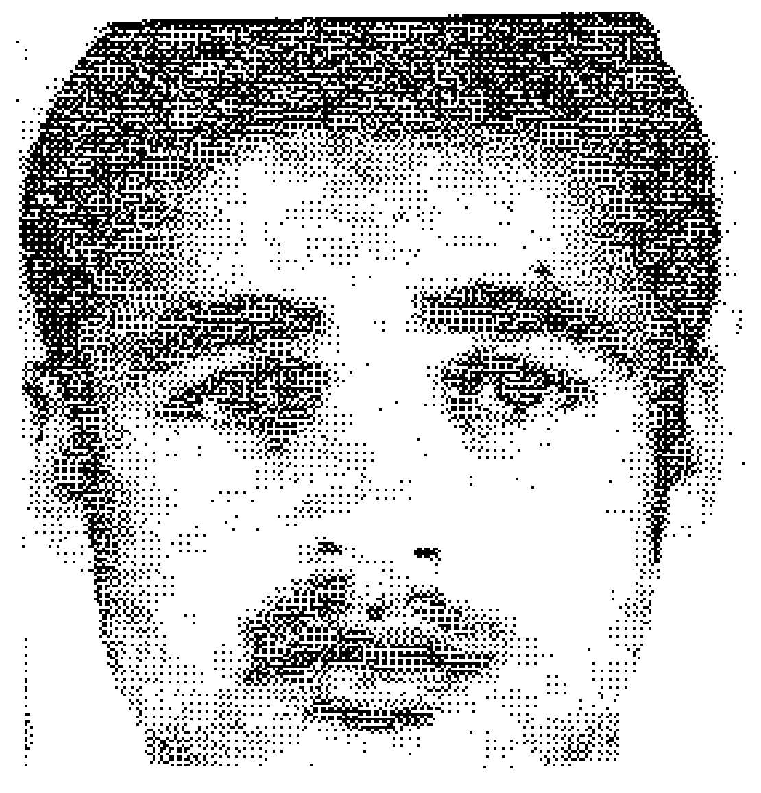

Mr Lucas Mapeyi


Mr Steven Green


Mr Charles Abrahams


Mr Peter Williams


Mr Ismail Khan


Mr Richard Wilmot is being sought in connection with rape.


Mr Franklin Ibrahim

Rewards for gem information

Crime Reporter

ILLEGAL possession of diamonds is on the increase and information leading to the arrest and conviction of people dealing in uncut stones is worth substantial rewards.

"In terms of the Financial Regulations Act, people supplying information on illegal dealers may claim 33 percent of the value of diamonds recovered," said Captain Gerhard van Rooyen, police liaison officer.

He quoted a Parow magistrate, Mr J C van Graan, as saying recently that traffic in illegal stones seriously crippled the economy of the country.

"People supplying the police with information which could lead to the prosecution of illegal diamond dealers are never identified," said Captain van Rooyen.

Anyone with information should contact Captain J D Pool, ☎ 46 007 or ☎ 58 3239 after hours.

Police round-up

Crime Reporter

THE following people could assist the police in their investigations. Any person knowing the whereabouts of the persons concerned is asked to call the telephone numbers mentioned.

Mr Jan Jakob Stefaans du Toit and Mr Pieter Adriaan Smuts could assist Pinelands police in connection with a case of theft.

The photographs were taken a few years ago and both may have longer hair and beards. They are usually together and drive a dark metallic blue Ford Escort, registration FYF 213 T.

Any person seeing them is asked to contact Detective-Warrant Officer J van der Merwe of the Pinelands police, ☎ 53 2826.

Mr Johannes Hilliard may be able to assist police with their investigations into housebreakings in the Pinelands area recently.

Detective-Warrant Officer J van der Merwe, ☎ 53 2826, is the policeman to contact.

On May 14 an employee of a company disappeared on his way to a bank with R3 400 in cash and cheques worth R5 900.

Mr Hilgard William Smith, who drives a white Volkswagen Golf, registration CA 462275, could help Pinelands police solve the mystery.

Anyone seeing him should contact Detective-Warrant Officer J van der Merwe, ☎ 53 2826.

The picture of Mr Smith is eight years old and he has longer hair.

A warrant has been issued for the arrest of Mr Alfred Arries, who failed to appear in court.

Any one recognising him is asked to contact Detective-Sergeant F Symans of the Pinelands police, ☎ 53 2826.

Mr Lucas Mapeyi, alias Phumzile Gomtyi, failed to appear in court after being charged with housebreaking and theft. A warrant has been issued for his arrest.

Any person seeing him is asked to contact Detective-Sergeant J Heyliger, ☎ 71 7150.

A warrant has been issued for the arrest of Mr Steven Green, who was charged with housebreaking and theft. He failed to appear in court.

Contact Detective-Constable A Kotze of the Wynberg police ☎ 71 7150 if you know of Mr Green's whereabouts.

Sewing machines worth R3 374 have been stolen from a Wynberg high school and police would like to contact Mr Peter Williams and Mr Charles Abrahams.

Contact Detective-Sergeant J Rademan, ☎ 71 150 if you have any information.

Mr Ismail Khan, 35, could help police in connection with the theft of R1 775.

Mr Khan has the words "Skollie Boy" and "Pirate" tattooed on his left arm.

Contact Warrant Officer Vivier at ☎ 45 7362.

Mr Franklin Ibrahim was arrested in December 1982 and failed to appear in court after being granted bail. A warrant has been issued for his arrest.

His last address was 1 George Street, Athlone.

Contact Detective-Warrant Officer Matroosie at ☎ 45 3003.

Mugging fails

Argus Correspondent

JOHANNESBURG. — An alleged mugger who attacked an 88-year-old woman was grabbed as he made off with the victim's handbag.

Mrs N Jorgensen of Malvern was walking in Jeppe Street when the mugger grabbed her handbag. Mr L Delport of De Deur tackled the robber as he ran off. Mr Delport retrieved Mrs Jorgensen's handbag and returned it to her.

She was not injured and a man will appear in court soon in connectior with the attack.

RDM 21/5/84

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More Cape nuclear power

CAPE TOWN. — The Koeberg nuclear power station near Cape Town reached another milestone on Saturday when its output was boosted to 690 megawatts, making it the single most powerful generator in Africa.

Escom spokesman Mr Andre van Heerden said the Atomic Energy Corporation (AEC) gave the green light on Saturday for the Koeberg output to be increased by 20%, to 70% of its 921-megawatt capacity, reports Sapa.

The Mail Correspondent in Cape Town reports that as the announcement came, a new, more comprehensive information brochure outlining emergency procedures in the event of an accident at Koeberg was published for residents living within a 20km radius.

The document, produced jointly by Escom and the Cape Divisional Council, gives more frank and detailed information than the previous "Living with Nuclear Energy" pamplet.

Mr Van Heerden said Escom would seek AEC permission to run the generator at 90% when further tests were completed. It should be ready to go to full power by July. The generator's twin was expected to go on stream in the third quarter of next year.

When both generators of the Koeberg station produce at full capacity their combined output, 1842 megawatt, will amount to 8% of the national electric power demand.

The new Escom information brochure is produced in "calendar" form with the intention that it be hung near the telephone.

The first section contains general information on how Koeberg operates, the type of fuel used and information on radiation and how it could affect people.

The second section specifies the three different levels of emergency situations, describes the emergency plan and gives a map outlining the various areas that would be affected in an emergency situation.

It stresses that only on the third emergency level — in the event of a general emergency — would the public be involved.

The third section gives details of what people should do in the event of a general emergency, how they will be informed, where they should go and what routes to take.

It also gives lists of instructions if told to stay at home, work or school and in the event of being told to evacuate these places.

A fourth section gives another detailed map in which 16 different zones have been indentified. A table below the map gives detailed directions on where to go in the event of an evacuation.

The brochure will be posted directly to all residents within a 20km radius of Koeberg. Posters advising people that the brochures are available will also be put up.

Soweto soon all lit-up

ARGUS 23/5/84

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Political Staff

ALL Soweto residents will have electricity available from August, Dr Piet Koornhof, Minister of Co-operation and Development, said today.

At a Press conference he said developments there should enable the Government to turn Soweto into a modern city in the next five years.

The population, which numerous surveys have pegged at one million, will be able to rise to 1,5 million in the next few years.

"Excellent"

Dr Koornhof said Soweto was a city "which enjoyed international attention".

There had been "excellent progress" with the upgrading of Soweto, especially with electrification.

The contractors had connected 91 800 of the 99 000 houses. About 40 000 inhabitants were using electricity and deposits were being paid for connections at a rate of 6 000 a month.

R163 million

All 955 sub-stations will be switched on by the end of June and completion of the street lighting and control stations will be done early next year.

Dr Koornhof said a project to upgrade water, sewerage, roads and stormwater services in Greater Soweto had started early in 1980 and a loan of R163-million had been approved for this.

Progress until March this year included: 220km of roads and streets newly constructed, reconstructed or improved and 90km of stormwater drainage, 43km of primary water pipelines, 255km of secondary water pipelines and 19 000 new water meters installed.

When the white elephant is finally tamed . . .

ARGUS 25/5/84 ~~28~~ 55

By BRENDAN NICHOLSON, Argus Africa News Service

CAHORA BASSA. — It began as Southern Africa's "project of the century", a technological "miracle" and a "monument to regional co-operation".

But soon after the R435-million Cahora Bassa power scheme was completed in 1975 President Samora Machel lamented: "We must tame this white elephant."

After nearly a decade plagued by sabotage, the sixth largest dam in the world may have been "tamed" finally by the Nkomati Accord.

It stands in northern Mozambique, its equipment in perfect condition — but its turbines producing only 0,5 percent of the 2 075 megawatts of power they are capable of.

Two thousand megawatts would be scorching down 1 400km of transmission lines to the Traansvaal if it were not for the destruction wrought on the pylons by members of the Mozambique National Resistance (MNR).

For three years after the project reached its full generating capacity in 1978 there were one or two sabotage incidents a year. But by October 1983 pylons were being blown up so regularly and the security situation in rural Mozambique was so bad that repairs became impossible.

Mozambique says that at Nkomati Pretoria agreed to stop supporting the MNR, but officials in Maputo estimate that it could take two years to mop up the remaining 8 000 or so "bandidos armadas" in the bush.

Ironically, because the lightly equipped and thinly stretched Mozambican forces cannot guarantee the security of the lines, South African helicopters and crews are expected in Tete before the end of the month to help with patrols.

The dam is still largely "owned" by the Portugese company Hidroelectrica de Cahora Bassa, which has been losing between R40-million and R50-million a year while power has not been reaching its only external customer — South Africa.

However, under the agreement reached recently by South Africa, Portugal and Mozambique, Maputo will receive 10 percent of the dam's profits once the lines are secured and has undertaken to protect them.

The company hopes to recover its investment in the dam withing 19 years and then it will be handed over to the Mozambican Government.

Already major installations such as the huge Matambo sub-station, 15km from Tete City, are heavily guarded by Mozambican troops backed by World War 2 vintage Russian T-34 tanks.

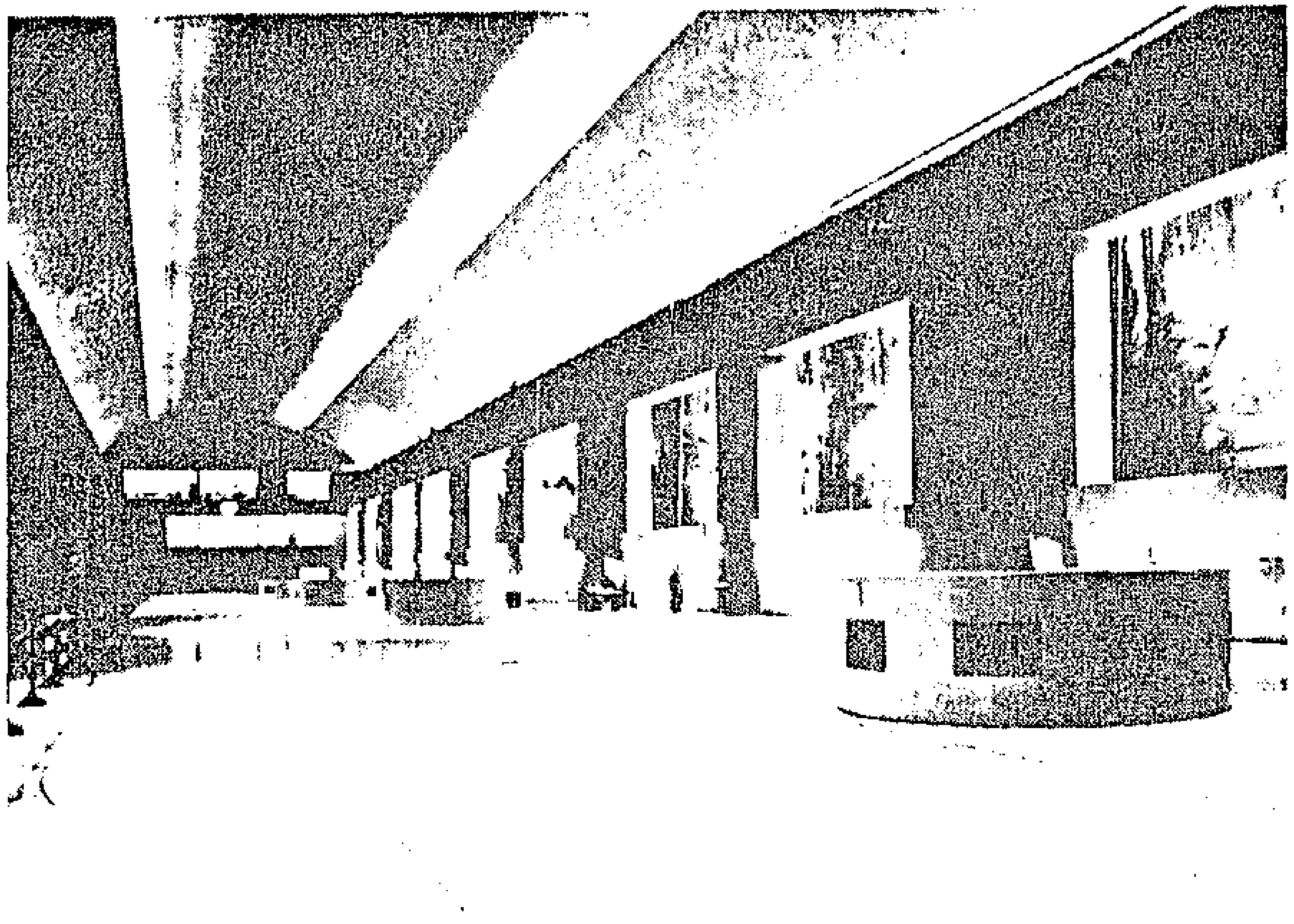
An end to political and military confrontation in the region could produce in Cahora Bassa the economic miracle its planners hoped for.

The dam can produce enough electricity to satisfy up to 9,5 percent of South Africa's requirements or the total combined needs of Mozambique, Malawi, Tanzania, Swaziland, Botswana, Angola, Zimbabwe, Zaire and Kenya.

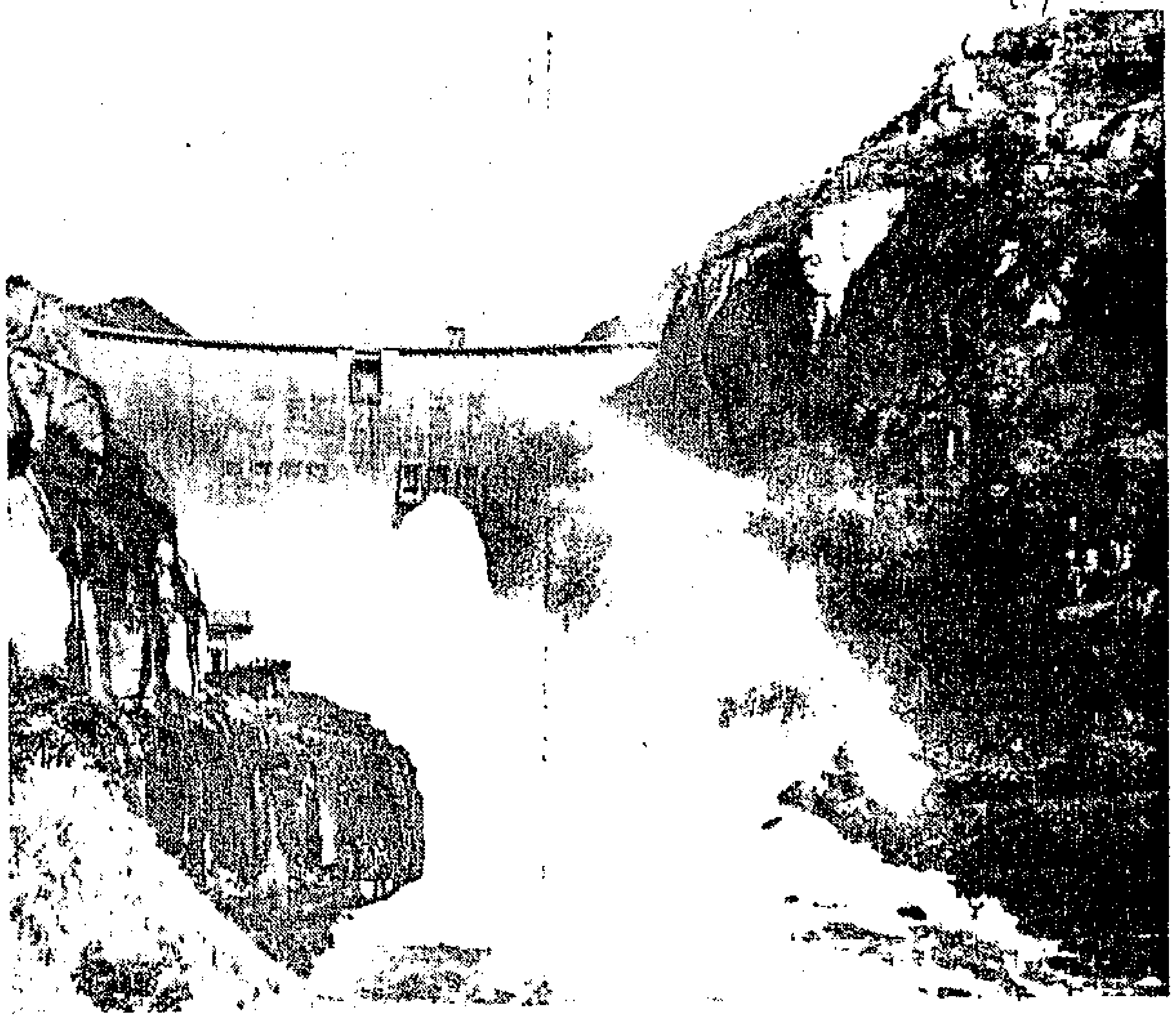
This power could support a huge amount of industrial and agricultural development in Mozambique itself.

The lake, 270km long and 32km across at its widest point, could provide endless possibilities for the development of commercial fishing, angling and other sports.

Once, that is, the elephant is finally "tamed".



The computerised and clinically-clean control room, carved out of solid rock. The dam is technologically so far advanced that it is run by shifts of only 25 men at a time.



Cahora Bassa dam, white elephant or the pot of gold at the end of Mozambique's rainbow?

(55)

26/5/84

Claims that supertanker was scuttled at sea to conceal sale of oil to S A

SALEM FRAUD: THREE CHARGED

W/t ARGUS 26/5/84 (55)

Weekend Argus Foreign Service

WASHINGTON. — A federal grand jury in Texas has charged three men in connection with the alleged sale of oil to South Africa from the tanker Salem, which it is claimed, was later scuttled at sea in an attempt to conceal the sale.

Most of the charges are against Frederick Ed Soudan, 40, a Lebanese-born American, who is alleged to have defrauded a South African government agency, a Johannesburg bank, Shell Oil, Lloyds of London and an Italian oil company of R70-million in the Salem swindle in 1978 and 1979.

Charged with Soudan are Abdul Wahab Al Ghazou, 47, Soudan's cousin and brother in-law, who lives in Syria and James Hillary Shorrock, 50, who claims to be a Briton, formerly of South Africa and now living in the Netherlands.

According to the charge sheet, Soudan used false pretences to get a contract for his Houston company, American Polomax Inc, to sell oil to the SFF Association Ltd, the South African government-owned entity responsible for obtaining crude oil for South Africa.

It is alleged that Soudan had in fact no oil to sell.

On the strength of this contract he got a R15-million loan from Mercabank of Johannesburg.

He allegedly used the money to buy the 214 000-ton supertanker Salem, which would be used to carry the oil to South Africa.

The charge sheet alleges that Soudan then contracted with the Italian company, Pontoil SA to transport 200 000 tons of oil belonging to Pontoil from Kuwait to Italy.

But, according to the charge sheet, after the oil was loaded the Salem sailed not for Italy but for Durban, where the oil was offloaded and sold to South Africa.

It also alleges that in an effort to conceal the sale of this oil to the SSF, the Salem was deliberately sunk after leaving Durban.

No distress signal sent out

The sinking of the Salem off Senegal on January 17, 1980 was thought suspicious at the time because no distress signal was sent out and crew members had time to pack belongings into lifeboats, according to the crew of a British freighter that rescued them.

Later Shell International sued a South African company and Mr Soudan for about R71-million each, and filed a cargo claim with Lloyd's for R70-million or the loss of the oil.

Shell International lost its claim against Lloyd's.

The Houston charge sheet alleges that Soudan, Shorrock and Gazou conspired to make false invoices and used foreign bank accounts and other methods to move money secretly both inside and outside the United States in order to prevent the US Government from collecting income tax on it.

Tried to obstruct inquiry

It claims that when the three became aware of the federal investigations in 1983 and 1984 they tried, through false documents and testimony, to obstruct the grand jury's inquiry.

Soudan is charged on 22 of the 23 counts in the charge sheet, including fraud, transporting stolen property between states, filing false income tax returns, conspiracy to obstruct justice and perjury.

Shorrock and Ghazou are charged with conspiracy to defraud the United States, conspiracy to obstruct justice and perjury.

Soudan became a naturalised American citizen in 1978.

He could not be reached at his home in Missouri city, Texas, today.

If convicted he faces a maximum penalty of 111 years imprisonment and a fine of R116 000.

Shorrock could get a maximum of 15 years imprisonment and a R36 000 fine and Ghazou could get up to R25 000 and 10 years.

Estimated costs of two mines R1,175-bn

TC Land, Wit Cols to set up Escom-tied coal mines

CAPE TIMES 29/5/84

By BRENDAN RYAN

55 ~~232~~ ~~260~~ ~~215~~

JOHANNESBURG. — Transvaal Consolidated Land and Exploration (TC Land) is to form a joint venture with 71 percent-held subsidiary Witbank Colliery to set up two Escom-tied coal mines.

The contracts for these collieries were awarded to TC Land by Escom in 1982.

One of the coal mines will also be developed as a multi-product colliery to meet TC Land's Phase 4A export allocation through Richards Bay of 2,5m tons of coal annually.

Total cost of the two collieries is estimated at R1,175 billion in current money values.

Each Escom colliery is expected to cost about R392m and the development of the export section at one mine will cost an additional R392m.

The collieries are Khutala, which will supply Escom's 3 600 MW Khutala power station near Ogies, and Majuba which will supply the 3 600 MW Majuba power station near Amersfoort.

Coal from Khutala's No. 5 seam will be mined for export as this seam does not form part of the coal reserves committed to Escom for the power station's use.

The joint venture will be held 70 percent by Witbank Colliery, through its wholly-owned subsidiary Douglas Colliery, and 30 percent by a TC Land wholly-owned subsidiary.

TC Land will assign the use of the Escom contracts, its export allocation and its coal rights to the joint venture.

In addition to its direct 30 percent share of the profits from the joint venture TC Land will also receive the royalty payable by Escom on each ton of coal its power stations burn from the collieries.

Payments by Escom to the tied collieries for each ton of coal used comprise the three separate elements of return on capital invested, working cost, and royalty.

TC Land and Witbank Colliery will fund the bulk of the capital expenditure through internal resources and the balance through borrowings which have to a large extent already been arranged.

Minimal financial benefits from the joint venture are expected by TC Land and Witbank over the next two years but earnings a share for both companies will improve after this period.

Khutala colliery, on the Bombardie-Cologne coal field, is scheduled to start coal production in 1987 and rise to full output of about 12,2m tons a year in 1992.

The first 600 MW generating set at the Kendal power station is scheduled to come on stream in 1989 and the sixth and last set in 1993.

Production from Majuba is planned to start in 1989 and build up to full output of 11,9m tons a year by 1994.

Majuba's first generating set is scheduled to come on stream in 1990 and the final set in 1995.

Escom has already postponed the start of the first set at Majuba by a year and there is a possibility that the station may be subject to further postponement if Escom defers 5 000 MW of new generating capacity from its expansion plans to 1995.

The new generating capacity will be deferred if the low growth rate in demand for electricity shown over the last two years continues.

Construction

The prime candidate for deferral is the Lekwe power station, to be supplied by Amcoal, as Escom has not yet placed orders for boilers or generators for this station.

"We have received no further notification from Escom on construction delays since the initial one-year postponement of Majuba," said Witbank Colliery's deputy chairman, Mr Allen Cook, yesterday.

"Decisions by Escom which defer the construction of the colliery increase its capital cost because of the effects of inflation on that cost over the longer time span to completion.

"This in turn affects the rate of return which we require from the new colliery. Should the colliery be delayed we would have to resolve this issue with Escom as it involves the price charged for coal supplied to the power station," he said.

Mr Cook said the joint venture agreement provides Witbank with an opportunity to invest funds into additional Escom and export business.

The company is at present restricted by its location in investing surplus cash into new coal mining ventures.

CAPE TIMES 29/5/84

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~~260~~

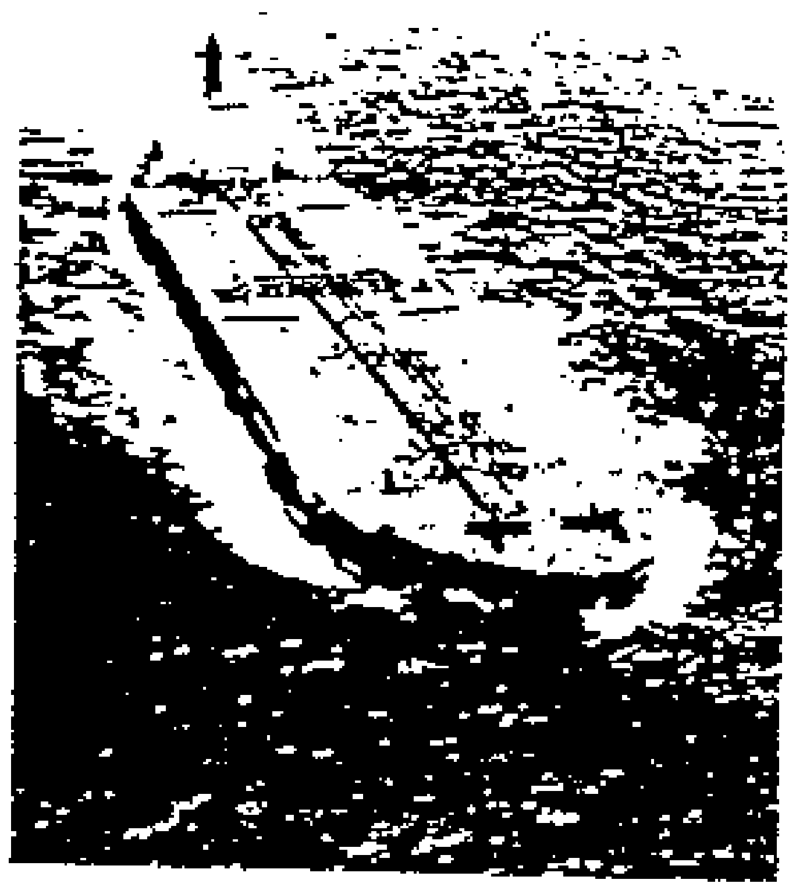
'Plan Sasol Four!'

Political Staff

HOUSE OF ASSEMBLY. — Planning should start straight away for Sasol 4, Mr Harry Schwarz (PFP Yeoville) said yesterday.

He was speaking during the second reading of the State Oil Fund Amendment Bill.

Mr Schwarz said that at present, in spite of the Iran-Iraqi war and the problems in the Gulf, there did not appear to be a shortage of fuel to be purchased on the international market.



However, he warned, the situation would change by the year 2 000.

Secondly, he said, South Africa could not afford to take a chance on oil sanctions. South Africa had done relatively well in procuring oil up to now.

"However, we cannot assume that the enemies of the country are not going to try and use more potent moethods in respect of sanctions against us," he said.

Mr Schwarz said he believed Sasol 4 was "a necessity". Its location should be determined in co-operation with the Department of Environment and Fisheries and sources of fuel for it should be determined.

"It is a big task, and if we want Sasol 4 ready by the year 2 000 we cannot start early enough with the planning of the project," he added.

CAPE TIMES 29/5/84

PFP objects to SOF bill

Political Staff

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HOUSE OF ASSEMBLY. — The Opposition objected strongly to vast amounts of public money being given to a private company to use at its discretion for largely undisclosed purposes, Mr Roger Hulley (PFP Constantia) said yesterday.

He was outlining PFP objections to the State Oil Fund (SOF) Amendment Bill during its second reading.

Mr Hulley said the purposes of the bill included:

- A reduction of the amount to be paid into the SOF but without changing the charge made on a litre of petrol.
- An expansion of the purposes of the SOF to allow its money to be used for "the acquisition, generation, manufacture, marketing or distribution" of any other form of related energy or research.
- To allow the minister to retain whatever amount of the Equalization Fund was not needed for this purpose and to invest it with the concurrence of the Minister of Finance — the non-retained balance to go to the State Revenue Fund.
- To allow the SOF to receive "monies obtained by the Strategic Fuel Fund Association (SFFA) from the sale of products determined by the minister".

He said the Opposition objected to the principle of tax funds raised from the public not being controlled by Parliament and not being audited by the Auditor-General. Was there "a hidden agenda for the vast SOF 'slush fund' which cannot be exposed to the light of public debate and scrutiny?"

'Idle' millions

Attacking the recent increase in GST to 10 percent, Mr Hulley asked how the government could raise GST to make an extra R880-million when much more than this was sitting idle in the SOF.

A further motivation for the Opposition's inability to support the bill, he said, was "our grave concern about the manner in which the State's oil funds in general have been managed and applied in recent years".

He referred to:

- The alleged overpayments of R385-million currently being investigated by the Advocate-General.
- The Salem Affair, which cost the South African taxpayer R30-million.
- The payment of enormous "pariah premiums" amounting to about R3 000-million since 1980, when the PFP was in possession of offers of oil, in one instance, at a saving of 5 dollars a barrel.
- South Africa's alleged dealings with non-reputable dealers.

In addition, Mr Hulley said, there was "the Sword of Damocles" hanging over State revenue in the form of the Sasol/Sellier court case currently being held in camera.

No statement, he said, had been made as to who would pay the amount of approximately R200-million claimed if Sasol lost.

Mr Hulley proposed a parliamentary select committee to probe transactions of the SOF and the SFFA, that the Auditor-General be appointed to audit the funds of these bodies and that provision be made by Parliament for the economy as a whole to benefit from accumulated funds in the SOF.

CAPE TIMES 29/5/84

55

Changes to SA oil deals?

Political Staff

HOUSE OF ASSEMBLY. — In a dramatic new development on South Africa's secret oil deals, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, yesterday announced the possibility of radical changes to South Africa's oil-purchasing operation early next year.

Speaking in Parliament in the second reading debate on the State Oil Fund (SOF) Amendment Bill, Mr Steyn said measures being considered by his department included stricter control by Parliament and the Auditor-General over the multi-million rand Strategic Fuel Fund used to buy crude oil.

Investigators were also considering the rationalization of energy-related operations, including oil procurement and the financing of synthetic fuel development.

Mr Steyn's announcement came amid a growing crisis following serious allegations of irregularities in the purchase of South Africa's oil supplies by the Strategic Fuel Fund Association (SFFA). A figure of R385-million in possible over-payments has been mentioned.

The SFFA is a private company funded by a levy on petrol sales. Its activities are shrouded in secrecy and neither the Auditor-General nor Parliament have control over SFFA finances.

In an interview yesterday, Mr Steyn denied that the changes being considered resulted from allegations over oil deals.

But Mr Roger Hulley (PFP Constantia) said in an interview that the announcement raised the "intriguing question" of whether Mr Steyn's action amounted to "a tacit acknowledgement" that the present system had given rise to problems of misappropriation of funds in the past.

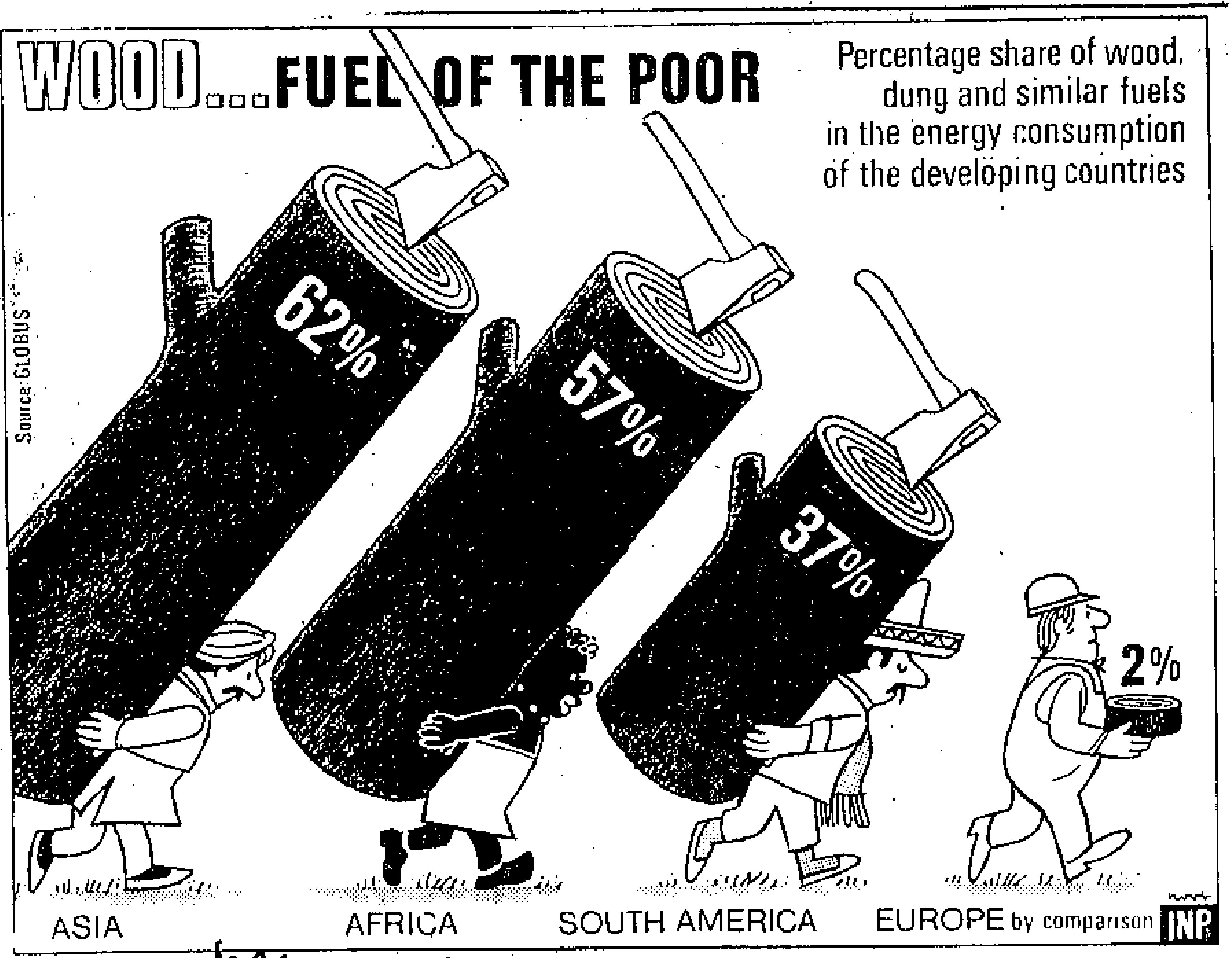
However, he welcomed the announcement in principle, provided that it had the effect of re-establishing parliamentary authority and the authority of the Auditor-General over the relevant oil and energy funds.

But he warned the government that future changes would not be sufficient to allay "our grave concerns" about the past.

Mr Steyn said one of the main factors influencing the possible change was that money paid from petrol sales levies into the State Oil Fund (SOF) was no longer needed to finance Sasol 2 and 3.

At the same time, the department was looking at possibly setting up a State corporation to be involved in energy matters.

The bill debated yesterday had three main objectives — to provide for the broader use of funds in the SOF now that Sasol 2 and 3 are complete; to transfer funds not immediately needed to the State Revenue Fund to assist in balancing the Budget as announced by the Minister of Finance, Mr Owen Horwood, in March; and to increase the Equalization Fund, which stabilizes fuel prices, without an additional levy on petrol prices.



Mercury

Destruction of trees 'alarming' . . .

29/5/84

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THE DRAMATIC rise in energy costs has placed a severe strain on the industrial countries, but it has been even harder on the poorer countries of the Third World. Many developing countries are no longer able to produce enough foreign exchange to pay the oil-exporting countries without reducing their food imports at the same time.

Alternative sources of energy are being sought; as was emphasised at the North-South summit in Cancun, Bonn has been providing financial and technical assistance for research of this kind for a number of years now.

As for the question of finances, the trend is apparently towards establishing a new World Bank affiliate responsible for financing the development of new sources of energy. The Europeans are hoping that the oil-producing countries will contribute financially through the Opec Development Fund.

The experts do not concede solar energy much of a chance as a short-term solution. Whether or not solar energy will really be able to alleviate the energy problems of the developing countries, most of which have very sunny climates, will depend on further research and being able to reduce the production costs of the required equipment. Since the farm sector still has priority in the developing countries the fact that more than half of the farmland devoted to crop cultivation is worked with animals will have to be taken into consideration in calculating energy requirements.

Studies carried out by the United Nations have shown that in Africa, Asia and Latin America wood continues to make up an important percentage of energy consumption. In Europe it amounts to only 2 percent. The enormous volume of wood consumption has assumed 'alarming proportions', according to sources in Bonn's Federal Ministry for Economic Co-operation. The developing countries, they said, were in the process of destroying their own landscape, their vital water supply, as well as a significant source of raw materials for their further development. — INP

Cape Times 30/5/84 (55)

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Act clause

Y. — The Minister of Law and
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"untrue matter" relating to

second reading debate on the
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consider any amendments to
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through all its stages. — Sapa

Oil deals: Blank cheque for govt?

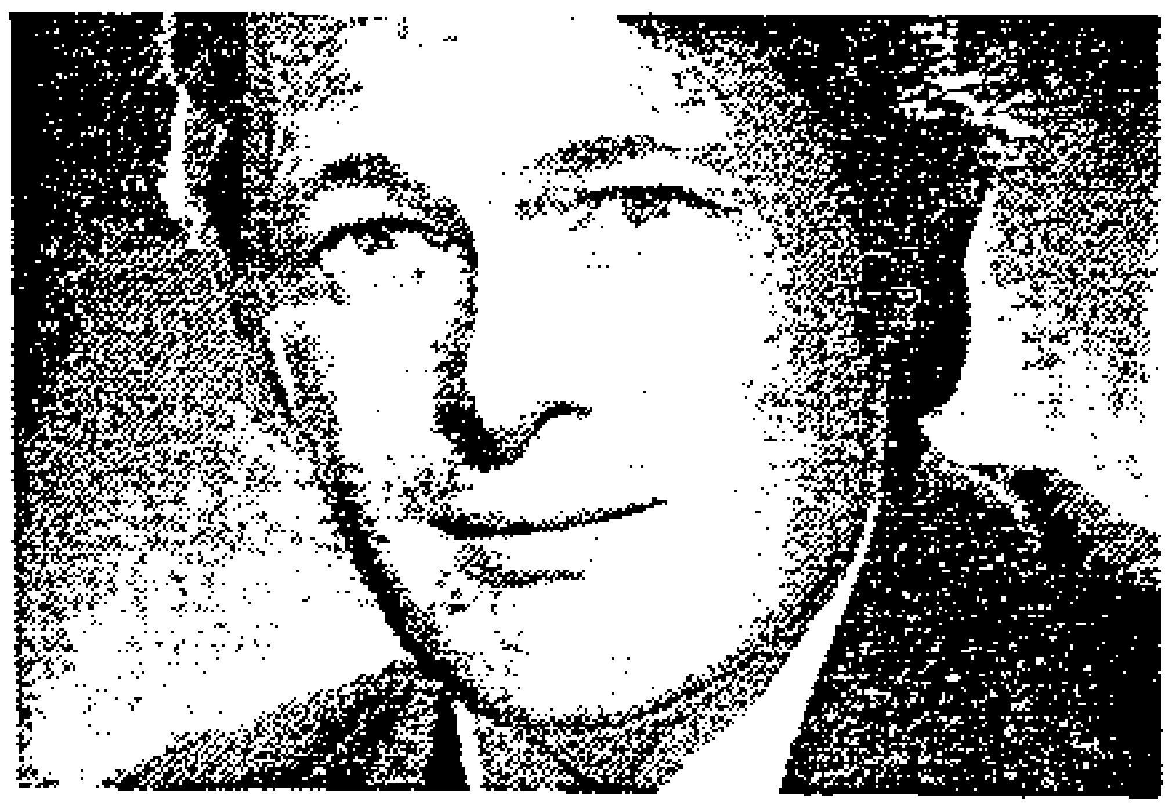
Political Staff

HOUSE OF ASSEMBLY. — Possible changes next year to South Africa's oil purchasing operations were welcomed by Opposition spokesmen in Parliament yesterday.

But concern was expressed that a new law now being considered as an interim measure would in the meantime allow millions of rands to be used at ministerial discretion without parliamentary control.

Speaking in the committee stage debate on the State Oil Fund Amendment Bill, Mr Roger Hulley (PFP Constantia) said the bill would give the government a blank cheque to use money in the State Oil Fund (SOF) beyond the control of Parliament and the Auditor-General.

"Daylight is the best auditor and we need to look at these projects in the full light of day," he said.


Mr Roger Hulley

Mr Harry Schwarz (PFP Yeoville) said the bill allowed ministerial discretion in the use of SOF funds and was contrary to the fundamental principle that Parliament be allowed to debate expropriations by government departments.

However, both Mr Hulley and Mr Schwarz welcomed the announcement in Parliament on Monday by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, that the whole question of oil and energy-related operations was being reconsidered by his department.

In an interview later, Mr Steyn said measures being considered included stricter control by Parliament and the Auditor-General over the multi-million-rand Strategic Fuel Fund used to buy crude oil.

Investigators were also considering the rationalization of a wide range of energy-related operations, including oil procurement and the financing of synthetic fuel development.

The Strategic Fuel Fund Association (SFFA) is a private company funded by a levy on petrol sales. Neither the Auditor-General nor Parliament have control over SFFA finances.

Mr Steyn denied in an interview that the changes being considered were a result of the wave of allegations concerning oil deals.

But yesterday in Parliament, Mr Hulley said the announcement appeared to be a tacit admission that the present system had caused problems in the past.

NATIONAL/INTERNATIONAL

At 90% of power output, Koeberg is Africa's giant

ARGUS 4/6/84

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Staff Reporte

KOEBERG'S Unit One reactor has reached 90 percent of its potential power output, making it the largest single power generator in Africa.

An Escom spokesman said permission to take the reactor to the 90 percent power-production level, equal to 880 megawatts, had been granted by the Atomic Energy Corporation (AEC).

This stage was achieved at the weekend after weeks of testing at lower production levels to ensure the satisfactory performance of the reactor. The unit is now producing 280 megawatts more than Escom's giant coal-fired generators in the Eastern Transvaal.

Went 'critical'

The unit went "critical" — the industry's term for a self-maintaining reaction — on March 16 and began to produce power at the 10 percent level on April 4.

Further licences for the 20, 30, 50 and 75 percent levels were subsequently granted after tests at each stage were satisfactory, clearing the way for permission from the AEC for the reactor to achieve its new output level.

Further testing of the Unit One reactor will be carried out and it is expected to be producing 100 percent power — 920 megawatts — by midyear, according to the spokesman.

He said additional power from the reactor came at a critical time for Escom, which last week had had three record demands for power, on Monday, Tuesday and Wednesday. The demand on Wednesday at 9am was for 16 468 megawatts — 827 above the highest demand level for 1983.

Hospitals ready for any alert at Koeberg

Provincial Staff

SHOULD there by a nuclear disaster at Koeberg, the Cape Department of Hospital Services has trained personnel to handle the situation.

Mr Piet Loubser, MEC in charge of hospital services, told the Provincial Council today the department was ready to meet any challenges which Koeberg might present.

Special equipment had been bought and personnel, including ambulance men, had been trained to handle patients.

"The chances of a major disaster at Koeberg are remote. But should this happen, the emergency will be dealt with in terms of guidelines laid down by the Department of Hospital Services."

These guidelines were determined following the overseas visit last year of the consultant in charge of the Emergency Services Centre, Dr A G MacMahon, with officials of the provincial, city and divisional councils.

Hulley calls for release of SOF accounts

Cape Times 6/6/84

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HOUSE OF ASSEMBLY. — The Official Opposition yesterday called on the Minister of Mineral and Energy Affairs, Mr Danie Steyn, to give an assurance that money from the State Oil Fund (SOF) would not be used to settle any claim arising from a civil court case involving Sasol and a private company.

Speaking during debate on the third reading of the State Oil Fund Amendment Bill, Mr Roger Hulley (PFP Constantia) also challenged the minister to provide the PFP with the accounts of the SOF since its inception and to allow SOF funds to be reviewed by the parliamentary Select Committee on Public Accounts.

Mr Hulley said it would be "a wrong and devious method" for the government to settle any claims arising from the Sasol-Celliers case, which is being held in camera, "by the back door" via the SOF.

Mr Hulley's challenge to the minister to release the accounts of the SOF was the result of Mr Steyn's statement during committee on the bill that no secrecy was attached to the affairs of the SOF.

'Deepest blanket of secrecy'

The PFP member also challenged Mr Steyn to specify which matters relating to the fund were open to publication.

Calling the minister's statement "astonishing", Mr Hulley repeated PFP claims that South Africa's oil procurement activites were conducted in secret.

"The impression gained both in this House and by the public at large is that matters relating to oil procurement are shrouded in the deepest blanket of secrecy," Mr Hulley said.

The Strategic Oil Fund and the Petroleum Products Amendment Acts both provided for offences relating to the unauthorized disclosure or publication of oil procurement activities.

Mr Hulley said he was not aware of any document of the SOF that was available to the public, while the government had taken steps to prevent publication of the Salem affair when it was first discussed in Parliament.

In reply to the debate, Mr Steyn said Mr Hulley was still confusing the activities of the SOF, which did energy research, with those of the oil-purchasing State Fuel Fund Association (SFFA).

SOF a private company

Although, he admitted, the activities of the SFFA would largely remain shrouded in a blanket of secrecy until South Africa was free of the international oil boycott, he was prepared to bring more SFFA operations into the public eye.

In contrast to the SFFA, Mr Steyn said, the SOF was not secretive.

If that was the case, asked Mr Hulley, why could he and the select committee not review the SOF's accounts.

Mr Steyn said the SOF was a private company and could not have its accounts perused by anybody.

Referring to the second reading debate, Mr Steyn said Mr Hulley had made "terribly speculative" allegations about how SOF and SFFA funds had been used in the past.

Mr Steyn said that although he and Mr Hulley agreed in principle that the SOF should have its accounts audited by the Auditor-General, this could not happen overnight.

The PFP asked that the House divide before the bill passed its third reading. — Sapa

The MINISTER OF POSTS AND TELECOMMUNICATIONS:

No, as already stated the relative directory became available on 20 February 1984;

(a) and (b) Fall away.

Telephone directories

*17. Mr A B WIDMAN asked the Minister of Posts and Telecommunications:

Whether approximately 180 tons of directories for the (a) Cape Peninsula and (b) Boland and West Coast regions, numbering approximately 450 000, were stored at Stirling Street, Cape Town, as at 1 February 1984; if not, (1)(aa) what was the weight of the directories stored there, and (bb) how many directories were stored there, at that date and (ii) for which regions were they?

The MINISTER OF POSTS AND TELECOMMUNICATIONS:

(a) and (b) No;

(i) (aa) approximately 266 tons

(bb) 197 549, and

(ii) the Cape Peninsula, Boland and West Coast, Southern Cape and Karoo and Namaqualand.

For written reply:

Hansard Q. Col. 1503 6/6/84

Double-shift classes

926. Mr R M BURROWS asked the Minister of Community Development:

(1) Whether, with reference to his reply to Question No 9 on 24 February 1984, mobile units are to be delivered to Coloured schools affected by double-shift classes; if so,

(2) whether there have been any delays in the delivery of these mobile units; if so, (a) what is the nature of the delays and (c) how many units (i) had been and (ii) remained to be delivered as at the latest specified date for which figures are available;

(3) whether any complaints have been received concerning the standard of these mobile units; if so, (a) from whom and (b) what is the nature of the complaints?

The MINISTER OF COMMUNITY DEVELOPMENT:

(1) Yes.

(2) Yes (a) and (b) An Interdepartmental Committee was appointed in July 1983 to investigate the provision of mobile classrooms. Tenders and the adjudication thereof was completed on 12 August 1983. Only 6 months were thus left for the manufacture, transport and erection of the large amount of classrooms throughout the Republic. The large order and limited time schedule created unforeseen material shortages and transport problems. Furthermore bad weather, a change of priorities and unfortunate circumstances such as fire damage at Northern Paarl and stormwater damage at Villiersdorp created delays.

(i) 300.

(ii) 50. The remaining 57 classrooms were as a result of revised priorities delivered to teaching colleges.

(3) No. (a) and (b) Falls away.

55

Hansard Q. Col. 1504 6/6/84

Electricity: consumption

946. Mr A J W P S TERBLANCHE asked the Minister of Mineral and Energy Affairs:†

(1) (a) In which months in 1983 did the maximum consumption of electricity in the Republic occur, (b) what was the average (i) demand for power and (ii) maximum demand per day in these months and (c)(i) what was the duration of the peak consumption periods and (ii) at what times of the day did they occur;

(2) (a) in which months in 1984 is the maximum consumption of electricity in the Republic expected to occur, (b) what is the estimated average (i) demand for power and (ii) maximum demand per day in respect of these months and (c)(i) what is the duration of the peak consumption periods expected to be and (ii) at what times of the day are they expected to occur?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) August.

(b) (i) 15 131 MW weekday avarage demand.

(ii) 15 639 MW

(c) (i) Approximately nine hours per day.

(ii) Between approximately 07h00 and 12h00 and between approximately 16h00 and 20h00.

(2) (a) August.

(b) (i) 15 684 MW weekday average demand.

(ii) 16 684 MW

(c) (i) Approximately nine hours per day.

(ii) Between approximately 07h00 and 12h00 and between approximately 16h00 and 20h00.

Escom: generating capacity

947. Mr A J W P S TERBLANCHE asked the Minister of Mineral and Energy Affairs:†

(1) (a) What was the maximum generating capacity of Escom in 1983, (b) what proportion of this capacity was generated by means of liquid fuel and (c) what was the lowest cost per kilowatt-hour at which electricity was generated in that year;

(2) (a) what is the estimated maximum generating capacity of Escom in respect of 1984, including the electricity supplied by the Cahora Bassa scheme, (b) what estimated proportion of this capacity is generated by means of liquid fuel and (c) what is the estimated lowest cost per kilowatt-hour at which electricity can be generated in 1984?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) 21 673 MW, excluding Cahora Bassa.

(b) 342 MW.

(c) 0,19 cents/kWh at the Vanderkloof Hydro Powerstation.

(2) (a) 25 901 MW.

(b) 342 MW.

(c) 0,21 cents/kWh at the Vanderkloof Hydro Powerstation.

Hydro-electric scheme: generating capacity

948. Mr A J W P S TERBLANCHE asked the Minister of Mineral and Energy Affairs:

(a) What is the generating capacity of the (i) Sterkfontein and (ii) Hendrik Verwoerd hydro-electric scheme and (b) what quantity of water is required for this purpose in each case?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(a) (i) The generating capacity of the Drakensberg Pumped Storage

Scheme which feeds the Sterkfontein Dam, is 1 000 MW.

(ii) 340 MW.

(b) The Drakensberg Pumped Storage Scheme requires approximately 0,8 cubic metres of water at a head of 430 metres per kWh generated. The Hendrik Verwoerd Hydro Powerstation requires approximately 10 cubic metres of water at a head of 40 metres per kWh generated.

Phoenix Township: telephone services

970. Mr P C CRONJÉ asked the Minister of Posts and Telecommunications:

(1) Whether any applications for telephone services are outstanding in Phoenix Township, Durban; if so, (a) how many and (b) when will these services be provided;

(2) whether installation fees are collected from persons lodging applications for telephone services in Phoenix Township; if so, (a) what is the fee and (b) from how many applicants had such fees been collected as at the latest specified date for which figures are available?

The MINISTER OF POSTS AND TELECOMMUNICATIONS:

(1) Yes;

(a) 3 596, as at 24 May 1984, which figure does not include 1 329 applications in respect of which authorities for the installation of the services have already been issued, and

(b) Phoenix township is at present served by the Mount Edgecombe exchange and the new Phoenix exchange which was commissioned on 14 April 1984. A third exchange, namely Trenance, which will also serve a portion of the township is expected to be established during the second half of 1985 or early in 1986. The provision of service to all 3 596 applicants referred to is dependent upon the completion of various cable works. The number of waiting applicants in each exchange area, the anticipated dates of completion of the various cable works and the number of applications that will be disposed of after completion of each cable work are indicated below:

Exchange	*Number of waiting applicants*	*Anticipated date of completion of cable work*	*Number of applications to be disposed of after completion of cable work*
Phoenix	457	September 1984	441
		December 1984	16
Mount Edgecombe	3 049	December 1984	2 583
		March 1985	269
		June 1985	8
		September 1985	189
Trenance	90	Second half of 1985 or early in 1986 in conjunction with the commissioning of the exchange	90

(2) Yes;

(a) R75,00, and

(b) 2 901, as at 24 May 1984. Telephone service has already been provided to 1 572 of the applicants while the remaining 1 329 services will be installed during the next two months.

Hansard Q. Col. 1509 6/6/84

Housing

973. Mrs H SUZMAN asked the Minister of Community Development:

(1) With reference to his reply to Question No 240 on 17 February 1984, (a) what was the nature of the housing projects to which the State allocated money and (b) what amounts have been allocated to each of these projects since the adoption of the new housing policy;

(2) how many (a) housing units and (b) building sites with the necessary infrastructure had been provided by way of these projects as at the latest specified date for which figures are available?

The MINISTER OF COMMUNITY DEVELOPMENT:

(1) (a) The nature of the housing projects is as follows;

- Serviced sites for sale to prospective home-owners.
- Welfare housing.
- Individual loans and material loans for self-help- and self-building projects.
- Conventional housing for the lowest income groups.
- Essential community facilities.

(b) and (2) The information is unfortunately not readily available.

Hansard Q. Col. 1509 6/6/84

Accommodation for the aged

975. Mr C W EGLIN asked the Minister of Community Development:

(1) How many accommodation units for aged (a) Coloured, (b) Indian, (c) Black and (d) White persons had been built in the Cape Town municipal area with financial assistance from the State as at the latest specified date for which figures are available;

(2) how many of these units for each race group were built in each of the latest specified three years for which figures are abailable?

The MINISTER OF COMMUNITY DEVELOPMENT:

(1) During the period 1 August 1920 to 31 March 1984—

(a) 485

(b) None.

(c) None.

(d) 2 026

(2)

	Whites	Indians	Coloureds	Blacks
1981/82	—	—	—	—
1982/83	252	—	—	—
1983/84	144	—	—	—

Telephone directories

976. Mr A B WIDMAN asked the Minister of Posts and Telecommunications;

With reference to his reply to Question No 3 on 16 May 1984, (a) how many white and/or yellow page telephone directories are stored in a carton and (b) what is the weight of a (i) white and (ii) yellow page directory?

The MINISTER OF POSTS AND TELECOMMUNICATIONS:

(a) 36 white page directories or 24 yellow page directories; and

(b) (i) 1,23 kilograms, and

Star 8/6/84

Offshore fuel find triumph

Major field will bring in R7 000-million

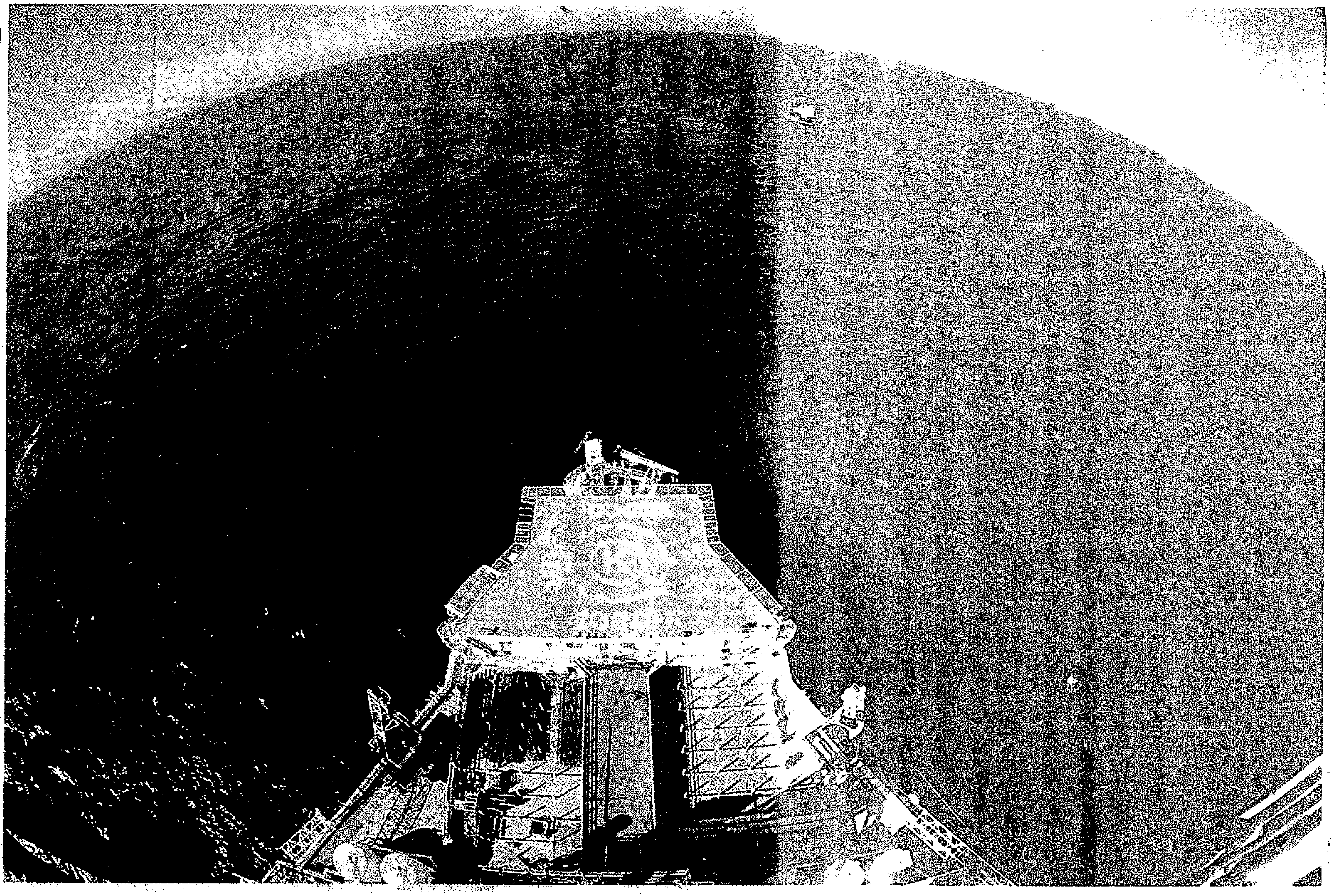
55

By Stephen McQuillan

South Africa is set to produce offshore natural gas from a major field established off the Cape coast, it was disclosed today.

Engineers are studying a R2 000 million plan to convert the gas to petrol and diesel, the 24 Hours team was told.

A spokesman for the Department of Mineral and Energy Affairs today confirmed that Soekor — the State-funded oil exploration organisation — had reached its target reserves "or is on the brink of doing so".



A bird's-eye view of the American Sedco K offshore oil exploration platform 100 km off the Cape coast. The Sedco K has been the mainstay of the offshore exploration effort, drilling more wells and finding more promising reserves than any other rig involved in the search. This photograph was taken from the top of the rig's derrick and shows the helicopter landing platform. Sedco K's support ship is on the horizon.

© Picture by Clive Lloyd.

BONANZA!

24 HOURS

AN INVESTIGATIVE REPORT

Revolutionary plant for SA? — Page 3
The long, long search for oil — Page 8
Loneliness of the far-off oilmen — Page 9

Condensate

The offshore triumph comes after 20 years of exploration effort on land and at sea which cost the taxpayer nearly R450 million.

But the investment is now expected to pay dividends with possible earnings estimated at around R7 000 million during the next 20 years if gas production is approved.

Soekor had found a medium-sized gas field by world standards which could also produce a small quantity of condensate (light oil), high-level sources told the 24 Hours team.

The gas field would yield about 20 000 barrels of petrol and/or diesel a day with reserves of about one trillion standard cubic feet of gas — enough to last about 20 years.

Offshore exploration experts believe the cost of establishing a North Sea-type field about 100 km off Mossel Bay would be paid off in five to seven years.

They also say the discovery of other fields — including crude oil producers — are "just around the corner".

The disclosures come after months of investigation by the 24 Hours team.

Earlier this week the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said Soekor was engaged in detailed investigations into the production of oil and gas.

He said a decision would be made by the Cabinet in two to three months.

"The Cabinet must first be convinced the production is feasible and viable," said a Department of Mineral and Energy Affairs spokesman.

He said Soekor had found mainly gas and would approach the Cabinet "with specific recommendations".

A technique developed for New Zealand could be used to manufacture petrol and diesel from natural gas or engineers could produce other products like methanol or ammonia.

"It is a valid conclusion, considering the quantity of gas deemed potentially viable, that there must be a case for production now or in the near future," said the department spokesman.

Optimistic

The Minister had recently had talks with Soekor.

A Soekor spokesman said: "We have on several occasions said we are optimistic and we do agree, and certainly hope, that the one trillion figure is now within our reach.

"But we first have to drill at least another two wells to make absolutely sure."

Production platforms would be built mainly by South African firms and assembled off the coast, 24 Hours was told.

"Gas production would be the first step toward a new national industry second only to space in the technical expertise required," said one exploration engineer.

If the Government approves plans for production a newly designed hi-tech refinery may be built on the south coast — possibly at Mossel Bay.

Gas production would spell job bonanza for SA engineers

Offshore gas production would create a job bonanza in the engineering industry.

Engineering firms throughout the country would be involved in all aspects of the development — on land and at sea.

The major assembly and construction work alone could create up to 6 000 jobs and a new petro-chemical plant could employ up to 2 000 people permanently, high-level industry sources told the 24 Hours team.

It is understood engineers have plans to build a petro-chemical plant, possibly at Mossel Bay, which would transform the sleepy fishing town.

New roads, houses, offices — a massive new infrastructure — would have to be established to support the gas field.

The cost of the new infrastructure is included in the estimated cost of up to R2 000 million.

Homes would have to be found for between 1 000 and 2 000 operational staff and associated personnel for the new petro-chemical plant.

The majority of jobs would be for skilled people.

Thousands of people would be needed to build the plant with the number of construction workers peaking at 3 000 during the five years it would take to build.

"There will be tremendous opportunities for engineering firms all over the country," said one industry expert. "There should be a slice of the cake for many people."

About 3 000 engineering workers would be needed to assemble the massive offshore production platform which would probably be erected off the south coast, near Mossel Bay.

Again, highly skilled, qualified people would be needed.

But many of the hundreds of pieces which make-up a production platfrom would have to be made outside South Africa to save time.

"The whole construction and assembly operation could be done here, but we wouldn't be able to compete with the speed with which it could be done by allowing overseas contractors to contribute," said the industry spokesman.

Some of the parts which make up the platform could be made in England, America, Korea and Japan.

The plant and equipment needed for the second stage of the offshore project, the "topside" — the gas reticulation and refinery complex to be built on top of the production platform — would involve many South African engineering firms.

It is estimated that 70 percent of the work required for onshore projects could be carried out by South African engineering firms.

R300-m a year will swell South Africa's coffers

Revenue from Soekor's expected R2 000 million offshore gas production project will be more than R300 million a year.

It is believed the State-run offshore exploration group will build at least one fixed production platform to exploit the FA field, 90 km off the coast.

The platform would be linked to shore by a pipeline costing about R90 million.

Soekor's proven gas reserves should be one trillion standard cubic feet in a matter of weeks, engineers said — the reserves Soekor says are required for viable production.

Soekor could go into production with half the reserves and make a profit, but the bigger reserves were necessary because no one would build a petro-chemical plant which would be used for only ten years. It would have to be in use for about 20 years.

It is understood the field will produce about 3 000 barrels of condensate and 135 million standard cubic feet of gas a day. More detailed figures will be available in November.

Industry sources say parts for the 150 m long production platform would be made up all over the world.

The bits would be assembled like a giant jig-saw puzzle at a point along the coast.

FLOATED

The offshore refinery, to be constructed on top of the production platform, would be built in individual sections which would be floated out to sea and later assembled like a huge Lego system. Construction would take about five years.

The sections would be made at as many different shipyards as possible.

Little processing would be done offshore, but the gas would have to be separated and the water removed to prevent corrosion.

Engineers estimate one barrel of diesel or petrol for every 40 000 standard cubic feet of gas at the beginning of production.

The condensate — of a high quality — would be pushed through the petro-chemical plant along with the gas.

Condensate improves the quality of the product and is a bonus of the gas find. "Nature has done much of the refining," an engineer said.

The condensate could be poured straight into a tractor engine and it would run.

It is understood samples of the high-quality condensate are sometimes used as cigarette lighter fuel by Soekor officials.

Condensate is produced when gas is brought to the surface, said an oil field engineer.

"When the gas gets into our well bore, there's an immediate reduction in pressure and a liquid is formed by the time the gas reaches the surface.

"It's much like a car tyre when you take the valve out. If you hold your hand over the valve, droplets of water collect, yet there's no indication there was any water in the tyre before it was deflated.

"The formation of these droplets could be equated to condensate."

Mr Peter Ker

Our rigs have played their part and are ready for more, says Sedco

The American South Eastern Drilling Company (Sedco) has for years been involved in the search for offshore oil in South Africa — and their contribution has been vital.

Their offshore drilling platform, Sedco K, has drilled more wells — and more commercially viable wells — than any other rig off the South African coast. Altogether, Sedco has drilled 55 of the 97 wells.

"The Sedco K proved that the formation on the South African continental shelf was old enough to hold hydro-carbons," said Mr Peter Ker, Sedco's resident manager.

RIGHT EQUIPMENT

"It told Soekor they were not wasting their money.

"I believe they drilled about 600 wells before they found the big Ekofisk gas field in the North Sea. You could say that South Africa has to drill an other 500 before they find a gas field."

The Sedco K had been the ideal rig for what Soekor wanted. A medium-sized rig, it could drill in 240 m of water and was ideal for South Africa's huge continental shelf. It had spent two years drilling in the North Sea before arriving in South Africa.

Mr Ker, who has been with Sedco for fifteen years and has lived in South Africa for five years, said the 'K' rig arrived in December 1975. Another Sedco rig, the 708, spent three years in South Africa from 1979 to 1981.

"The 708 drilled a few holes on the west coast for two years, then drilled on the south coast. It's now working in Alaska, off the Russian border."

Sedco 135 operated through 1973/74.

"Brazil was going broke importing oil so they thought if that was going to happen, why not do it in a big way?" said Mr Ker. "With 30 rigs and a huge exploration programme, they found some production and paid off the capital costs.

"We could do that here. We could have 20 or 30 rigs and in two or three years bring the oil ashore."

Soekor would probably like more rigs to "drill the hell out of the continental shelf", but funds and manpower are a problem.

Mr Ker said production was looking more promising. "The Cape has no energy source and it would be a logical move," he said.

Production would increase the chances of Sedco being brought back into exploration as Soekor would be able to finance a bigger exploration programme with the revenue.

BONANZA! AN EX

Revolutionary petro-chemical plant for SA?

South Africa might soon have a revolutionary petro-chemical plant producing petrol and diesel from offshore gas. The total project could cost up to R2 000 million.

The Department of Mineral and Energy Affairs says the plant could be based on a design developed in New Zealand.

CO-OPERATION

A department specialist has already visited the country to get more information.

Industry officials say co-operation from the New Zealand Government has been "very good".

"That's one thing we've found in the oil business: we don't usually get wrapped up in politics," said one engineer.

"The first plant of its kind is being built in New Zealand and should be on stream by the middle of next year," he said. "It takes offshore gas and converts it to methanol. It then produces 100 percent petrol from the methanol."

It is understood that Soekor wants to build a similar plant to produce petrol and diesel from methanol.

"We believe there will be an imbalance in the amounts of petrol and diesel available to us in future, and it is for this reason that we are particularly interested in this new technology," said one official. "It will allow us to produce both from the same plant."

The plant would be similar to a refinery, but clean — without smoke or by-products which are difficult to dispose of.

Investigations are not complete yet, but indications are that the plant will be built at Mossel Bay in line with the Government's decentralisation policy. However, it might possibly be built at Cape Town, Port Elizabeth or Durban.

The plant would cost between R700 million and R1 200 million including new infrastructure, if necessary, for the town where it is located.

The offshore project could cost about R700 million.

An industry spokesman said: "The problem is that up to now, everywhere in the world, it has been cheaper to manufacture petrol and diesel from crude oil. The synthetics route, like Sasol, is more expensive — but that's the price you pay to be independent if you don't have crude."

Use of offshore gas — power plant not viable

Engineers considered building a power station on the Cape coast during their investigations into the best use for offshore gas.

But, it is understood, engineers said it did not fit in with Escom's present planning.

The station, which could have been built at Mossel Bay, would have generated 700 Mw — a miniature compared with the Eastern Transvaal's 3 600 Mw giants.

"Escom would go for 2 000 or 3 000 Mw plant instead of a 700 Mw; it did not fit with their way of thinking," said an industry spokesman.

"But if we find more gas, it could still be a viable project for Soekor and for Escom in the future."

The station would have been powered by gas turbines, fuelled by liquefied petroleum gas.

The lack of a significant gas market in South Africa quickly narrowed other options for Soekor engineers.

"If you are a big producer of gas in the UK, the US or Europe, you just bring it ashore, tie into a pipeline and whatever happens after that isn't your concern," said the spokesman. "They take care of it and pay you according to contract.

"In this situation it was different because there's no market.

SMALL AND LIMITED

"We have small reticulation systems in Johannesburg, Cape Town and probably Port Elizabeth.

"They're mainly for industrial use.

"They are small and limited for the amounts of gas we are talking about."

The possible uses of ammonia and methanol, which go together in the petro-chemical field, had been investigated.

But they were dismissed because production would provide more than the local market could absorb.

"The market is over-stocked internationally and we have artificially high prices here," said the spokesman.

"Price control was lifted at the beginning of this year — certainly on ammonia — and you could import it much cheaper than we, or anyone else, could produce in South Africa.

"It was decided we could not base a project like this on a fluctuating international market."

The onshore cost of producing methanol and associated gases would have been R400 million, bringing the total cost of gas production down to about R1 000 million.

SA's rights under law of the sea

South Africa is allowed to prospect for oil and gas anywhere on its huge continental shelf, according to international law.

The country is a signatory to the 1958 Geneva conventions on the law of the sea.

As such, it is able to to prospect for minerals on the sea bed and in the subsoil up to a water depth of 200 m — or up to a point where exploration is economically feasible.

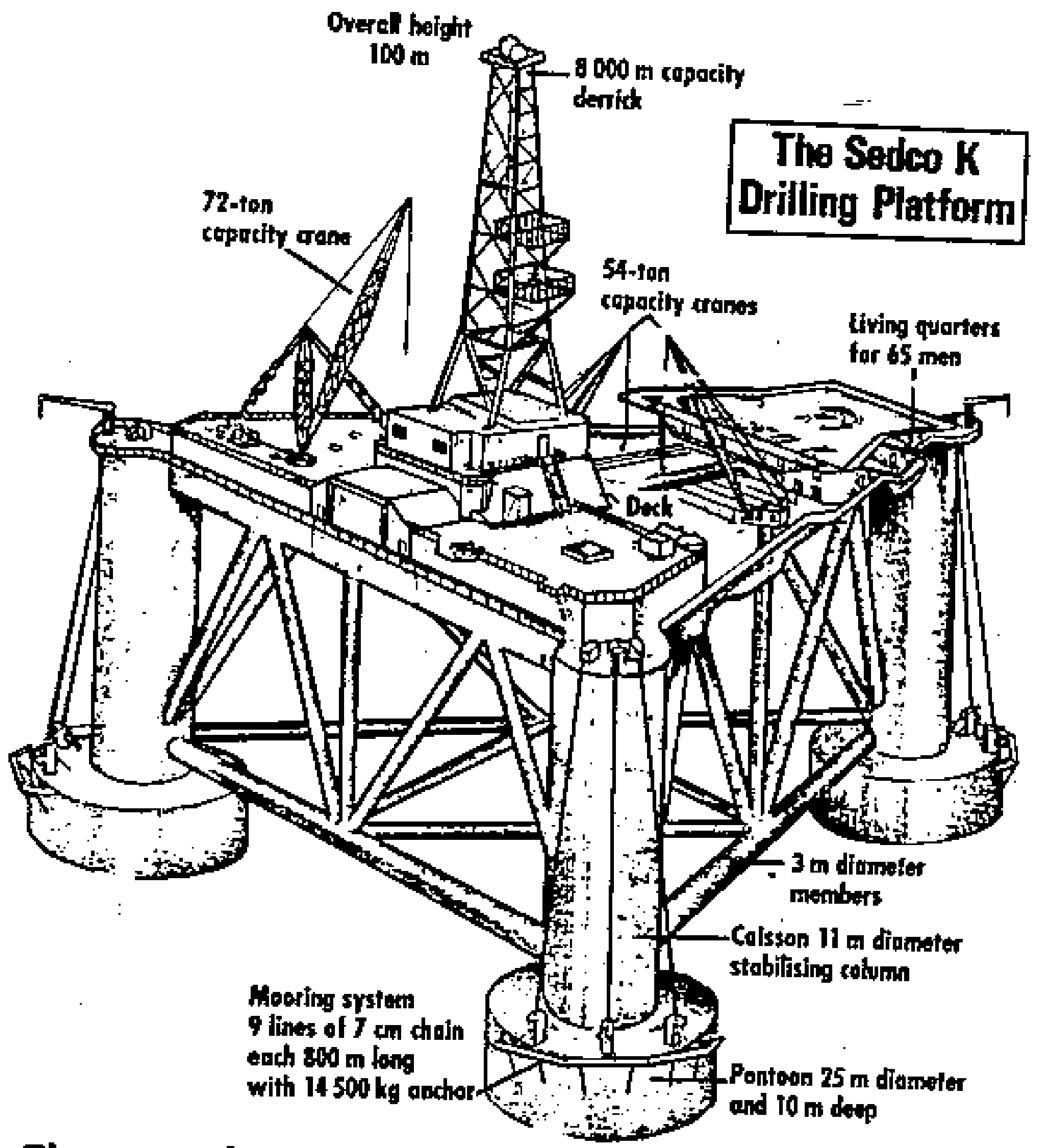
A new treaty has been under negotiation for the past 12 years, and has been signed by many nations.

The United States has refused outright to sign, but South Africa is still investigating the issue.

The new treaty gives countries the right to prospect for minerals up to 200 nautical miles offshore.

CLUSIVE INVESTIGATION 24 HOURS By Stephen McQuillan

The riser pipe connecting the rig to the sea bed apparatus, as viewed through the Sedco K's moon pool.



The main features of the Sedco K drilling platform.

Advanced drilling platforms the mainstay

Two Panamanian-registered offshore drilling platforms — among the most advanced in the world — will be the mainstay of South Africa's future exploration effort.

The Actinia and the Nymphea rigs — each worth about R80 million — will continue to probe the continental shelf for more gas or oil fields as Soekor, the State-owned exploration organisation, goes into gas production.

The Actinia arrived in South Africa in February last year after it was built in Japanese shipyards.

The Nymphea is expected in South African waters soon, after drilling operations at the other side of the world.

Soekor engineers visited Japan during the rigs' construction to oversee modifications that would enable the rigs to drill a larger area of South Africa's vast continental shelf.

The rigs were modified to drill in up to 500 m of water.

Engineers requested that the rigs' eight anchors be heavier — 20 tons each — to cope with the strong currents off the South African coast.

Four thrusters, or variable direction screws, were also fitted.

The platforms had to meet international requirements drawn up by the Norwegian Det Norske Veritas classification body and Britain's Department of Energy.

"The Norwegian body is responsible for structural construction and the British body for safety, comfort and working environment," said Soekor's liaison officer, Mr Like Leibbrandt.

The rigs are on "long term hire contract" to Soekor.

Dallas oil rig was hired to Soekor

The Sedco K drilling platform, owned by the Dallas-based South Eastern Drilling Company, was hired to Soekor.

Soekor, the oil exploration company, were the operators. They had an engineer and geologist on board to supervise operations.

Sedco, the contractors, supplied the crew, and the vessel was under the charge of a Sedco representative, known in oil field terms as the "toolpusher".

This is the standard arrangement for oil exploration.

"Most exploration companies don't build their own rigs — you hire one with a crew," said Soekor's Mr Bronek Karcz, drilling engineer.

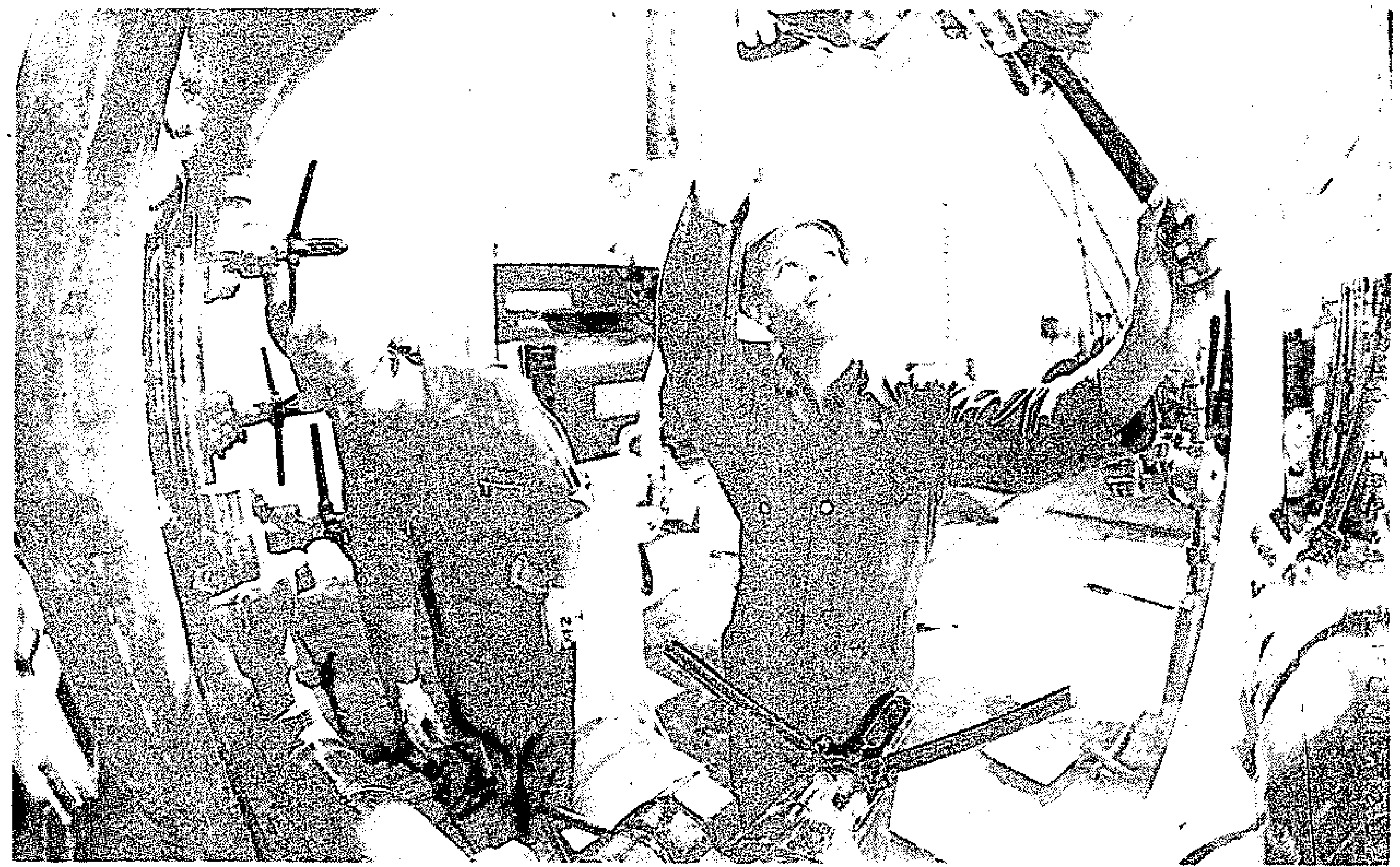
"The operators draw up the operations, and an engineer and geologist are sent to the rig to make sure they are done as per contract for Soekor.

"Assisting us, we have a number of people known as 'mud loggers' who work closely with the geologist. They are data collection technicians who collect all the information from the well.

The giant rig Sedco K arrived in January 1976. In November of that year, Soekor refused to confirm or deny that Sedco K had struck oil off Mossel Bay. But in December, oil fever hit the town after rumours from the rig's crew that they had struck the "best looking oil flow yet". In October 1982 it was confirmed that Sedco K had struck oil 110 km south of Mossel Bay. These pictures were taken aboard the rig:

LEFT — An operator monitors the controls and dials at the heart of oil exploration — the drill-room.

RIGHT — Riggers, who work 12-hour shifts, double-check pressurised pipes on the drill deck.



The long, long search for oil

Highlights of the oil and gas search:

1966

MAY: Soekor says the search for offshore oil will start in 1967.

JUNE: Natal, the South African Navy's survey ship, sails for the Agulhas Bank carrying specially imported equipment to begin intensive, but preliminary, soundings for oil beneath the sea.

AUGUST: Geologists are reported to be more optimistic about finding oil offshore than onshore. Prime Minister Dr Hendrik Verwoerd makes a major policy decision to spare no expense in making the country independent in terms of oil supplies.

OCTOBER: South Africa is told by an American oil executive that it will cost R2 million to sink each well on the 155 440 sq km continental shelf which stretches from the Natal north coast to the mouth of the Orange River in the Cape and extends to a depth of 200 m.

NOVEMBER: Oil experts talk about a possible search off the coast of South Africa and Namibia and concessions are granted to six major oil companies.

Officials of Atlantic Richfield Oil Company, which has R1 100 million in assets, say they

BONANZA!

24 HOURS

AN INVESTIGATIVE REPORT

By Stephen McQuillan

The quest for oil and gas in South Africa has left a trail of disappointment, excitement, false hope, expectation and frustration. Sometimes emotions have verged on hysteria whenever it was suspected that the country may be close to realising its dream of oil rigs, pipelines, and production platforms.

Natural gas and oil were always the glaring absentees from an impressive list of natural resources. They constitute a wealth so vital to the strategic interests of a country still alienated by other nations.

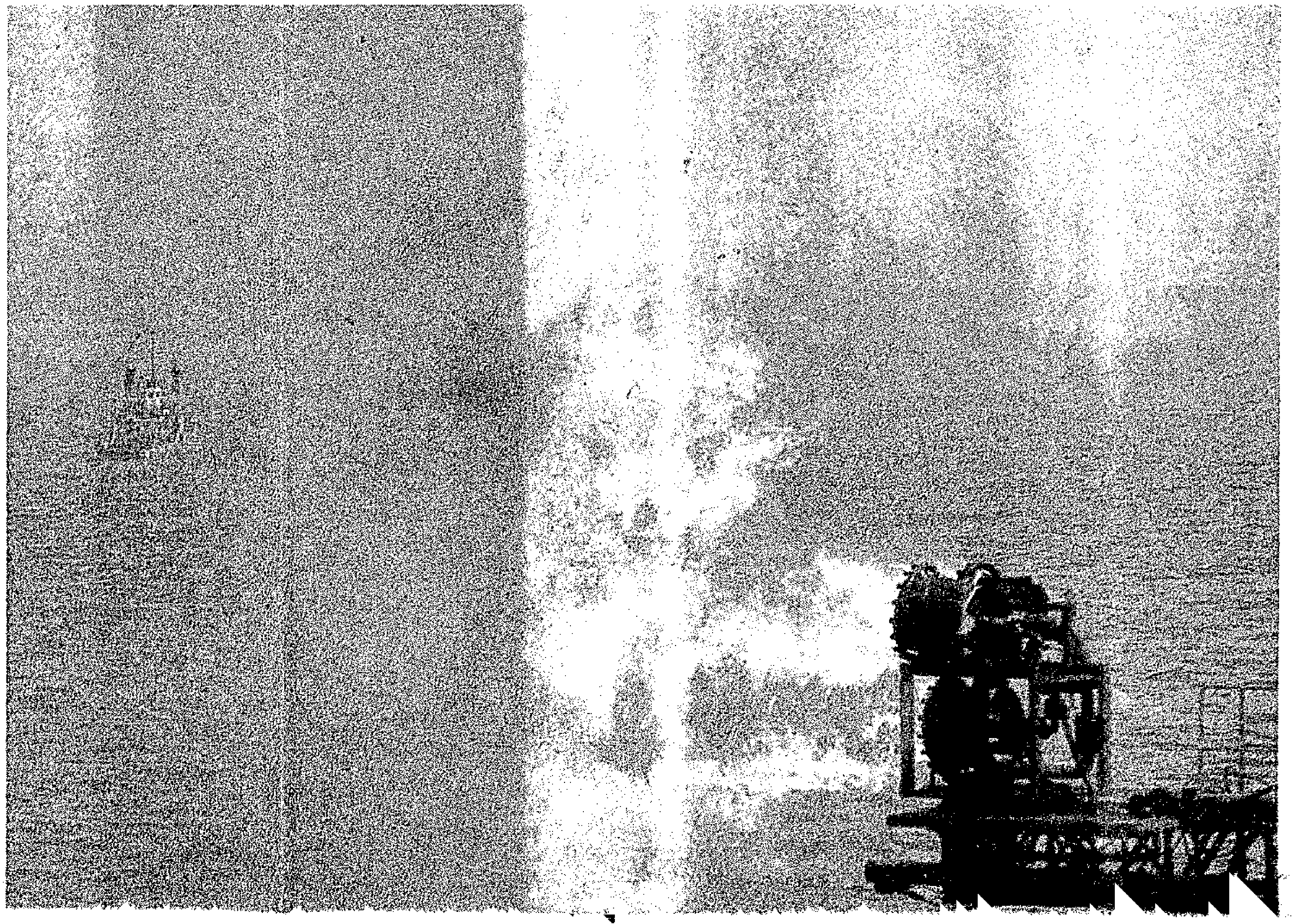
But these products now appear to be no longer a national dream — thanks to the Southern Oil Exploration Corporation (Soekor). After 19 years of sustained effort, indications are that the corporation is going into the oil production business.

Soekor was formed by the Government in 1964. Worried by international boycotts, it wanted the corporation to speed up the search for oil and gas.

Announcing the registration of Soekor, Minister of Planning, Mr J F W Haak, said the new corporation would lead to the biggest co-ordinated search for oil South Africa had seen.

Soekor would be financed from funds set aside for the development of strategic minerals and would work alongside the Department of Mines.

The corporation was allocated R10 million, and in



1979

AUGUST: About R151 million has been spent on the oil search.

NOVEMBER: Drilling rig Sedco 708 finds signs of gas in well K-A1 off the west coast of South Africa. It is the sixth well to be drilled off the south coast. The first, Kudu, was a potentially commercial gas producer and, of the remaining five, three were dry and two showed signs of gas.

1980

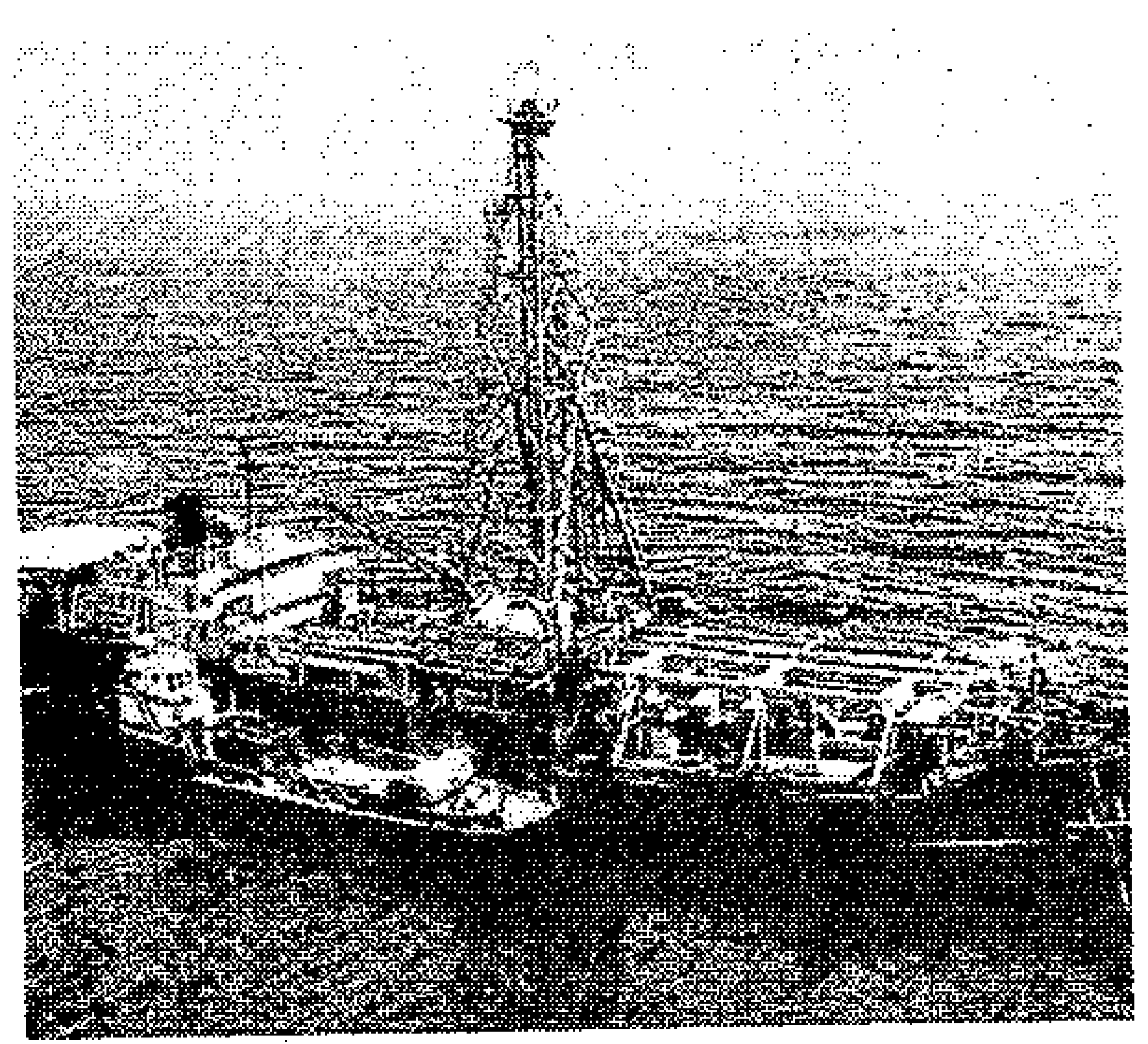
JANUARY: Soekor is reported to be studying an ambitious plan to use floating conversion plants to make methanol from gas deposits.

OCTOBER: Soekor finds gas off the Cape coast. Of the previous 12 wells drilled in the area, nine had encountered signs of gas.

DECEMBER: Soekor strikes oil and gas 80 km south of Mossel Bay in "significantly bigger quantities" than any find in the country to date. But experts say it will be a year before they know if the quantaties are big enough to warrant going into production. After spending an estimated R274 million and drilling 51 holes, hopes are high that the country faces an offshore oil bonanza.

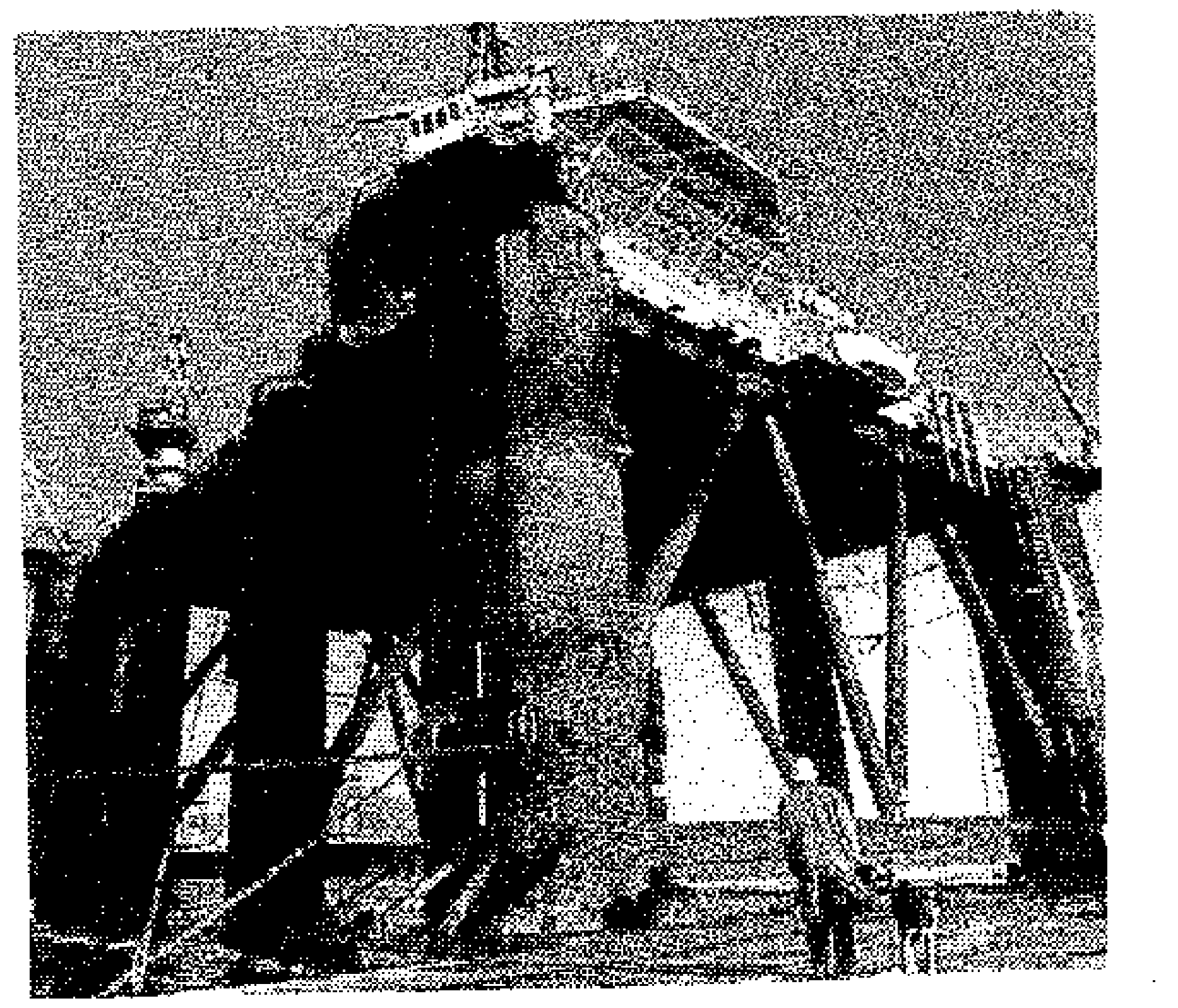
Soekor puts the find under wraps, saying that no more interim statements will be made

July 1966 the tranquility of the little Karoo town of Murraysburg was disturbed by the strident roar of a giant oil drill. Soekor was in business . . .

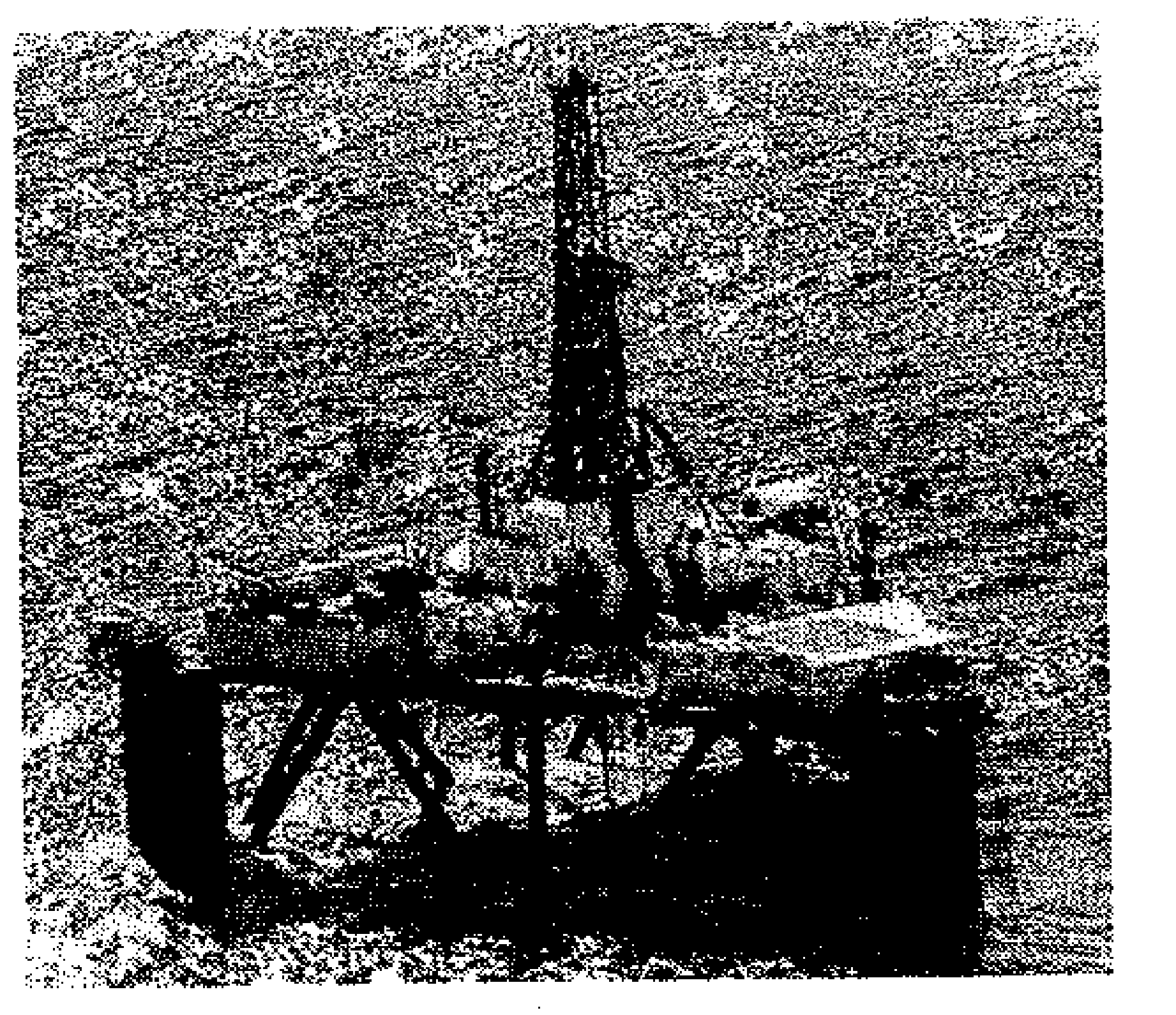


The Glomar Sirte, the floating platform which first drilled for oil off Plettenberg Bay.

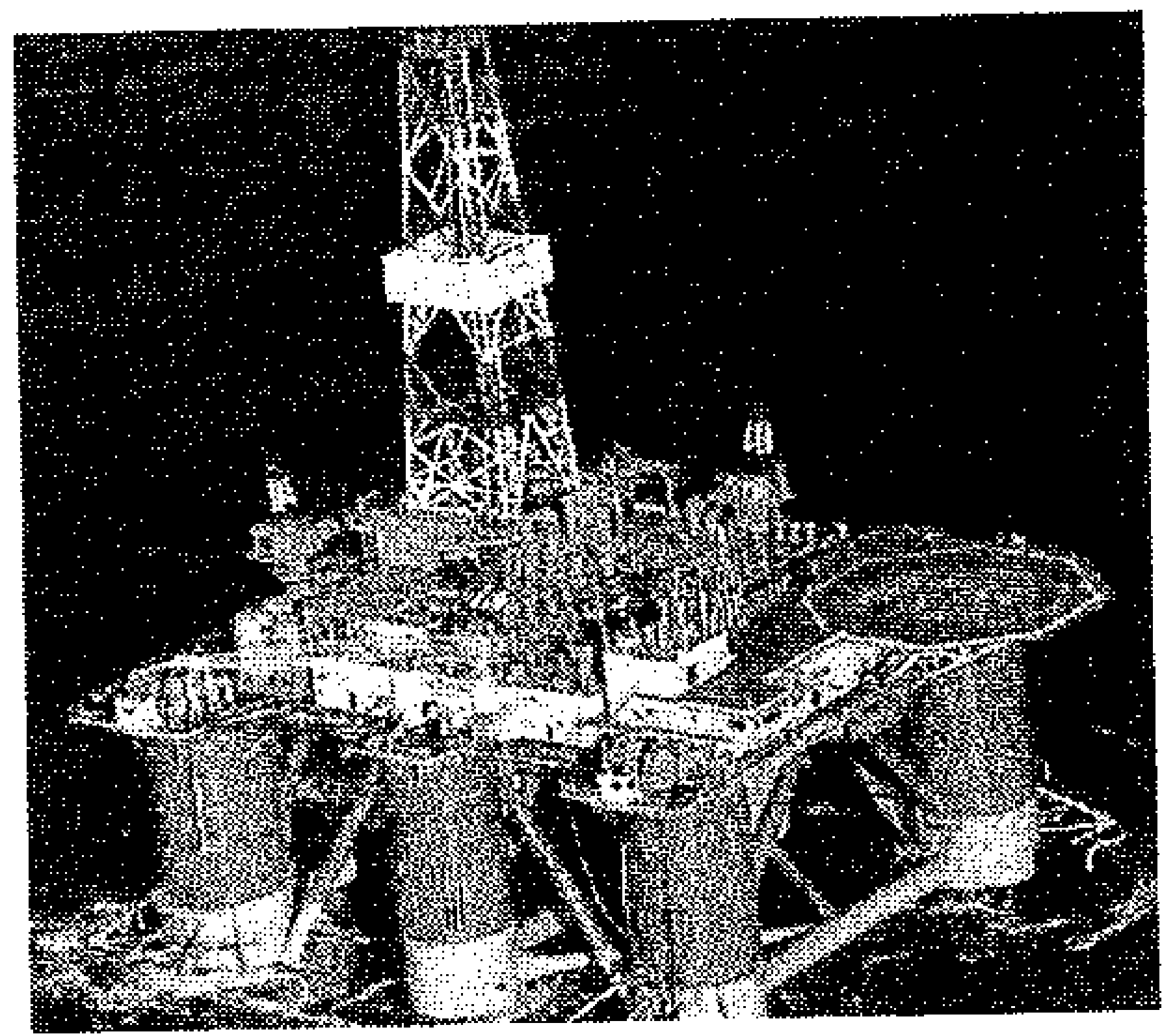
Flaring gas spurts from the Sedco K during well testing as the oil rig supply ship stands-by in case of accident.



The American rig Sedco 708, which operated for a short time off the west coast.



Sedco K . . . the rig presently leading South Africa's exploration effort.



One of the new Japanese-built giants, now operating in South African waters — the R80 million Actinia.

will be "taking the greatest risk" ever" by drilling for oil off the coast of South Africa. Millions of rands will be spent on drilling in a 21 500 sq km area south of Cape Agulhas. After 18 months of surveys, the company decides to bring in giant sea rigs, each worth about R5,5 million, to start the search.

A consortium led by Total expects to start their search for oil in a 23 160 sq km concession area the following April. Their area runs east of Knysna, past Port Elizabeth and ends off Grahamstown. Detailed final agreements between Soekor and offshore concession holders are still to be signed.

1968

FEBRUARY: It is disclosed that the offshore search will be concentrated in two areas near Mossel Bay and Plettenberg Bay following detailed analysis of initial seismic tests.

MARCH: The American oil giant Gulf joins the search for oil in Zululand, considered the most promising area on land for oil.

JULY: Land areas around Port Elizabeth are considered to be as promising as Zululand. Three seismic survey ships are kept active in South African waters by prospecting companies.

OCTOBER: Glomar Sirte, a 127 m drilling ship belonging to Superior Oil, is operating off the coast. Costing R30 000 a day to operate, the ship is the first vessel involved in major drilling work. And, according to Soekor, the development comes three years before it was scheduled.

1969

FEBRUARY: First reports filter through of South Africa's first offshore gas and oil strike at well Ga-A1 56 km south of Plettenberg Bay. It is later confirmed that the strike was made by Glomar Sirte.

MARCH: The Agulhas Bank offers promise of more discoveries at sea, says the Minister of Mines, Planning and Health, Dr Carel de Wet, in Johannesburg.

The yield of the first borehole sunk by Glomar Sirte is 25 million cu ft a day from an upper zone and 10 million cu ft from a lower zone. The gas is found to be suitable for industrial and household heating, for the generation of electricity or conversion to liquid fuel.

The find is hailed as an important step forward in South Africa's 60-year search for oil. Soekor has so far spent R27,5 million on exploration.

Nineteen sea concessions, streching over an almost continuous belt from Mozambique round the South African and Namibian coasts, now cover 290 000 sq km.

Glomar Sirte, known to oilmen as "Dirty Girte", moves to a site off Mossel Bay on instructions from Superior Oil.

MAY: Superior Oil wants North-Sea-type submersible rigs to drill near the site of the oil and gas strike off Plettenberg Bay.

DECEMBER: South Africa's second seabed oil probe starts. The drill on the giant floating rig Ocean Traveller is "spudded in" and begins round-the-clock operations off Plettenberg Bay. The cost of the offshore search reaches R8 million.

1970

JANUARY: Ocean Traveller, an 11 000-ton semi-submersible rig, operates off Plettenberg Bay for six months and sinks two wells at a cost of R5 million.

APRIL: Ocean Traveller strikes gas — the second strike offshore and the third well, Ga-A3, to be drilled — 48 km off Plettenberg Bay, five km from the spot where Glomar Sirte first struck oil and gas. It is later found to be non-commercial. The previous well, Ga-A2, was dry.

JUNE: A workman dies after an accident on Ocean Traveller. South Africa's offshore oil search is extended to the eastern Cape coastline, from the mouth of Storms River to Great Kei River.

JULY: Soekor announces details of a R17 million offshore drilling programme covering a 1 450 km stretch of coast from Cape Agulhas to Tugela River. The biggest and most modern semi-submersible rig in the world, Trans World 61, is contracted to drill offshore between Knysna and Mossel Bay.

AUGUST: Trans World 61 arrives in South African waters.

SEPTEMBER: Trans World 61 is extensively damaged by high seas. The offshore oil probe almost comes to a halt.

NOVEMBER: The cost of the South African oil search is put at R38 million, of which Soekor pays R23 million.

DECEMBER: Rigs south of Mossel Bay strike gas — but not in big enough quantities. The Government earmarks R15 million for Soekor for oil probes on and off shore during 1971.

1971

JUNE: An American company is awarded a large offshore concession area between the Orange River mouth and Brak River for oil exploration over three years. The cost will be R2,5 million.

1972

APRIL: Parliament is told that the search for oil has cost about R62 million since 1964. The offshore cost is R30 million, most of which had been met by private companies.

JUNE: Soekor is awarded oil prospecting concessions off the coast of Namibia.

AUGUST: Offshore oil exploration is to resume off the southern Cape coast with the giant American drilling rig Sedco 135. It is hired by Soekor to sink four boreholes costing R4 million. All four were later found to be dry.

1973

JUNE: The cost of the oil search is put at R70 million.

DECEMBER: Soekor enters into negotiations with the Hunt Company. It held concessions off the coast of Mozambique and Soekor wanted an interest in them. But the negotiations were not finalised because Mozambique gained independence soon after.

1974

APRIL: The second potentially commercial offshore gas well, Kudu 9a-A1, is drilled by the Sedco 135 on contract to the Chevron Group. The well, located off the mouth of the Orange River in Namibian waters, is not adequately tested because of the high pressure of the gas.

AUGUST: Soekor announces that deep sea areas off the South African coast will be explored from 1976.

SEPTEMBER: It is announced that Dr Piet J van Zijl will be appointed general manager of Soekor from January 1, 1975.

DECEMBER: Soekor reveals that its representatives will visit Brazil in January to follow-up an important lead in the search for South African oil.

Dr Quass, retiring managing director of Soekor, says an oil field can be expected to be found offshore south of the Orange River.

1975

MAY: Soekor prepares to drill eight wells off the southern Cape coast. Another rig, Sedco K, is scheduled to arrive the following January on a two-year contract.

SEPTEMBER: Soekor announces it will spend at least R75 million over three years on the offshore search. Dr van Zijl says two rigs have been contracted to drill a series of wells off the west coast and along the Agulhas Bank.

1976

JANUARY: Sedco K will carry out a R50 million drilling programme over two years. The programme in fact cost R26,8 million. Offshore oil exploration costs are now running at R30 000 a day. Sedco K starts drilling in what is seen to be the most hopeful project to date.

JUNE: Parliament is told that the total costs to the country of the oil search on land and sea are R100 million.

NOVEMBER: Soekor refuses to confirm or deny that Sedco K has struck oil off Mossel Bay.

DECEMBER: Soekor announces that 15 more holes will be drilled between Port Elizabeth and Struisbaai. Oil fever hits Mossel Bay after rumours from the crew of Sedco K that they had struck the "best looking oil flow yet".

1977

JANUARY: Sedco K starts drilling about 112 km south of Mossel Bay. After a largely unsuccessful onshore oil search, Soekor's programme is reported to be drawing to a rapid close. The offshore search is now costing R55 000 a day.

Reports say that South Africa is sitting on a tremendous natural gas strike off the coast of Namibia but that development has been frozen because of the impending independence of the territory. Experts describe it as potentially the fifth biggest gas field found.

APRIL: Parliament is told that the land search is almost certain to be abandoned later in the year.

DECEMBER: Hopes are raised after the Government confirms a gas strike by Sedco K off Mossel Bay.

1978

JANUARY: Dr van Zijl says the country needs one large oil field or a few small ones by 1985 when, he predicts, there will be another oil crisis.

1981

FEBRUARY: Two R80 million rigs are to be built in Japan for use by Soekor.

APRIL: South Africa is reportedly on the brink of making what could prove to be the most promising discovery to date. Sedco K is reportedly drilling a favourable well, F-A5, about 75 km south of Mossel Bay. Soekor refuses to comment. It is later found to be a non-commercial producer.

1982

JANUARY: Dr van Zijl says Soekor's offshore search in 1981 was the most promising so far. The country now has offshore gas reserves of 400 000 million cu ft. It is the result of a 16-year search that had cost R300 million. But it is still only 20 percent of what is needed to develop a new industry.

APRIL: A R10 million budget cut for the Soekor exploration programme coincides with a decision to cancel operations with a third drilling rig, scheduled for 1983.

AUGUST: Soekor discloses that 32 of the 71 wells drilled at sea are dry. Two have produced oil, but not in viable quantities, and four have shown signs of oil. Of 15 wells that have produced gas, four are commercially exploitable.

OCTOBER: Sedco K strikes oil 110 km south of Mossel Bay. Experts say that it is by far the biggest strike yet in an area long thought to be promising. It is a good quality oil and the well is capable of producing 900 barrels a day.

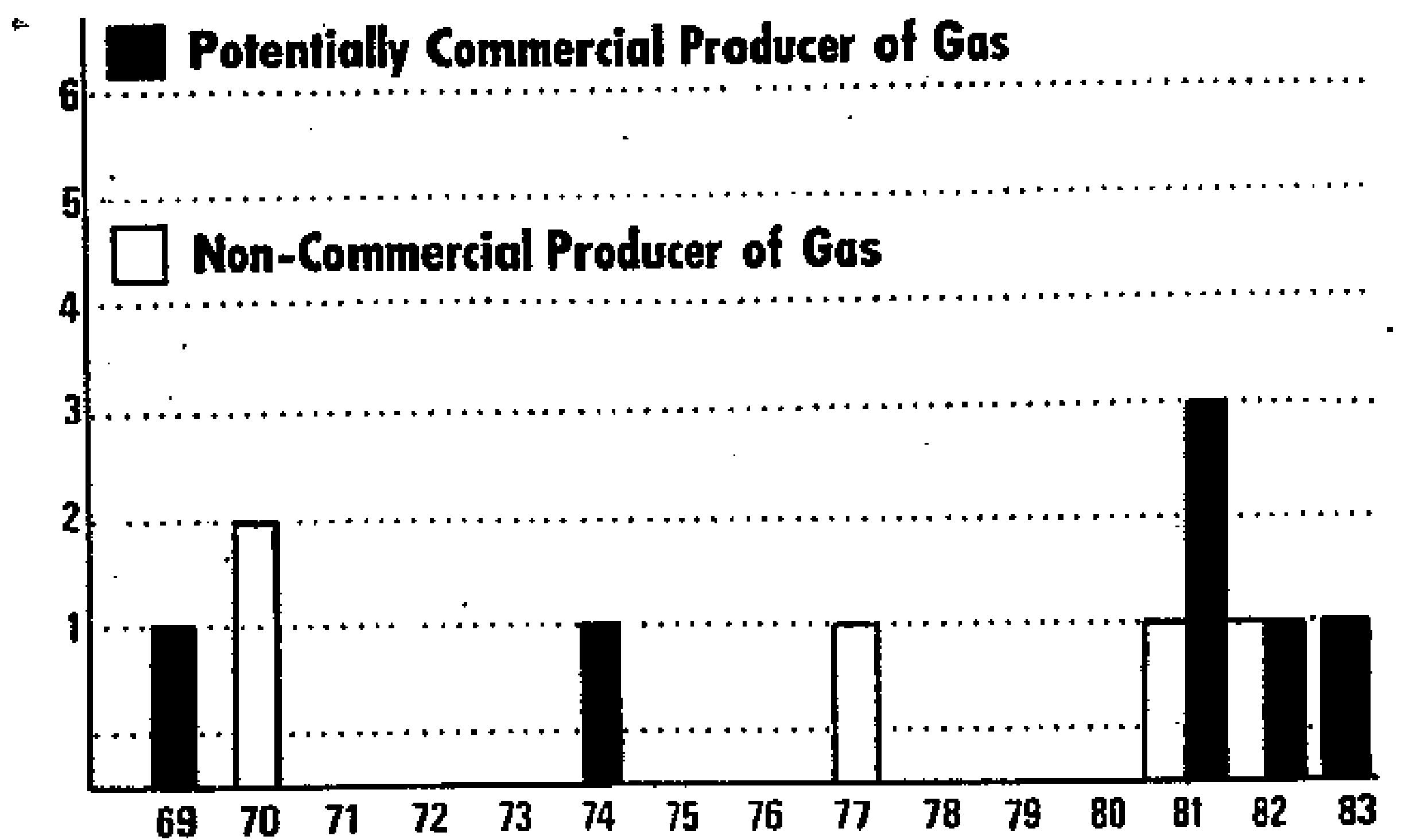
1983

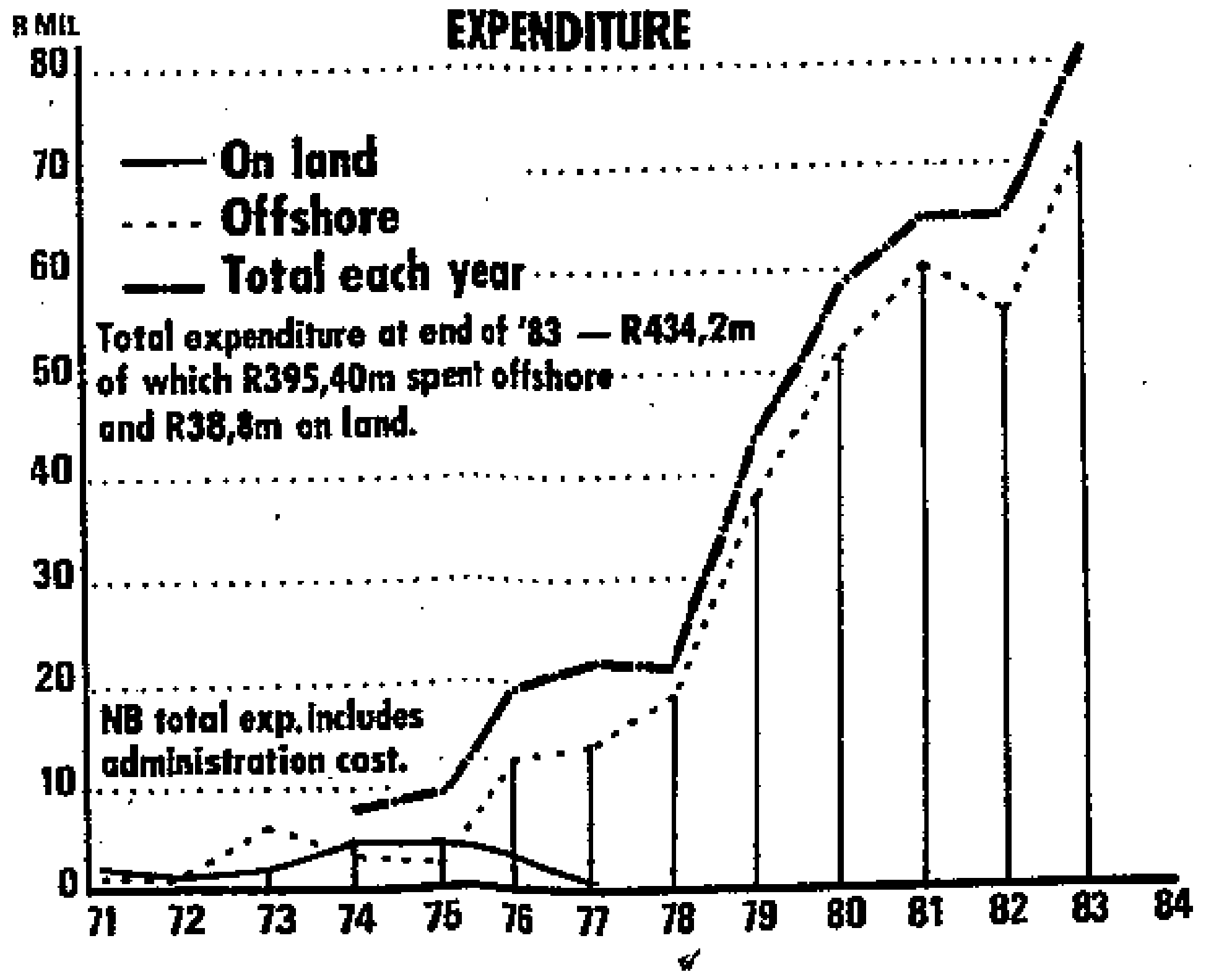
JANUARY: A multimillion rand accident sets back development of what is hoped to be the country's first commercial field. A 215-ton piece of equipment, a blow-out preventer stack valued at R2 million, falls into the sea from Sedco K. Experts are flown in from Scotland to salvage the stack, but efforts are eventually abandoned. The cost of the oil search is put at R430 million.

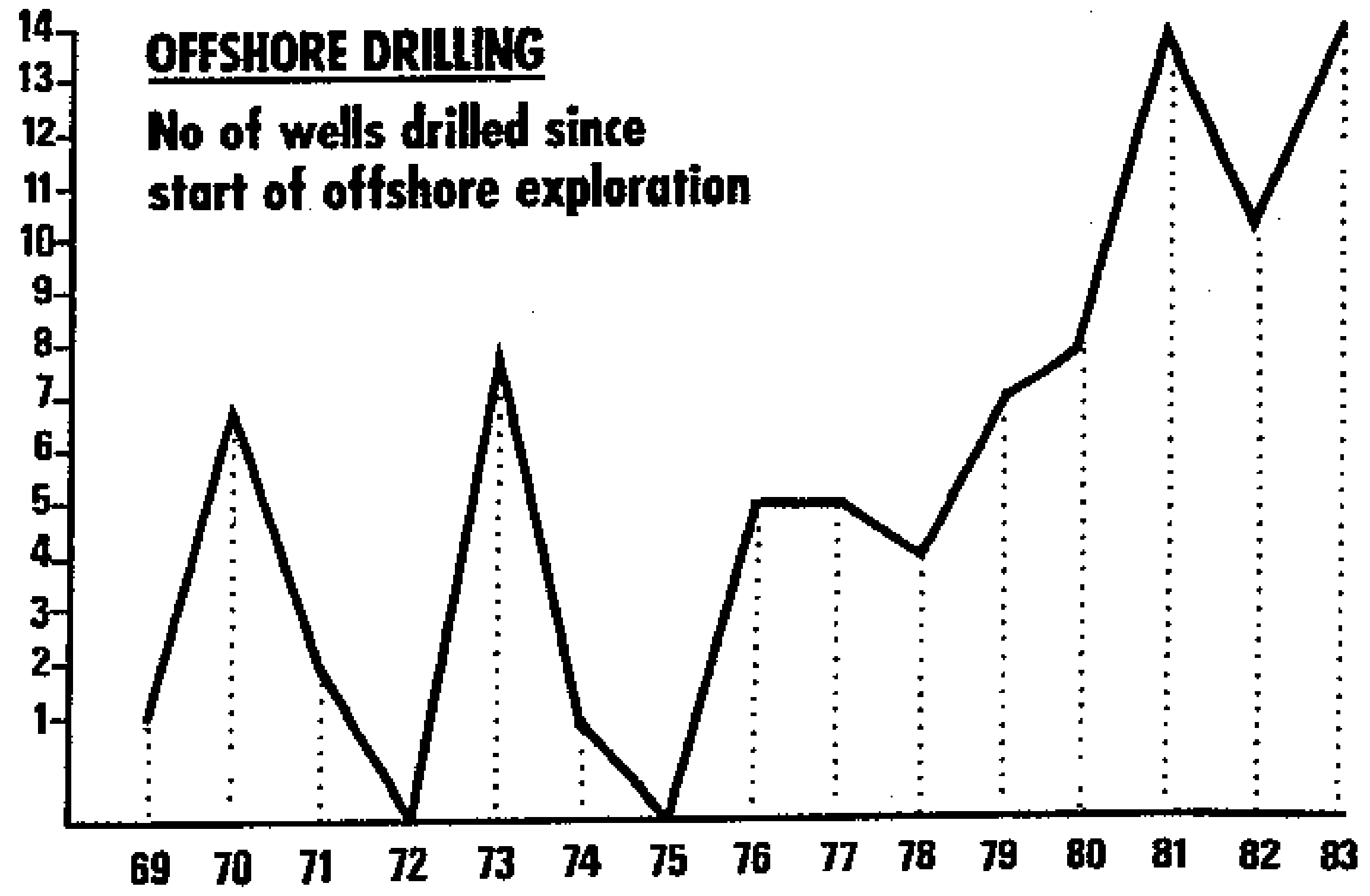
FEBRUARY: The new R80 million Japanese-built rig Actinia arrives in Durban to drill 28 km east-north-east of the city. Dr van Zijl says South Africa is on the verge of oil or gas production.

1984

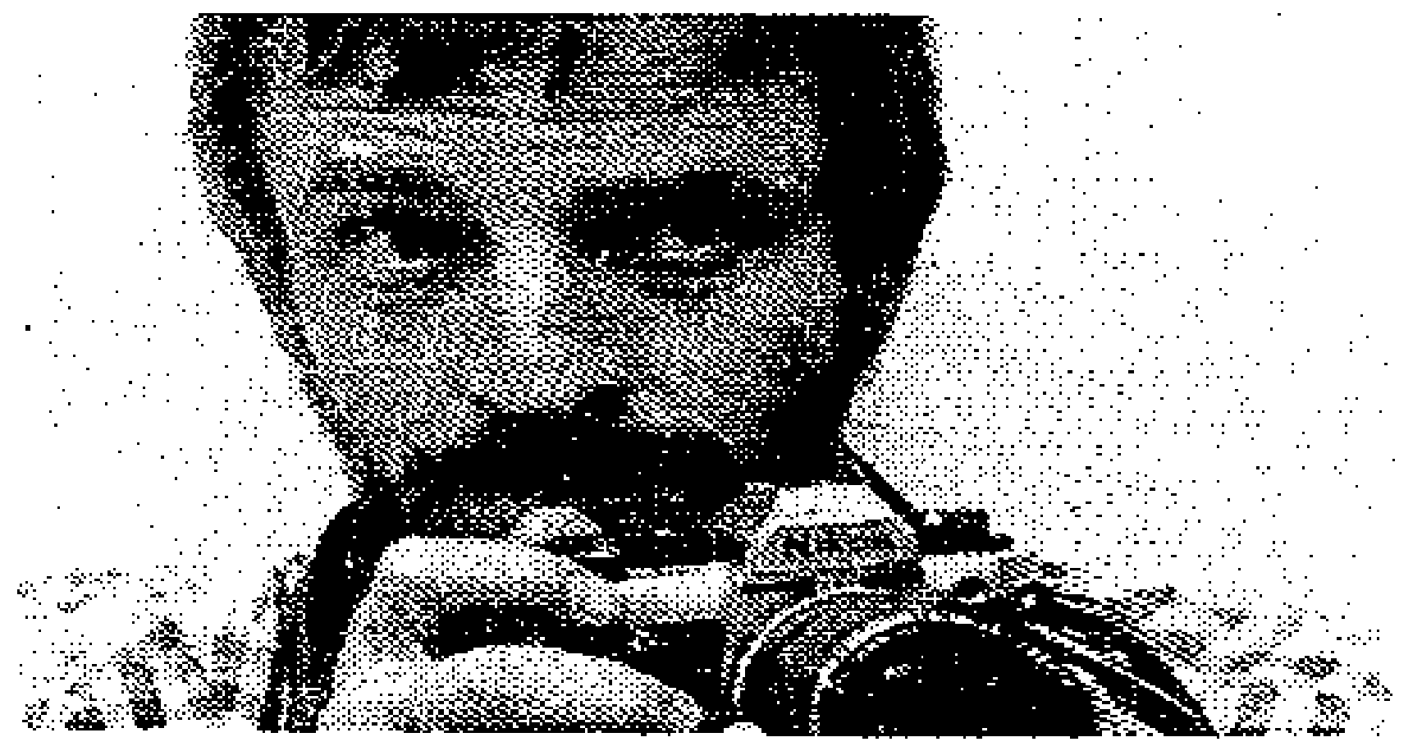
MARCH: Soekor announces that expenditure on the oil search had reached R434,2 million by the end of 1983. About R395 million had been spent on the offshore search and R39 million on inland exploration.







STEPHEN MCQUILLAN (left) reports from the frontline of South Africa's hunt for oil from aboard the deck of the oil rig Sedco K. Chief Photographer CLIVE LLOYD (right) took the photographs.



Life in the middle of nowhere

A giant workhorse of the oceans, a veteran of the cruel North Sea, heaved up in the five-metre Indian Ocean swell.

Towering 30 storeys, it gleamed red, white, yellow ... an island of mechanisation anchored in the middle of nowhere.

Its 75 occupants worked, ate, slept in a round-the-clock routine which merged day into night, a cycle that was as smoothly efficient and continuous as the swirling teeth of their drilling bit.

They lived in an environment of danger, alienation, boredom and excitement, a place where people spoke of money in millions and where a visit to the toilet could be measured in rands.

They ate like kings and worked "like dogs", slaves to time in a world where each minute was worth R62.

This was the Sedco K, semi-submersible offshore exploration rig, 3 500 tons of hi-tech power and sophistication — the backbone of South Africa's offshore search.

"There's a big swell today," explained Soekor drilling engineer Mr Bronek Karcz. "It's probably eight metres — and that's exceptional. You can feel the movement."

The rig was moving in an awkward motion, its three legs or caissons riding the swell unlike any ship. But it could hardly be compared with the effect the sea was having on the rig's standby supply ship. It was being thrown over the swell and almost disappearing as it crashed through each trough.

The Sedco's mammoth anchors, three on each caisson, held it fairly stable over the well which started about 110 m below. "There is lateral and horizontal movement all the time," said Mr Karcz. But motion compensators — like huge shock-absorbers — and swivel joints allow the rig to move and the drill pipes to remain almost stationary.

"You can stand a lateral movement of three to five metres either way without affecting drilling, depending on the depth of course." The drilling bit was down to a depth of nearly three km. "Normally, a rig of this size can drill to 4 500 m below the seabed," said Mr Karcz.

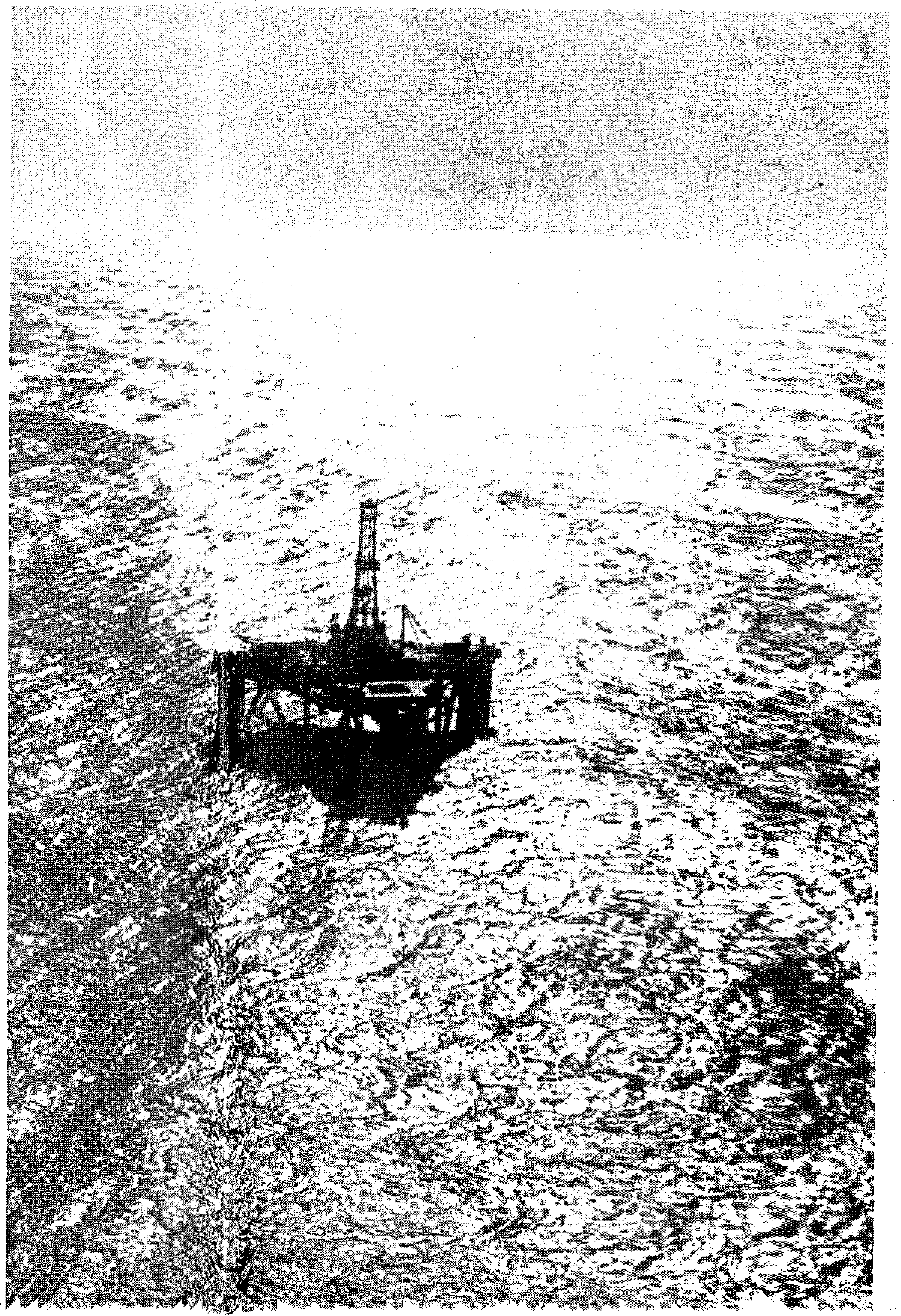
The Sedco K is submerged to a depth of about 26 m while drilling and lifted to about 20 m while on tow.

The rig can accommodate 84 people. "But when we are drilling ahead, our crew is normally about 75," said Mr Karcz. "When we are testing a well, we need the full capacity."

About 60 percent of Sedco's crew were recruited locally, but the

The barge engineer writing a letter home.

A chef serves some of the hotel-style food available aboard the Sedco K.



The da
gas zo
out an
burned

Australian toolpusher Pet
Allen sat on the edge of the de
and blew a column of cigaret
smoke across the office.

As superintendent in char
of the Sedco K drilling rig,
was the man at the top.

"With the type of people y
have in the oil business, the
are always some great stori
around — and I guess you'
looking for one," he said.

We were.

It started between the coa
of Australia and New Guine
"We drilled into a gas zone th
kicked on us — in other words,
blow-out," he explained. "That
when the formation pressure
greater than that of the hydr
static fluid in the hole.

"The procedure in such a sit
ation is to hang-off — close o
the big valves on the sea be
and circulate heavier mud. B
the valves cut loose.

"The derreck fell over and th
well started blowing out. W
had to evacuate the rig. Abou
10 minutes after we'd left, th
rig caught fire and was severel
burnt.

"The rig was moved off loca
tion and taken to Singapor
where it was repaired.

"It is the only case I know o
where a rig has had a blow-out
burnt down, been towed away
and repaired and went back t
drill a relief well which kille
the well which caused the prob
lem," said Mr Allen, who ha
worked offshore in the North
Sea, Canada, the Far East an
the Gulf of Mexico.

But advances in technology
since that accident in 196
brought greater safety to off-
shore drilling platforms.

"Accidents still happen, bu
they are probably caused by a
lack of maintenance on the con-
tractor's behalf and a lack o
fore-sight on the operator's be-
half.

"But we have a well-organerally contracted overseas and had two-year contracts. "They are tied to the rig and move around with it. The majority on this rig comes from North Sea countries like the UK, the Netherlands etc. But there are New Zealanders, Americans and Australians."

Most of the crew worked a normal schedule of two weeks on and two weeks off. They worked 12-hour shifts from 12 am to 12 pm and vice-versa. Skilled workers also had six weeks holiday each year during which time they were flown to the country from where they were contracted.

Recreation centred on home movies. The crew had access to a film library of about 100 movies in the auditorium. "We don't know what we'd do without the movies," said one crewman. The crew was also able to pick up SABC TV.

Mr Karcz said other recreation was limited because the Sedco K was a fairly small rig. But the crew had a gym inside one of the caissons, complete with weights, bicycles and other exercise machines.

Crewmen were also able to telephone their families via radio to Cape Town.

The fishermen of the crew were allowed to fish off the rig because it was not self propelled. "On other rigs with thrusters, the fishing line could get caught up and cause damage," said Mr Karcz.

"Fishing is a keen hobby here. At one stage we had to stop it because the chaps were catching so much they were taking 50 kg off the rig at a time. It was becoming too much weight for the helicopter.

"They catch yellowtail mostly, tunny, kingklip and squid and the chaps occasionally land a shark."

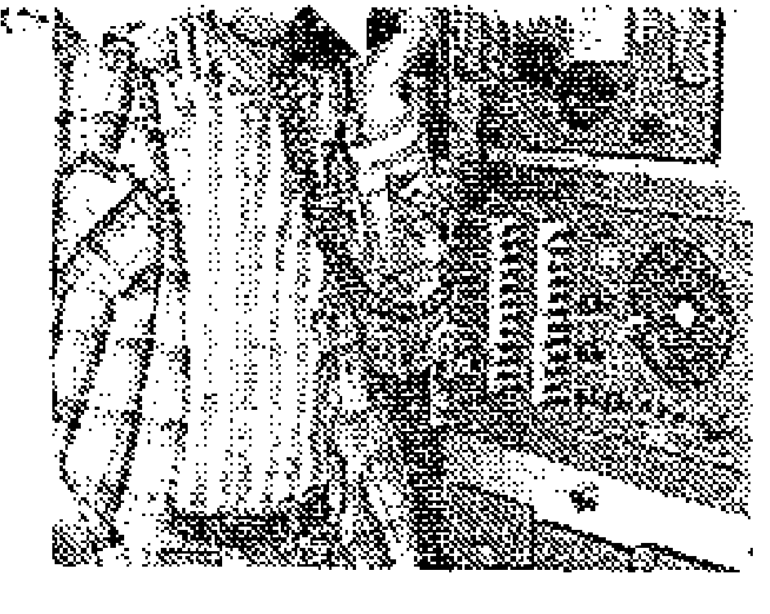
There had been cases of men falling overboard, but never while any sharks were in the vicinity.

The galley provided four meals a day — the equivalent of at least three-star rating — at around 6 am, 12 noon, 6 pm and midnight.

The hotel-style food could be chateaubriand, kingklip or lasagne with four vegetables, salads, soups and four types of sweet for lunch one day, followed by a just-as-substantial meal a few hours later for dinner.

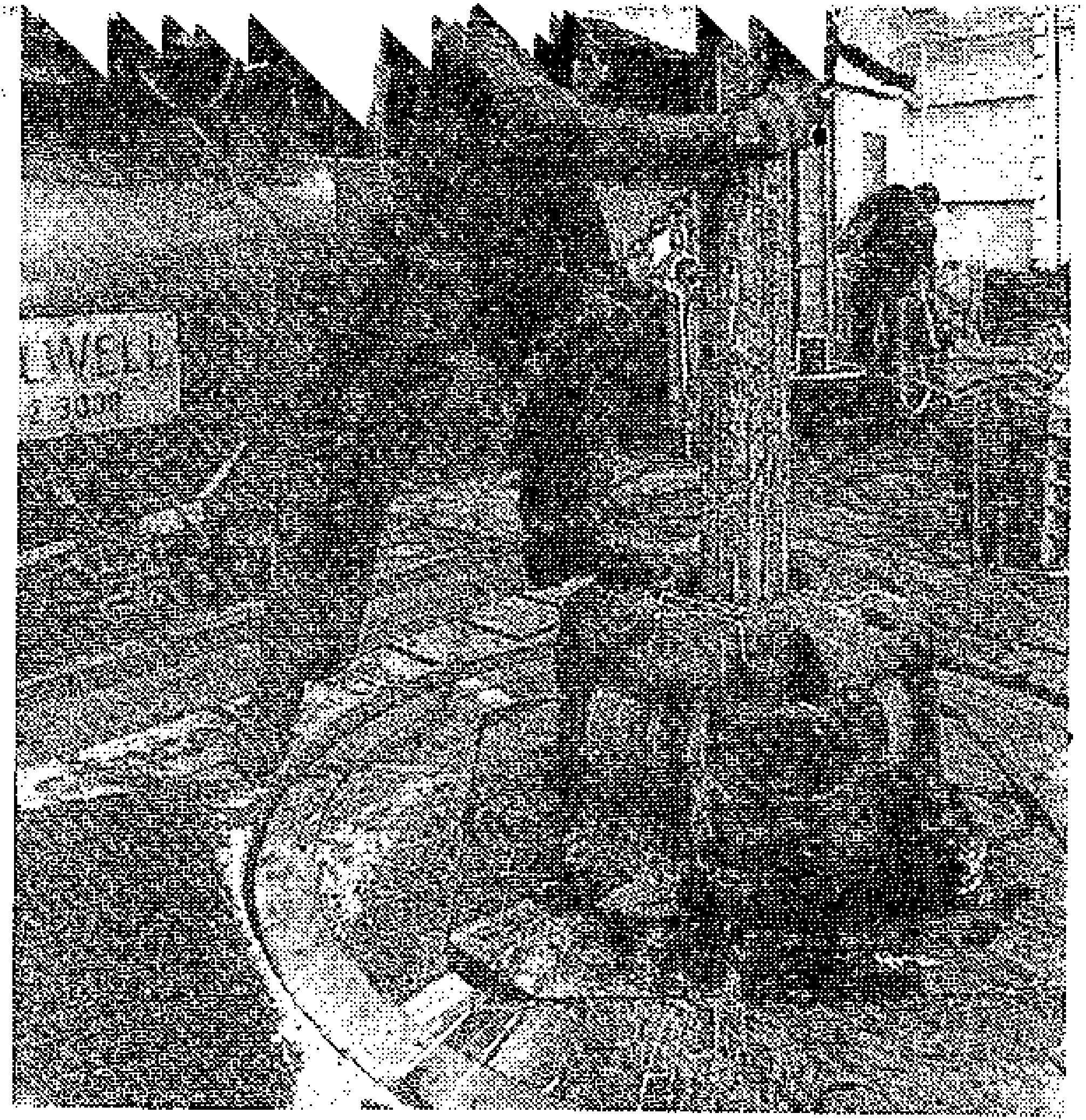
"They can eat as much as they like and snacks, cheese and crackers, ice-cream, coffee etc is available 24 hours a day," said Mr Karcz. "Between nine in the morning and three in the afternoon pancakes, sausage rolls, cakes and fruit are available."

Mr Karcz said the rig had a friendly atmosphere. "The chaps laugh and joke and everyone seems to get along with everyone else. You cannot afford to argue or clash with anyone. You live in each other's pockets."

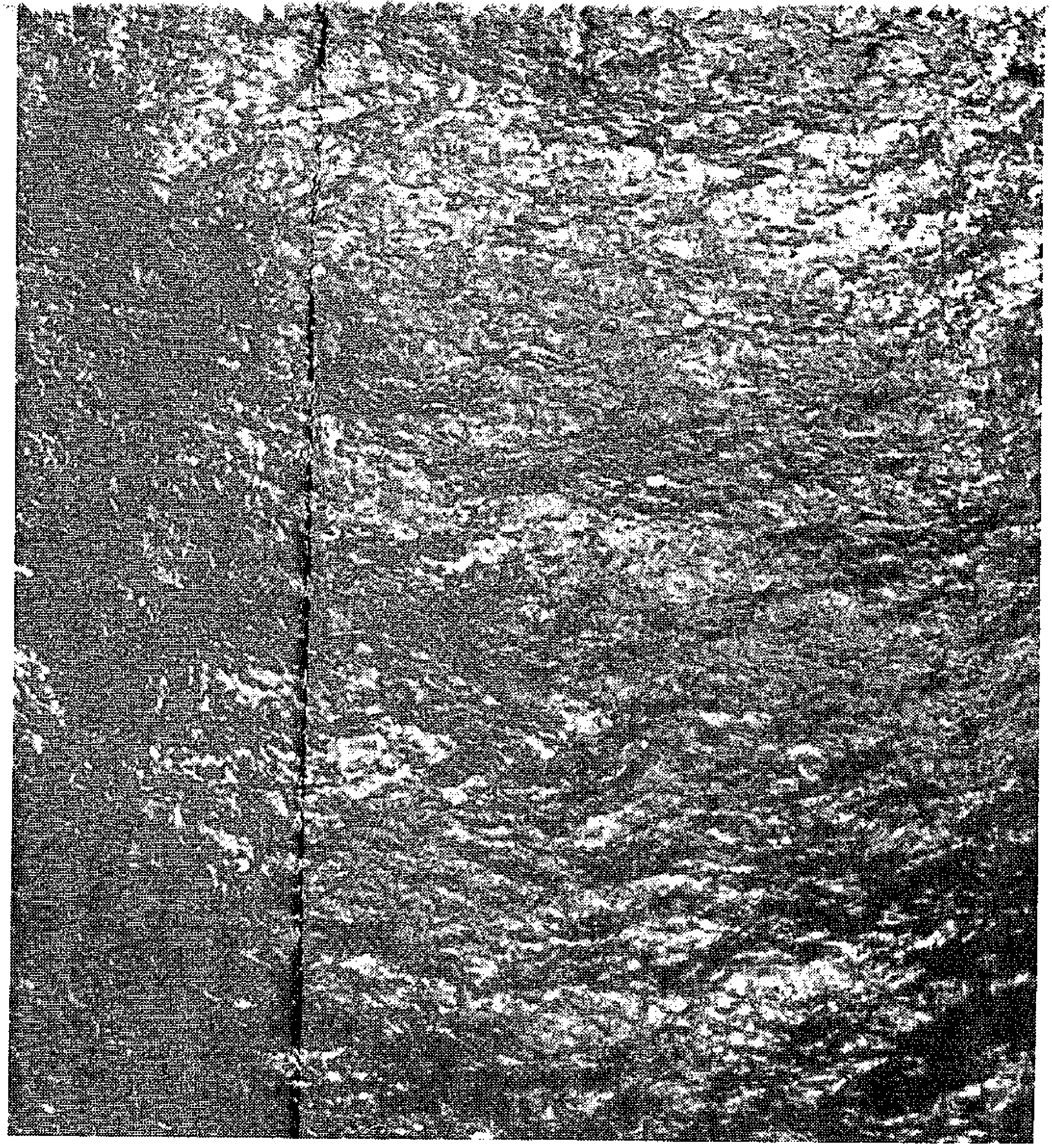


The radio operator making a call to the coast.

A crewman discussing the medical equipment.



'Action on the drill floor . . . a rigger preparing for the hoisting of drill pipes aboard the Sedco K.



An island of mechanisation anchored in the middle of nowhere . . . the Sedco K drilling ahead in South Africa's first potentially commercial gas field.

and liaison between Sedco and Soekor is excellent — this is one of the better drilling contracts to have in the world and one of the nicest environments in which to work."

The drilling programme in South Africa was going well. "I guess there's a lot of dispondancy in South Africa because of the number of negative results we've had. But one must remember that during the North

the shipyards of Port Arthur, USA, in 1973 and worked with the rig in the North Sea.

"Being transferred here was like coming home. There were still a few old hands around and I knew the rig quite well," he said. "I have a special feeling for this rig because I feel I was there at its conception — nine months before it was finished.

"This rig is probably one of the best little units in the fleet."

Loneliness of the far-off oilmen

Divorce is an occupational hazard of offshore exploration. Toolpusher of the Sedco K, Mr Peter Allen, said there was "a tremendous number of divorces" in the oil business. Wives who stayed with their husbands in a happy relationship for 15 or 20 years were remarkable people.

"It takes a special breed of woman," said Mr Allen, married with children. "The problem is that while you are away the wife becomes the mother and father and when you get home, the husband's authority is no longer there."

Most large oil exploration companies were offering their employees "communter status" which meant a person could live in the country of his choice and be flown home every month.

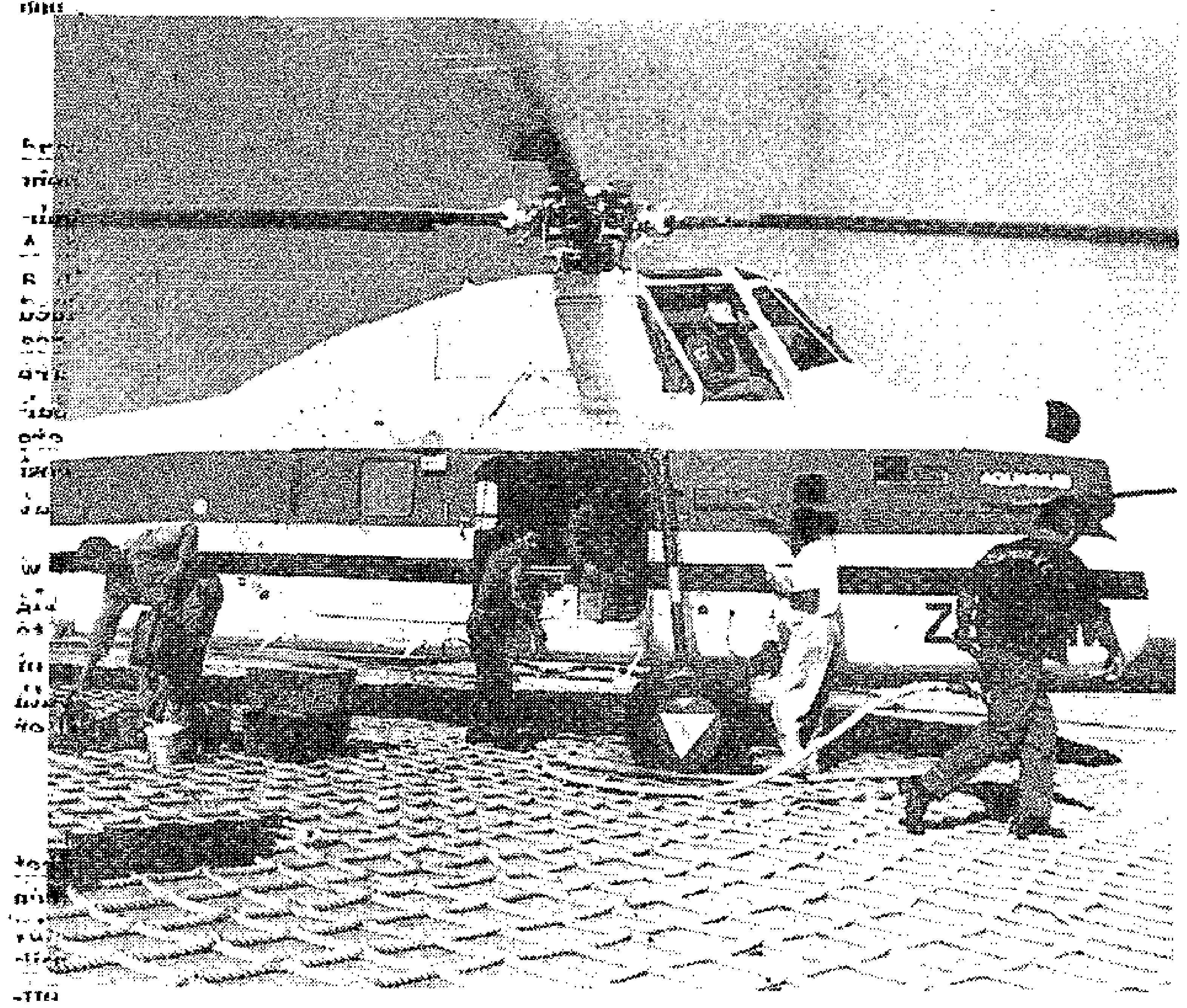
"But my family has followed me around the world up until now," said Mr Allen. "I saw them last week in Dallas. You work 25 days and have 25 days off. After that time the family gets pretty tired of you and you get pretty tired of them."

But most men with the Sedco K were locals on contract whose wives and families lived in Cape Town. They worked for either seven or 14 days, then took the same amount of time off.

"It also takes a special breed of man to work on a rig. We have a cross-section of the community on this rig — engineers, platers, students and many others.," he said.

"And there's no doubt that the rigs bring out the best in men and generate a feeling of commitment. You find if you run into a problem, an otherwise mundane character rises to the occasion and saves some drilling time — and that time, of course, is all important."

'Just as scary as flying in a war'



Equipment and men are off-loaded from a 14-seater Sikorsky helicopter on the deck of the Sedco K.

The helicopter came down low over the wild ocean, spray whipping across the cockpit and wheels almost skimming the waves.

Underneath, a crippled Taiwanese tunny boat with about 20 crew pitched and heaved like a cork in the 15-metre swell — an up-and-down movement that reached almost five storeys.

The Sikorsky S-58T, captained by Karl Zehrt (34), kept its hovering position over the boat's deck, waves occasionally towering high above the helicopter.

A freak wave suddenly threw the boat high, almost colliding with the belly of the chopper.

There was a second helicopter at the scene. Its winch cable had become snagged on the boat's safety rail. One mistake could have meant disaster.

Ten of the boat's crew were winched to safety in 20 minutes before the helicopters left with just enough fuel to return to the nearest landing strip.

That air-sea rescue drama was just one of a series experienced by Captain Zehrt and other pilots with Court Republic Helicopters whose round-the-clock emergency standby and close links with the National Sea Rescue Institute (NSRI) lead to two or three such rescues a year.

The helicopters also privide the vital link between land and Soekor's off-shore oil exploration operations.

"We haven't had that kind of drama involving the rigs," said Captain Zehrt, operations manager for the Soekor contract. "But we have had close shaves in other situations during our time with Soekor.

"In the tunny boat incident, south of Plettenberg Bay, it was a very risky operation and frightening when one looked out of the cockpit only to see the next wave above you.

"We tried to keep a steady height over the the ship. As the swell lifted the boat, we lifted the helicopter. When it went into the next trough, we went down with it."

But the helicopters' day-to-day routine revolves mainly around oil-rig service operations.

The American-built helicopters with two 1 025 hp turbine engines can ferry 14 passengers to or from the oil rigs or airlift emergency supplies. They are ideally suited to flying over sea because twin engines offer a greater degree of safety, say pilots.

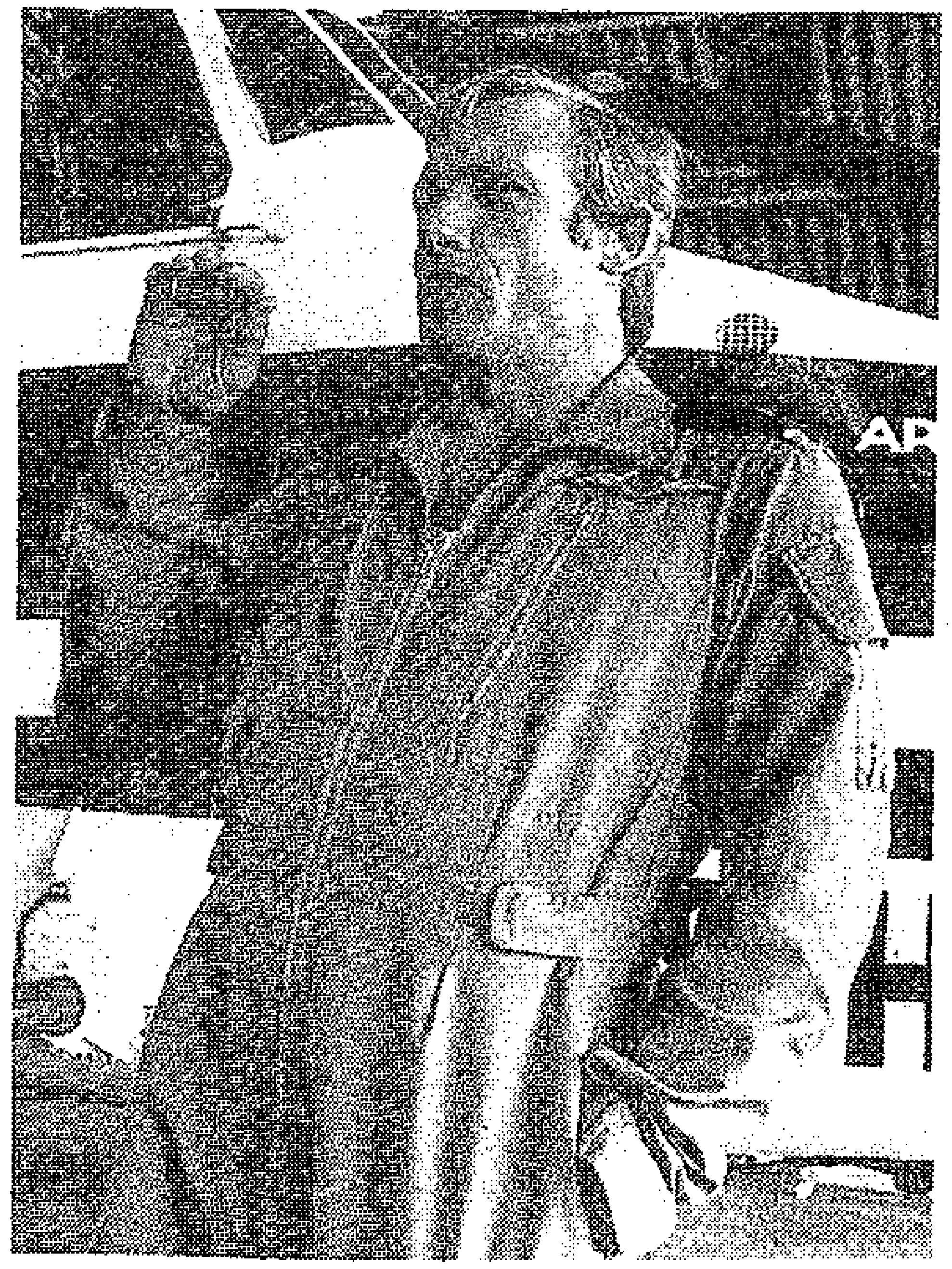
Captain Zehrt, who has been flying since 1979, spent 18 months training with Impala jets of the SAAF. He later saw active service on the border flying Alouette helicopters.

"The few search-and-rescue operations we carry out involve flying in atrocious conditions — strong winds and heavy rain — and I would say this can be just as scary as flying in a war situation," he said.

One of the few incidents involving a Soekor emergency occurred last Christmas Day when a crew member of an oil rig support ship had an arm cut off and one leg virtually removed in an accident during an anchor-handling operation.

Minutes after, a helicopter carrying a doctor was airborne and en route to the rig. The arm was packed in ice and the casualty transferred to Tygerberg Hospital in Cape Town where surgeons successfully re-attached the limb.

Captain Zehrt, who has logged about 2 000 hours flying the Sikorsky, said landing a helecopter on an oil rig was not dangerous. "But it can get difficult in strong wind."



Captain Karl Zehrt, head of Court Republic Helicopters' oil rig supply operations.

XCLUSIV

Fuel breakthrough

Cape gas field all set for R2 000-million development plan

ARGUS 8/6/84

55

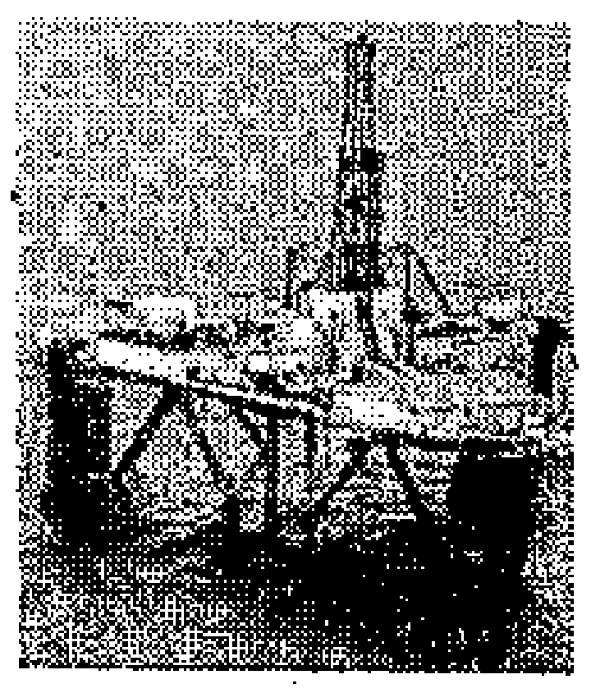
Offshore production would create many jobs

Argus Correspondent

JOHANNESBURG. — Offshore gas production would create an employment bonanza in the engineering industry.

Engineering firms throughout the country would be involved in all aspects of the development on land and at sea.

The major assembly and construction work alone could create up to 6 000 jobs and a new petro-chemical plant could employ up to 2 000 people permanently, according to high-level industrial sources.



It is understood engineers have plans to build a petrochemical plant, possibly at Mossel Bay, which would transform the sleepy fishing town.

DEVELOPMENTS

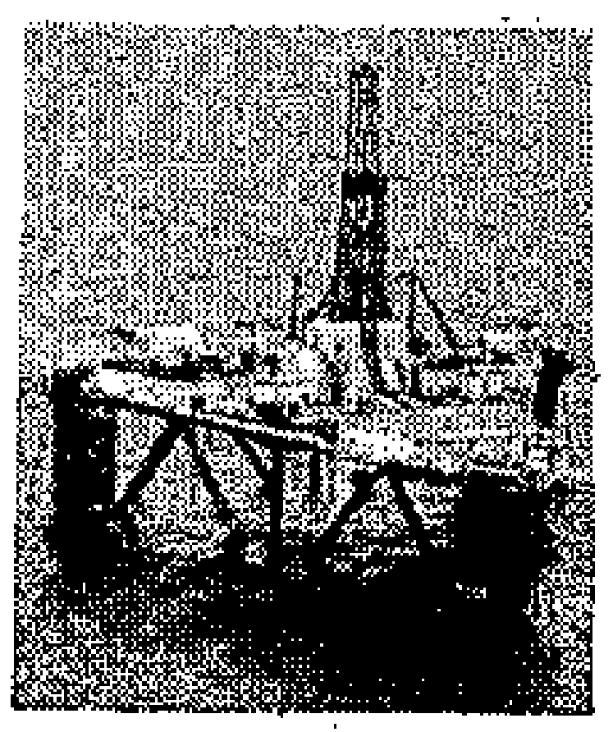
New roads, houses, offices — a new infrastructure — would have to be established to support the gas field.

The cost of the new infrastructure is included in the estimated cost of up to R2 000-million.

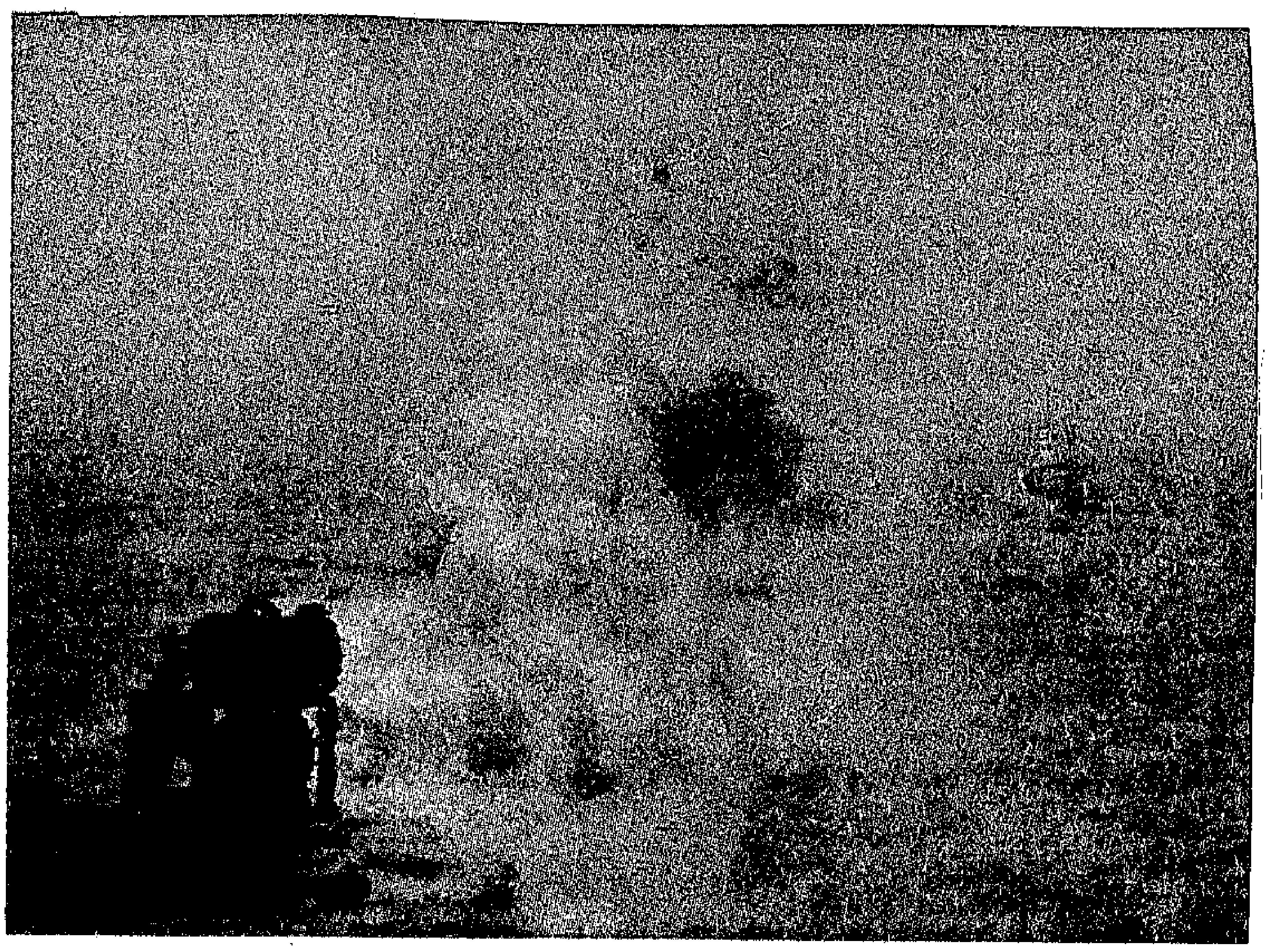
Homes would have to be found for between 1 000 and 2 000 operational staff and associated personnel for the new plant.

Most jobs would be for skilled people.

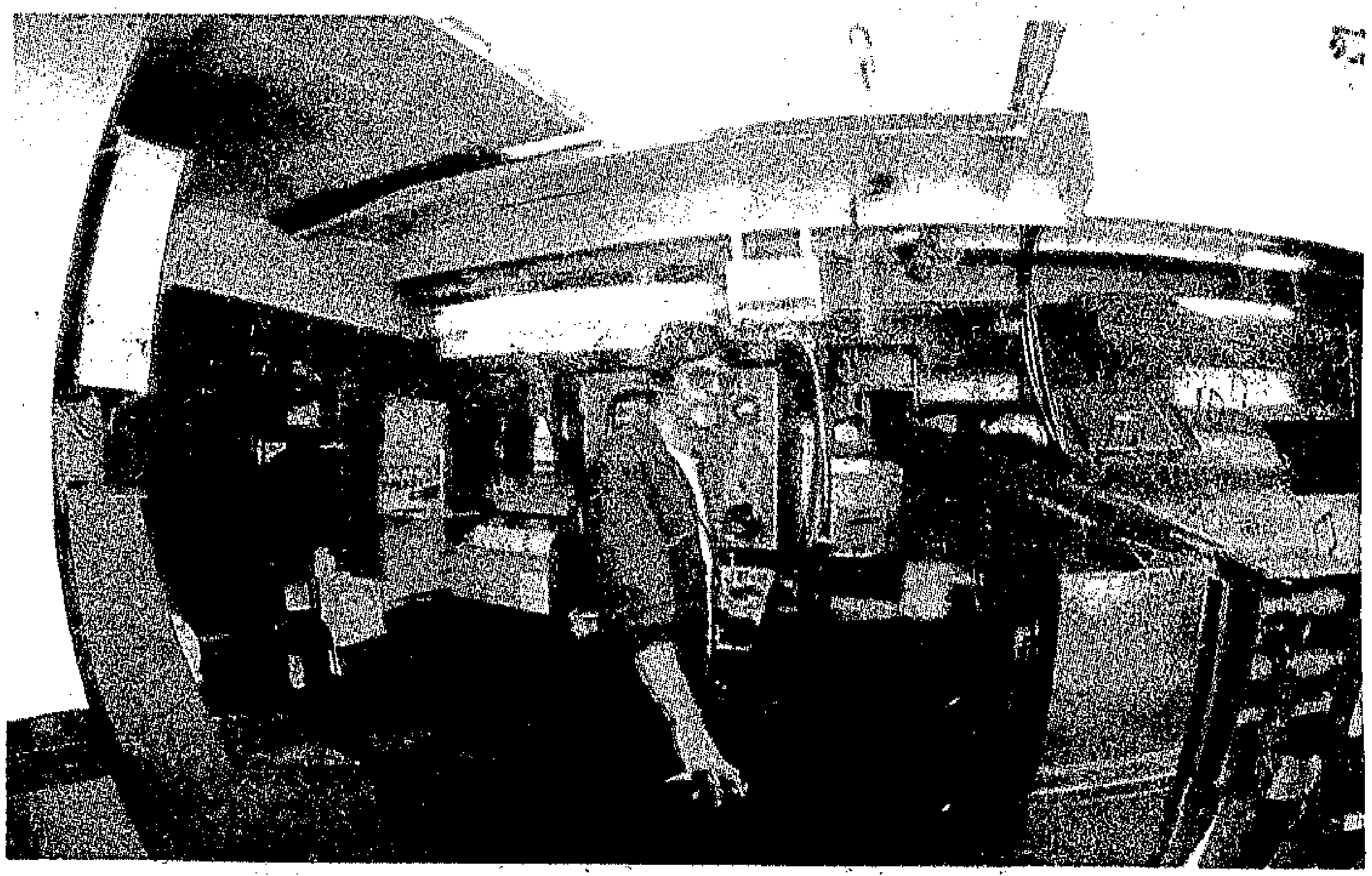
Thousands of people would be needed to build the plant with the number of construction workers peaking at 3 000 during the five years it would take to complete.



"There will be tremendous opportunities for engineering firms all over the country," said one industry expert. "There should be a slice of the cake for many people."



Flaring gas spurts from the Sedco K during well-testing as the oil rig supply ship stands by in case of accident.



An operator monitors the controls and dials at the heart of oil exploration — the drillroom aboard the Sedco K.

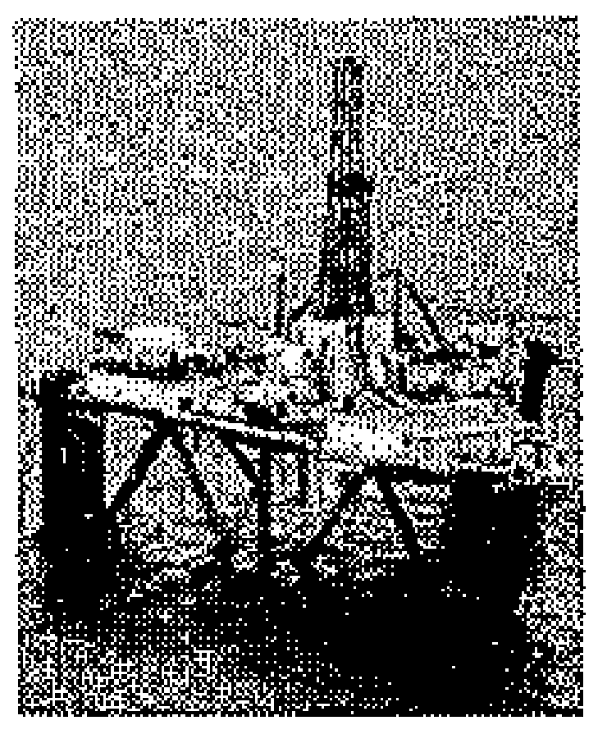
About 3 000 engineering workers would be needed to assemble the offshore production platform which would probably be erected off the south coast near Mossel Bay.

Again, highly skilled, qualified people would be needed.

CONTRIBUTIONS

But many of the hundreds of pieces which make up a production platform would have to be made outside South Africa to save time.

"The whole construction and assembly operation could be done here, but we would not be able to compete with the speed with which it could be done by allowing overseas contractors to contribute," said the industry spokesman.



Some of the parts which make up the platform could be made in the UK, US, Korea, Japan and other countries.

The plant and equipment needed for the second stage of the offshore project, the "topside" — the gas reticulation and refinery complex to be built on top of the production platform — would involve many South African engineering firms.

It is estimated that 70 percent of the work required for onshore projects could be carried out by South African engineering firms.

Project could be worth R300m a year

Argus Correspondent

JOHANNESBURG. — Revenue from Soekor's expected R2 000-million offshore gas production project should be more than R300-million a year.

Engineers say the project will pay for itself in five to seven years.

It is believed the State-run offshore exploration organisation will build at least one fixed production platform to exploit the field, 90 km off the coast.

The platform would be linked to shore by a pipeline costing about R90-million.

This would be transformed to 20 000 barrels a day of petrol and/or diesel. The find is classed as a medium size gas field in world terms.

Industry sources say parts for the 150-metre long production platform would be made up all over the world.

The bits would be made up like a giant jig-saw puzzle at an assembly point along the coast.

The sections would be made at as many different shipyards as possible.

Very little processing would be done offshore, but the gas would have to be separated and dried (water removed) to prevent corrosion.

Construction would take about five years.

Engineers estimate one barrel of diesel or petrol for every 1 100 cubic metres of gas at the beginning of production.

The condensate — of a high quality — would be pushed through the petro-chemical plant along with the gas.

Condensate improves the quality of the product and is a bonus of the gas find.

"Nature has done much of the refining for us," said one Soekor official.

The condensate could be poured into a tractor engine straight from the earth — and it would run.

Samples of condensate are sometimes used as cigarette lighter fuel by Soekor officals.

The quality, says Soekor, is better than that of the expensive Iranian light oils.

CAR TYRE

Condensate is produced when gas is brought to the surface.

"When the gas gets into our well bore, there's an immediate reduction in pressure and a liquid is formed by the time the gas reaches the surface," said one oil field engineer.

"It's much like a car tyre when you take the valve out. If you hold your hand over the valve, droplets of water collect, yet there's no indication there was any water in the tyre before it was deflated.

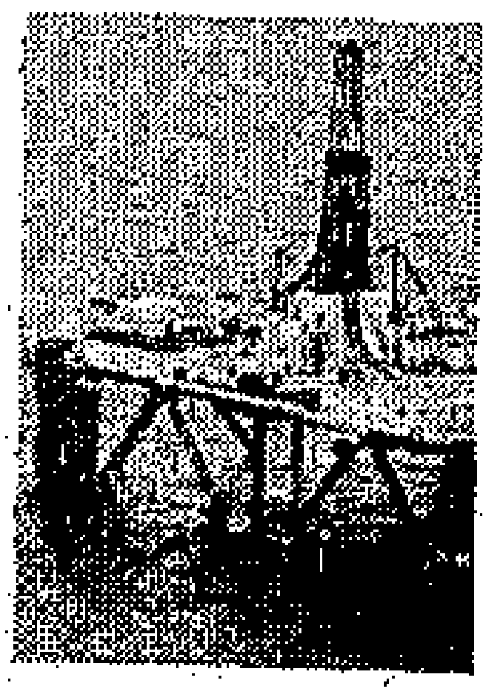
"The formation of these droplets could be equated to condensate."

From STEPHEN McQUILLAN

JOHANNESBURG. — South Africa is ready to produce offshore natural gas from a major field established off the Cape coast.

Engineers are studying a R2 000-million plan to convert the gas to petrol and diesel. The field could produce 20 000 barrels a day and would last at least 20 years.

A spokesman for the Department of Mineral and Energy Affairs today confirmed that Soekor — the State-funded oil exploration organisation — had reached its target reserves "or is on the brink of doing so".



The offshore triumph comes after 20 years of exploration on land and at sea which cost the taxpayer nearly R450-million.

But the investment is now expected to pay dividends with possible earnings estimated at around R7 000-million during the next 20 years if gas production is approved.

Soekor has found — by world standards — a medium-sized gas field which could also produce a small quantity of condensate (light oil), according to high level sources.

The gas field would yield about 20 000 barrels of petrol and/or diesel a day with enough reserves to last about 20 years.

Offshore exploration experts believe the cost of establishing a North Sea-type field about 100 km off Mossel Bay would be paid off in five to seven years.

They also say the discovery of other fields — including crude oil producers — were "just around the corner".

Much of the revenue would be poured back into a stepped-up offshore exploration programme.

Earlier this week the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said Soekor was engaged in detailed investigations into the production of oil and gas.

He said a decision would be made by the Cabinet in two to three months.

"The Cabinet must first be convinced the production is feasible and viable," said a Department of Mineral and Energy Affairs spokesman.

Soekor had found mainly gas and would approach the Cabinet "with specific recommedations", said the spokesman.

"We have to decide which of the options on what to produce are most preferable in the South African situation."

A technique developed for New Zealand could be used to manufacture petrol and diesel from natural gas or engineers could produce other products like methanol or ammonia.

"It is a valid conclusion, considering the quantity of gas deemed potentially viable, that there must be a case for production now or in the near future," said the department spokesman.

The Minister had recently had talks with Soekor.

Offshore exploration experts say the field would strengthen the economy and provide many jobs in South Africa.

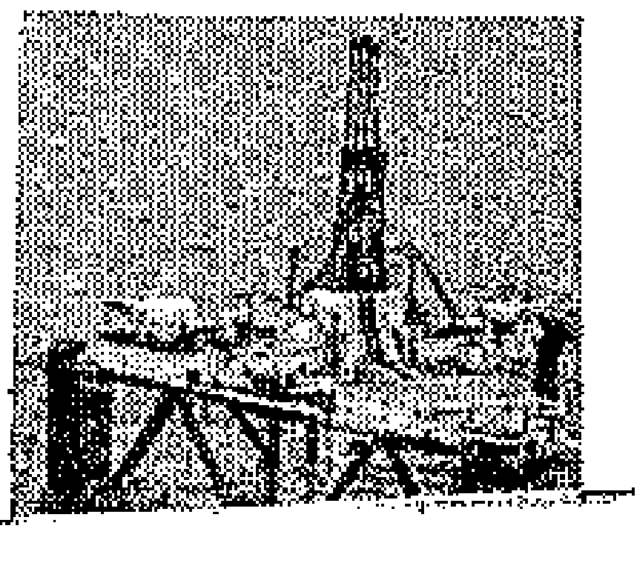
Production platforms would be built mainly by South African firms and assembled off the coast.

Hi-tech refinery

"Gas production would be the first step toward a new national industry second only to space in the technical expertise required," said one exploration engineer.

If the Government approves plans for production, a newly designed hi-tech refinery may be built on the south coast — possibly at Mossel Bay — to convert the gas to petrol and diesel.

Gas would be pumped ashore through a pipeline.



- **More reports and pictures,**

Crystal Palace will still get GLC's R1-m

The Star Bureau

LONDON — Crystal Palace, scene of Zola Budd's 3 000 m triumph this week, will get its R1 million from the Greater London Council (GLC) after all.

Despite the threat by Mr Peter Pitt, left-wing chairman of the GLC's arts and recreation committee, to withhold payment because Zola declined to denounce apartheid, the money has already been committed.

The GLC and the Sports Council share equally the cost of the upkeep of the athletics stadium.

As a protest at being unable to withhold payment Mr Pitt yesterday announced his resignation from the Greater London and South-East Council for Sport and Recreation, its executive committee and the Crystal Palace committee.

GOVERNMENT CAMPAIGN

Mr Pitt denied that the GLC had made the threat on Wednesday so as to affect Zola's performance.

He said she had refused to denounce apartheid and was part of a government campaign to bring South Africa out of isolation.

Daily Express columnist George Gale writes today that Mr Pitt's threat was "no less nasty for being idle".

And he leaves no doubt about his views on Mr Pitt, dubbing his threat "ugly and hateful, spiteful and envious, twisted and warped, cruel and ignorant and mean".

SA spending R2,3-bn a year to beat oil embargo

(55) Star 8/7/84

The Star's Foreign News Service

AMSTERDAM — The oil embargo is costing South Africa R2,3 billion a year, according to the anti-apartheid Shipping Research Bureau's latest survey of oil deliveries to the Republic.

The survey, released yesterday, claims that more than 200 oil tankers called at South Africa between July 1981 and January 1983 in defiance of the international oil embargo.

Giving details of 57 of the tankers, the survey identifies 23 shipping companies — most of them Norwegian-based — and six minor oil companies involved in the shipment of oil.

The bureau claims that most of the oil comes from a limited number of nations, mainly in the Gulf, which are unaware that it is going to South Africa. In a few cases the oil is trans-shipped in Rotterdam.

Of the cost to South Africa of R2,3 billion, about R950 million arose at source. The cost of maintaining an enlarged stockpile is put at R760 million, while payments to middlemen account for R380 million. Another R250 million is spent on increased oil exploration.

The 57 tankers of which the bureau gives details had a combined capacity of about 12 million tons, about half of South Africa's annual import needs. Forty-three are owned or managed by Norwegian companies.

The bureau says it has tried to contact the companies it has identified as involved in the oil trade with South Africa. Some admitted making deliveries, some denied the allegations and some refused to respond.

New Zealand.

CO-OPERATION

A department specialist has already visited the country to get more information.

Industry officials say co-operation from the New Zealand Government has been "very good".

"That's one thing we've found in the oil business: we don't usually get wrapped up in politics," said one engineer.

sel available to us in future, and it is for this reason that we are particularly interested in this new technology," said one official. "It will allow us to produce both from the same plant."

The plant would be similar to a refinery, but clean — without smoke or by-products which are difficult to dispose of.

Investigations are not complete yet, but indications are that the plant will be built at Mossel Bay in line with the Government's decentralisation policy. However, it might possibly be built at Cape Town, Port Elizabeth or Durban.

The plant would cost between R700 million and R1 200 million including new infrastructure, if necessary, for the town where it is located.

The offshore project could cost about R700 million.

An industry spokesman said: "The problem is that up to now, everywhere in the world, it has been cheaper to manufacture petrol and diesel from crude oil. The synthetics route, like Sasol, is more expensive — but that's the price you pay to be independent if you don't have crude."

Use of offshore gas — power plant not viable

Engineers considered building a power station on the Cape coast during their investigations into the best use for offshore gas.

But, it is understood, engineers said it did not fit in with Escom's present planning.

The station, which could have been built at Mossel Bay, would have generated 700 Mw — a miniature compared with the Eastern Transvaal's 3 600 Mw giants.

"Escom would go for 2 000 or 3 000 Mw plant instead of a 700 Mw; it did not fit with their way of thinking," said an industry spokesman.

"But if we find more gas, it could still be a viable project for Soekor and for Escom in the future."

The station would have been powered by gas turbines, fuelled by liquefied petroleum gas.

The lack of a significant gas market in South Africa quickly narrowed other options for Soekor engineers.

SA's rights under law

Two Panamanian-registered offshore drilling platforms — among the most advanced in the world — will be the mainstay of South Africa's future exploration effort.

The Actinia and the Nymphea rigs — each worth about R80 million — will continue to probe the continental shelf for more gas or oil fields as Soekor, the State-owned exploration organisation, goes into gas production.

Cape Times 9/6/84

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Soekor gas search 'on verge of target'

Own Correspondent

JOHANNESBURG. — The State-sponsored oil exploration corporation, Soekor, is on the verge of reaching its target in its search for natural gas off the Cape coast.

However, detailed and intricate studies are still continuing before any production plans are undertaken.

A Soekor spokesman in Johannesburg, Mr Mike Leibbrandt, said yesterday exploratory wells were still being sunk about 100km off Mossel Bay to establish the actual extent of the field — described as "medium" by world standards.

Conversion plan

Soekor was also investigating ways of getting the gas ashore and of converting it into liquid fuel, he said.

Mr Leibbrandt was reacting to reports yesterday that engineers were studying a R2 000-million plan to convert gas to petrol and diesel.

"Nothing new or dramatic has suddenly happened," he said in response to the reports.

The R2 000-million gas production plan mentioned in reports would be one of a number of proposals involving South Africa's oil production which Soekor was currently working on and which would be submitted to the government.

In Cape Town, a spokesman for the Department of Mineral and Energy Affairs said yesterday's reports that South Africa was ready to produce offshore natural gas from the field did not mean major new oil or gas finds had been made.

Mr Leibbrandt said it was still to be established which fuel products could be most economically produced from the gas.

Target figure

He said Soekor's target figure was 1-trillion cubic feet of gas, which would yield 20 000 barrels of liquid fuel a day.

Soekor had said in the past that once this figure had been reached, the high costs of extraction would be justified.

Once the multi-facetted study had been completed, the results would be presented to the Cabinet for a final decision.

Mr Leibbrandt said further drilling was taking place and the best methods of extracting the gas were being studied.

R450 million

He said Soekor had come close to reaching the desired figure after accumulative research based on several boreholes off the Mossel Bay coast. The first major discovery was made in 1980. He confirmed approximately R450-million had been spent on the exploration effort over the past 20 years.

Mr Leibbrandt told the Cape Times that if the cabinet gave the go ahead to develop the gas deposit and if a plant of the magnitude mentioned in reports yesterday was built, it would take "something in the region of five years" before it would be completed.

He said he could not comment on what proportion of South Africa's fuel needs the field would satisfy.

SOUTH CAPE SET TO BOOM

By CHRIS ERASMUS and ROBIN BROWN
Weekend Argus Reporters

THE South Cape is poised for an economic boom following confirmation that engineers are studying a R2 000-million plan to convert gas to petrol and diesel at Mossel Bay.

Businessmen and property dealers in the area are jubilant at the prospect and have welcomed confirmation from the Department of Mineral and Energy Affairs that development of the gas field about 100 km off the South Cape coast near Mossel Bay was under consideration.

The project is expected to create at least 6 000 jobs during the construction phase of the onshore petro-chemical plant and 2 000 permanent jobs in the economically depressed Mossel Bay area.

"Implications terrific"

If Government expectations are fulfilled, the petrol and oil-from-gas scheme will earn about R7 000-million over its 20-year life, with a yield of about 150-million barrels of petrol.

Mr John Michler, president of the Mossel Bay Chamber of Commerce, said he was fully aware of the proposed project and that speculation about it had been rife for some time.

"I think it's the greatest thing this side of Texas — it's simply the best thing that could happen to this town and this country.

"If the project's employment and investment promises are fulfilled, then the implications for the South Western Districts are terrific. It will mean an economic boom for the whole region including George, Mossel Bay itself, Albertinia and Riversdale.

Tremendous boost

"Of course, it won't be an overnight wonder, but as the project's various phases are implemented we can expect our local employment problem — which is pretty grim — to be substantially eased. Many of the local people in the fishing industry are unemployed for three or four months of the year."

Mr Jan de Jonge, president of the George Chamber of Commerce and a member of the Government's Regional Advisory Development Committee (RADC) for the Western Cape, agreed with Mr Michler and said the building and service industries could expect a major piece of the cake.

"This could be a tremendous boost for the area, depending on Soekor (the State-funded oil exploration organisation) and how it handled the development.

Speculators land hunting

Mr Nellis Vintcent, also a member of RADC and of the Mossel Bay Town Council, said: "With development of the new P W Botha Airport in George, which is to be expanded, and the new road link between George and Mossel Bay, there is already the basic infrastructure here for this type of development."

Meanwhile property speculators and developers throughout South Africa are eagerly preparing to invest heavily in Mossel Bay.

Many of them have been hunting for vacant land in the viciniy since Soekor started oil and gas explorations off the coast about 14 years ago.

Many inquiries received

Property dealers in the town — there are between 50 and 60 — today said that since the news of the proposed Soekor project broke yesterday they had received many inquiries from up-country speculators.

Meanwhile in the town, sectional title flats, shops and offices are being quickly developed.

One developer has paid R300 000 for a 2 900-sq m site in the town centre and intends to build sectional title units.

Two projects totalling more than R6-million for 36 flats, shops and offices close to the seafront are underway and an old historic building is being converted and refurbished at a cost of about R1-million.

A one-bedroomed flat now being built in Mossel Bay and ready for occupation next year will sell for R80 000, a three-bedroom unit for about R120 000.

● **Life on an oil rig, Page 15.**

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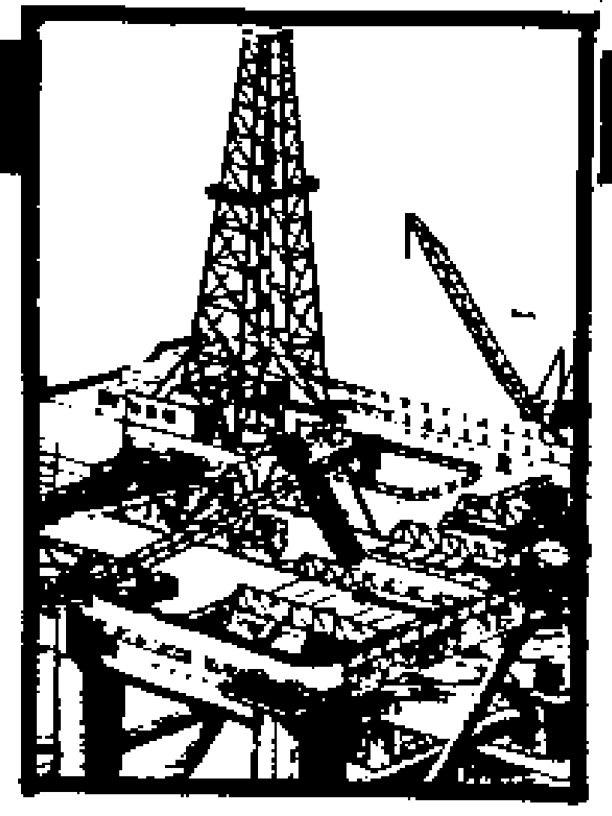

WEEKEND ARGUS SPECIAL REPORT

55 9/6/84
Week Arg

Life on an oil rig

By STEPHEN McQUILLAN

A GIANT workhorse of the oceans and veteran of the cruel North Sea heaved up to five metres in the Indian Ocean swell.

Towering 30 storeys, it gleamed red, white, yellow. An island of mechanisation anchored 60km towards nowhere.

Its occupants worked, ate, slept round the clock in a routine which merged day into night.

The 75 souls lived a cycle as smoothly efficient and continuous as the swirling teeth of the drilling bit.

They lived in an environment of danger, alienation, boredom and excitement, a place where people spoke of money in millions and where a toilet visit could be measured in rands.

They ate like kings and worked "like dogs", slaves to time in a world where each minute was worth R62.

This was the Sedco K semi-submersible offshore exploration rig, 3 500 tons of hi-tech power and sophistication — the backbone of South Africa's offshore search.

"There's a big swell today," explained Soekor drilling engineer Mr Bronek Karcz. "It's probably eight metres and that's exceptional. You can feel the movement."

The rig was moving in an awkward motion, its three legs or caissons riding the swell unlike any ship.

The movement was enough catch out the visitor, prompting an occasional side-step, but could hardly be compared with the effect it was having on the rig's stand-by supply ship.

The ship was being thrown over the swell in an undignified fashion, often almost disappearing as it crashed through a trough.

The Sedco K continued its drilling, though the Actinia rig, drilling further down the coast, had halted operations during bad weather the day before.

The Sedco's mammoth anchors, three on each caisson, held it fairly stable over the well which started about 110m below.

"There is lateral and horizontal movement all the time," said Mr Karcz. But motion compensators — like huge shock-absorbers — and swivel joints allowed the rig to move and the drill pipes to remain almost stationary.

"You can stand a lateral movement of three to five metres either way without affecting drilling, depending on the depth of course."

The drilling bit was down to a depth of nearly three km.

"Normally, a rig of this size can drill to 4 500m below the seabed," said Mr Karcz.

The Sedco K is submerged to a depth of about 26m while drilling and lifted to about 20m while on tow.

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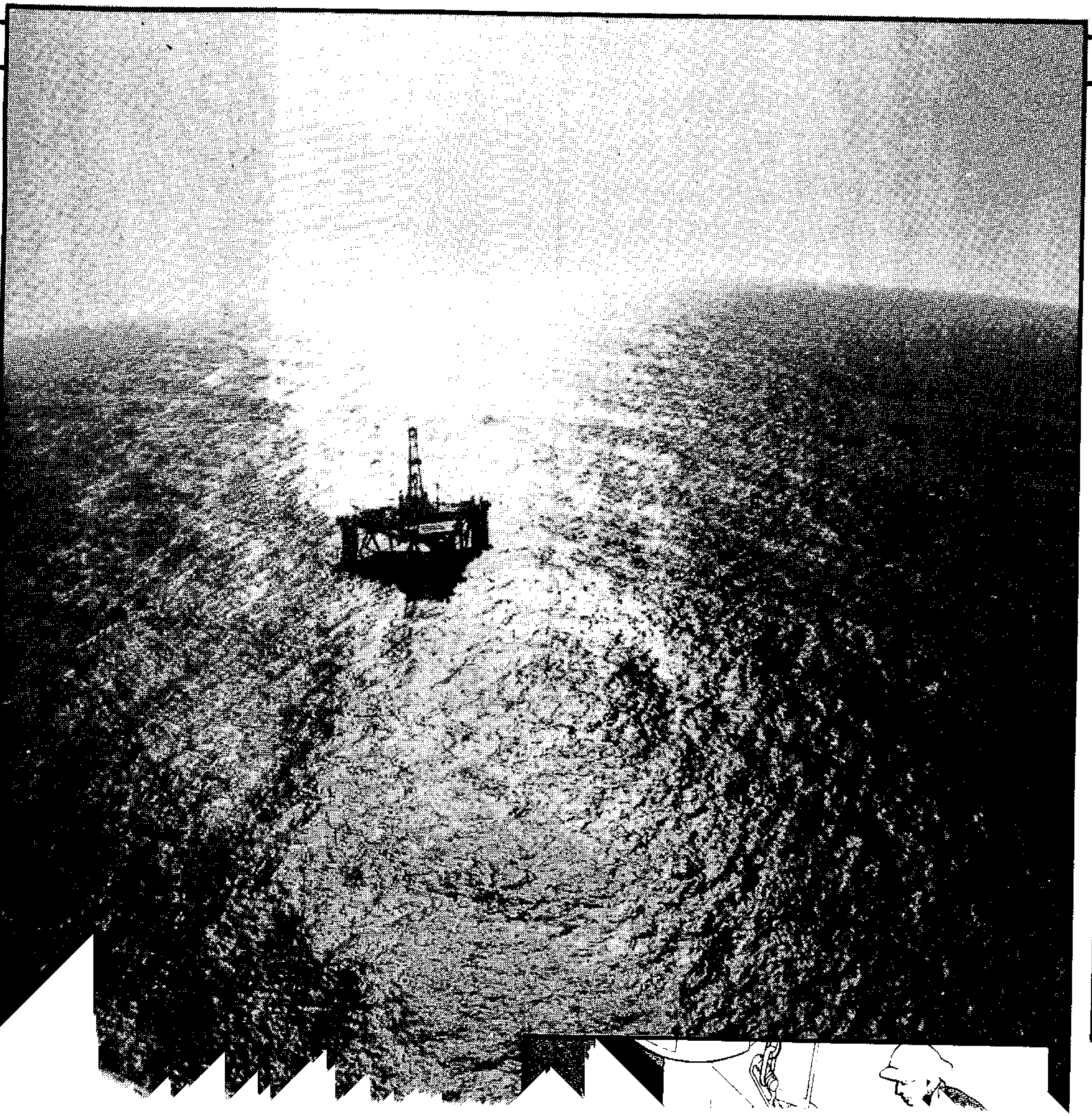


AND THE PEOPLE

Radio operator Mr Dave Thornton making a call to the coast from the Sedco K.

Come and get it! A chef serves some of the five-star food available aboard the Sedco K.

An island of mechanisation anchored 60km towards nowhere. The Sedco K rig drilling ahead in South Africa's first potentially commercial gas field.

Where every minute is worth R62

The rig can accomodate 84 people. "But when we are drilling ahead, our crew is normally about 75," said Mr Karcz. "When we are testing a well, we need the full capacity."

About 60 percent of Sedco's crew were recruited locally, but the skilled labour was generally contracted overseas and had two-year contracts. "They are tied to the rig and move around with it. The majority on this rig are from North Sea countries like the UK, the Netherlands. But there are New Zealanders, Americans and Australians."

Most of the crew worked a normal schedule of two weeks work and two weeks off. They worked 12-hour shifts — 12am to 12pm and vice versa. Skilled workers also had a six weeks holiday each year during which time they were flown to the country where they were contracted.

Recreation centred on home movies. The crew had access to a film library of about 100 movies in the auditorium. "We don't know what we'd do without the movies," said one crewman. The crew was also able to pick up SABC-TV.

Mr Karcz said other recreation was limited because the Sedco K was a fairly small rig. But the crew had a gym inside one of the caissons, complete with weights, bicycles and other exercise machines.

Crewmen were also able to telephone their families via radio to Cape Town.

The fishermen of the crew were allowed to fish off the rig because it was not self propelled. "On other rigs with thrusters, the fishing line could get caught up and cause damage," said Mr Karcz.

"Fishing is a keen hobby here. At one stage we had to stop it because the chaps were catching so much they were taking 50kg off the rig at a time. It was becoming too much weight for the helicopter.

"They catch yellow tail mostly, tunny, kingklip and squid and the chaps occasionally land a shark."

There had been cases of men falling overboard, but never while any sharks were in the vicinity.

The galley provided four meals a day — the equivalent of at least three-star rating — at around 6am, 12 noon, 6pm and midnight. "You often have the situation where one man is sitting down to dinner while the other chap is having some other meal," said Mr Karcz.

The hotel-style food could be chateaubriand, kingklip or lasagne with four vegetables, salads, soups and four types of sweet for lunch one day, followed by a just-as-substantial meal a few hours later for dinner.

"They can eat as much as they like and snacks, cheese and crackers, ice-cream, and coffee is available 24 hours a day," said Mr Karcz. "Between nine in the morning and three in the afternoon pancakes, sausage rolls, cakes and fruit are available."

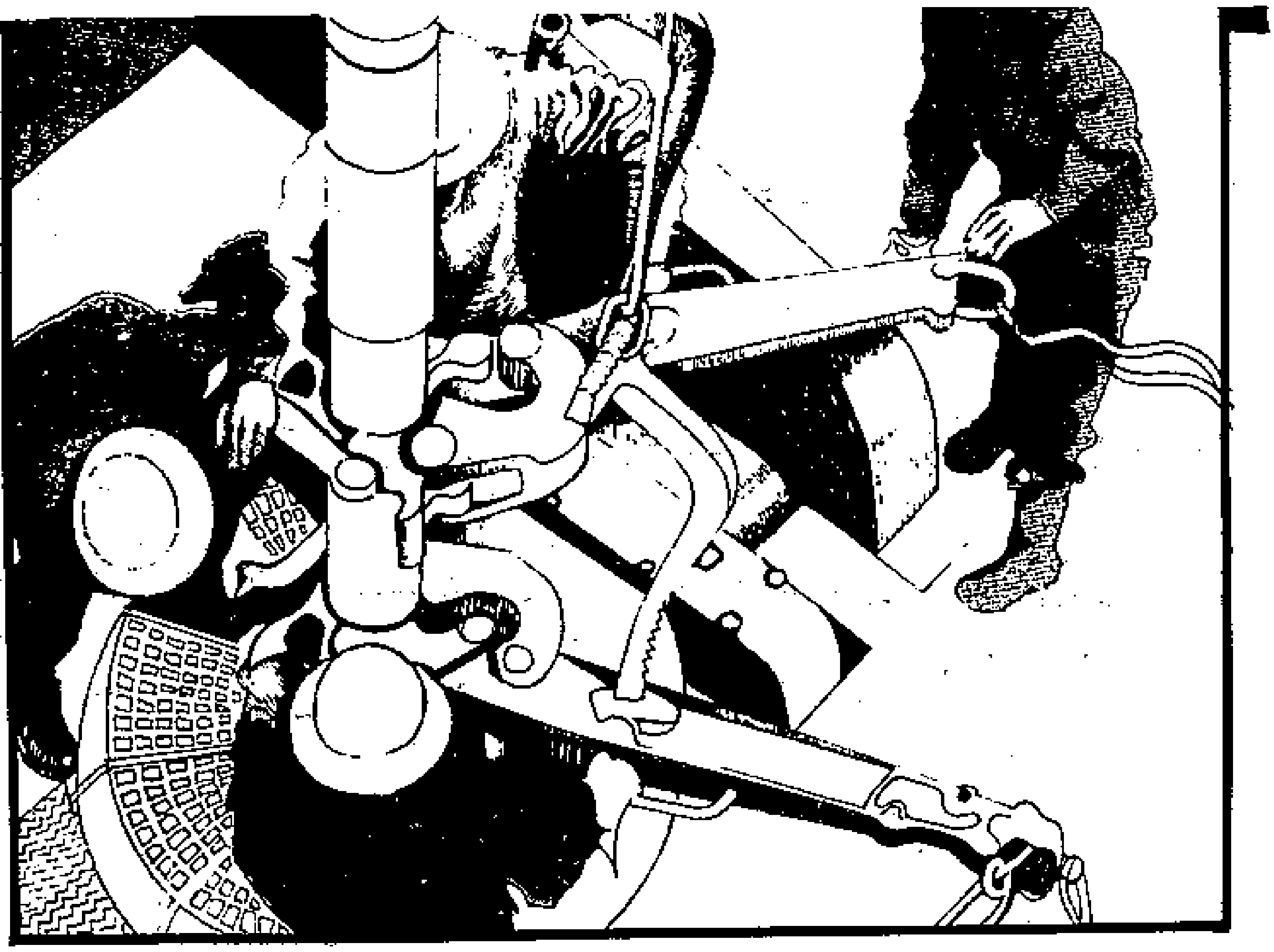
With first-class food every day, it would be easy for many of the crew to become flabby. "The deck hands — the guys doing the physical work — have no problem working it off, but the personnel supervisors, engineers nad others have to be careful. They usually run down to the gym after work and have a good workout," explained Mr Karcz.

Asked whether sea-sickness was a problem, he said: "Today the movement is abnormal. You generally have a roll of about one or three-quarters of a degree and you don't really feel it. I have rarely seen people sea-sick, and then they are only the new hands who aren't used to it.

"On the other hand, the work boats take the full brunt of the swell."

Mr Karcz said the rig had a friendly atmosphere. "The chaps laugh and joke and everyone seems to get along with everyone else. You cannot afford to argue or clash with anyone. You live in each other's pockets.

"When new chaps come aboard, the guys soon sort themselves out. You have to learn to be quiet and adjust because you sleep four to a cabin. Two guys will be on the opposite 12-hour shift to their cabin mates. During shift change you have to think of other people — have to remember to close cupboards quietly and walk on tiptoes.



"New hands usually sort themselves out within the first week. You occasionally hear chaps griping in the galley, but they learn. It's rare you find antagonism.

"The chaps do get bored because the job does get monotonous. Our operation has been the same for a week now, just drilling — slow drilling. These people are used to changes. They have moved countries and are not the types to do an eight to five job.

"They are a particular breed of people. You find once a person has come into the oil field and been working about four years, it gets into his blood. You cannot do another job. It's the change. You might be towing to a new location, drilling, you might have pipes stuck in the hole — there's 101 things that can change.

Dangers? "The risk of working on a rig is higher than anywhere else. If something goes wrong, there's nowhere you can run. We would have to evacuate to the work boat."

The Sedco K was considered a safe rig. The last lost-time accident had been 132 days before when a man fell off the catwalk and fractured his skull. "We've had one year without a time-lost accident before and only one death since operations started."

Tankers that play chicken

FREIGHTERS and oil tankers are playing a dangerous game of chicken with oil rigs off the South African coast.

And the ships' masters are repeatedly endangering oil and gas exploration by their flagrant violation of the rules.

Passing ships are not allowed within a nautical mile of the oil rigs, according to laws of the sea.

But, regularly, ships pass too close, according to Commander William Howarth, managing director of Unicorn Offshore (Pty) Ltd., whose ships are on round-the-clock station next to the rigs.

"We've had oil tankers approaching dangerously close to rigs and the service boats have had to go to intercept them," said Commander Howarth.

"We've had ships passing within the rigs' anchor range between the anchor buoys and the rig — and they're often sizeable tankers. They are not supposed to approach within a nautical mile."

A spokesman for Soekor — the State-run oil exploration organisation — confirmed the dangers, which are heightened by the sometimes difficult seas off the South African coast.

"Sea conditions off the coast of South Africa are among the worst in the world," said Commander Howarth. "The weather is frightful."

Strong currents cause mountainous seas and difficulties, especially when anchors had to be handled by the rigs' support ships.

It's a gas, and more oil too!

By NEIL HOOPER and STEPHAN TERBLANCHE

S. Times 10/6/84

OIL found by Soekor off the Cape coast is sufficient to meet eight percent of South Africa's fuel requirements, it was disclosed yesterday.

A small deposit of "valuable" light oil was found along with large gas reserves, which will eventually make a "significant contribution" to the country's fuel needs.

This was disclosed yesterday by the chairman of Soekor, Dr Nico Stutterheim, who said Soekor hoped to complete tests and calculations on the economic conversion of the gas to petrol and diesel fuel within the next few months, and would then make its recommendations to the Government.

Sufficient for eight percent of SA's fuel requirements

On the oil deposit he said: "In finding the gas reserves we also found light oil. This was a valuable find because virtually all the oil can be converted into fuel.

"Often heavy oils are found along with gas reserves and they are not as useful, as only the lighter oils can be converted.

"Although the quantities of light oil found are relatively small, they could meet eight percent of South Africa's fuel needs, and are possibly of greater benefit to South Africa than the gas.

"The oil can be taken out at the same time as the gas, which in terms of energy content, which is always the measure, is of much greater financial value. We believe that we can convert the gas to petrol through a chemical conversion plant."

The final decision whether to go ahead with the extraction of the light oil and the conversion of the gas to fuel would be taken by the Government's Energy Priority Committee.

Dr Stutterheim said that the membership of this committee and its deliberations were highly secret and fell under the Official Secrets Act, and could not be made public.

However, he disclosed that the committee had been established by the Government to find alternative sources of fuel supply, such as the liquid fuel-from-coal produced by Sasol.

"This committee must weigh up all the alternative sources of supply and determine their priority. It will have to decide whether the conversion of gas to fuel is justified," he said.

Dr NICO STUTTERHEIM
"A considerable time"

Dr Stutterheim said that if the Government approved the gas-conversion project on the recommendation of the Energy Priority Committee, it would still take a considerable time before any fuel was produced.

"I would say that it would take years before we are producing fuel. We must first build a pipeline and a conversion plant before any usable fuel can be obtained from the site.

"All such projects are highly involved ... their design and construction take time. In the case of Sasol the first two plants each took four to five years to build. In this case we will also have to construct a plant and refineries."

He described the find thus far as "a fair amount of gas, which cumulatively is reaching the stage where production of fuel through conversion is possible provided a suitable process is viable".

Dr Stutterheim said that Soekor had abandoned an earlier proposal to pump gas into tankers at anchor above the gas reserve fields.

"We'll put in pipelines to shore if the gas reserve is large enough," he said, adding that the scheme would also require a seaward processing plant as well as an on-shore conversion plant.

Dr Stutterheim declined to estimate the cost of such a project.

"Once this thing is operating it will repay all this expenditure very quickly. I don't want to give an estimate... I don't know the cost of the pipeline, or the processing or conversion plants ... these things are very specialised.

"But I have no doubt that once one starts the returns will quite readily cover all the expenditure within an economically reasonable time."

FINANCE

Minorco may be poised for Anglo American bid

ARGUS 18/6/84 85

Argus Foreign Service

LONDON. — The scene is set for a large bid by Minorco, the Bermuda-based holding company for Anglo American, according to an in-depth analysis of the giant by Charles Zorab of stockbrokers Quilter Goodison.

He suggests that the bid might be accompanied or preceeded by disposals. His guess is that it would be a further move into energy, either coal or oil and gas.

Minorco's balance sheet is very strong with virtually no debt and around $209-million dollars held in liquid funds.

Interim results showed net profits trebled to $75 400 000, and Mr Zorab predicts the full year — to end June — will double that figure.

The main thrust, he suggests, is coming from Phibro Salomon, the investment banking and commodity trading concern.

Recently there were dicussions of a proposal to hive off the non-oil trading side of Phibro in a management buy-out and it was expected that the oil trading side would follow.

This, says Zorab , was know to be the result of friction between Phibro's top management. The de-merger is now off and Mr Zorab speculates that David Tendler, Phibro Salomon co-chairman, and Thomas O'Malley, president of Phibro, have either settled their differences or have had their heads banged together by Minorco.

Whatever it is, he argues that it is worrying to have tension of ths kind and it does nothing for earnings or investor confidence.

Note:

The nature and the procedure in connection with the application of each of the industrial incentives is explained in the Manual on the implementation of the new regional development incentives introduced on 1 April 1982. The Manual is freely available on request.

(a), (b) and (c)(iii) There are no standard industrial incentives applicable to Komga. Applications for incentives which are received from industrialists at this point, are considered on an *ad hoc* basis according to their own merits, ie the specific project and not the area is the deciding factor for the granting of incentives granted to other industries on an *ad hoc* basis at the point in the past are taken into consideration.

~~Q. Col. 1860~~

Iscor: undertakings in decentralized areas

(39) Hansard

1047. Mr P G SOAL asked the Minister of Industries, Commerce and Tourism:

Whether (a) Iscor and (b) any of its subsidiaries have established undertakings in decentralized areas in or near the national and/or independent Black states; if not, why not; if so, (i) which subsidiaries, (ii) where are they located in each case, (iii) what total amount has been invested by Iscor in these areas and (iv) how many jobs have been created as a result?

The MINISTER OF INDUSTRIES, COMMERCE AND TOURISM:

(a) and (b) Yes.

(i)	(ii)	(iii) (1) R million	(iii) (2) R million	(iv)
The Durban Navigation Collieries	Dannhauser	96,0		5 580
Vryheid (Natal) Railway, Coal and Iron Co Ltd (Hlobane)	Vryheid	105,6		4 930
Iscor Berlin (Pty) Ltd	Berlin	1,6		31
Iscor Works	Newcastle		886,7	8 750
Tsikondeni Mining Co (Pty) Ltd	Sibasa, Venda		7,0	230

Notes:

(iii) (1) Investment in terms of original cost of fixed assets, as reflected in the latest available financial statements.

(2) Investment in terms of capital expenditure.

The Durban Navigation Collieries and the Hlobane are both long established undertakings.

The Iscor warehouse at Berlin, the Iscor Works at Newcastle and the Tsikondeni mine were established at their particular locations primarily with a view to decentralization.

(55) ~~(39)~~ Hansard

Sasol: undertakings in decentralized areas

Q. Col. 1861 29/6/84

1048. Mr P G SOAL asked the Minister of Industries, Commerce and Tourism:

Whether (a) Sasol and (b) any of its subsidiaries have established undertakings in decentralized areas in or near the national and/or independent Black states; if not, why not; if so, (i) which subsidiaries, (ii) where are they located in each case, (iii) what total amount has been invested by Sasol in these areas and (iv) how many jobs were created as a result?

The MINISTER OF INDUSTRIES, COMMERCE AND TOURISM:

(a) and (b) No. The manufacturing facilities of Sasol at Sasolburg and Secunda are closely bound up with the Northern Free State and Eastern Transvaal coal fields for coal supplies. In addition, the production of co-products forms an integrated part of the primary synthetic fuel manufacturing process. The establishment of Sasol undertakings away from Sasolburg or Secunda has, therefore, never been seriously considered.

(i) to (iv) Fall away.

Tourism Board

1058. Mr D J N MALCOMESS asked the Minister of Industries, Commerce and Tourism:

(a) Who are the members of the South African Tourism Board, (b) when was each appointed and (c) how many meetings (i) had been held by the Board since the appointment of each such member up to, and (ii) did each specified member attend as at, 31 May 1984?

The MINISTER OF INDUSTRIES, COMMERCE AND TOURISM:

(a) The members of the South African Tourism Board are appointed in terms of section 3 of the South African Tourism Board Act, No 100 of 1983. The present members are: Mr D J Hough (Chairman), Mr P Braun, Mr N de Villiers, Mr A B Eksteen, Dr R Knobel, Mr M Pieterse, Mr C Pillay, Dr W J Pretorius, Dr P S Rautenbach, Mr C F Scheepers, Mr P E I Swartz, Mr G van der Veer, Mr P van Horen.

(b) 1 October 1983.

(c) (i) 5.

(ii)

Mr D J Hough	5
Mr P Braun	4
Mr N de Villiers...........	4
Mr A B Eksteen	3
Dr R Knobel	5
Mr M Pieterse	4
Mr C Pillay...............	3
Dr W J Pretorius	5
Dr P S Rautenbach	4
Mr C F Scheepers	5
Mr P E I Swartz	5
Mr G van der Veer	2
Mr P van Horen...........	5

Group Areas Act

1095. Mr S S VAN DER MERWE asked the Minister of Community Development:

(1) (a)(i) What was the total cost to the State of implementing the Group Areas Act as at the latest specified date for which figures are available and (ii) on what specified items was this money spent and (b) what amount had been paid in compensation to (i) white, (ii) Asian and (iii) Coloured persons as a result of the implementation of this Act as at that date;

(2) whether any group areas remain to

We subsequently compiled a new set of conditions which will be made retroactive from 15 March 1984. There is no difference in principle between the two sets of conditions but the magnitude of the cancellation fees, and the times at which they become due, have been altered.

Hansard

Q. 601. 1875 3/7/84

Teaching staff/hospital staff

1082. Mr H H SCHWARZ asked the Minister of Internal Affairs:

What will be the total cost of the proposed salary increase for (a) the (i) teaching profession and (ii) administrative staff involved in this profession and (b) hospital staff in respect of the current financial year and a full financial year, respectively?

The MINISTER OF INTERNAL AFFAIRS:

Total cost of proposed salary improvements:

			Present Financial Year (R million)	Full Financial Year (R million)
(a)	(i)	Education profession (including top structure gradings)	260,7	710
	(ii)	Administrative staff involved with the education profession	None	None
(b)		Household staff	3,3	10

Admistrative staff attached to educational institutions were not included in the investigation into the education profession. They have already received an occupational specific dispensation separately from the education profession.

It is assumed that by "hospital staff" household staff is meant. Hospital staff as such include several occupational classes which have already received occupation specific dispensations separately from household staff.

Cape fur seal

1105. Mr E K MOORCROFT asked the Minister of Environment Affairs and Fisheries:

(1) (a) How many breeding colonies of the Cape fur seal occur off the South African coast and (b) what is the total estimated population of these colonies;

(2) (a) how many of these colonies are subject to culling and (b) what was the total pup quota awarded in respect of the latest specified period of 12 months for which figures are available?

The MINISTER OF ENVIRONMENT AFFAIRS AND FISHERIES:

(1) (a) 9.

(b) 380 000.

(2) (a) 1.

(b) 4 500 for the period 1 January to 31 December 1983.

Afforestation

1106. Mr R W HARDINGHAM asked the Minister of Environment Affairs and Fisheries:

How many applications for permits in respect of afforestation were (a) received and (b) refused in each of the latest specified three years for which figures are available?

The MINISTER OF ENVIRONMENT AFFAIRS AND FISHERIES:

	(a)	(b)
1 April 1981 to 31 March 1982 . .	139	14
1 April 1982 to 31 March 1983 . .	81	25
1 April 1983 to 31 March 1984 . .	108	3

WEDNESDAY, 4 JULY 1984

Hansard 55

†Indicates translated version.

For oral reply: 4/7/84

Prime Minister: Q. 601. 1877

South West Africa: dump for nuclear waste

*1. Mr B B GOODALL asked the Prime Minister:

(1) Whether any person and/or body attached to the (a) South African Government and/or (b) Administration of South West Africa has received any requests, offers or representations concerning a dump for nuclear waste in South West Africa; if so, (i) when, (ii) what was the nature of these requests, offers or representations, (iii) to whom were they made and (iv)(aa) from whom and (bb) in respect of which countries were they received;

(2) whether these requests, offers or representations have been considered; if so, (a) by whom, (b) when and (c) with what result;

(3) whether a decision has been reached on the matter; if not, when is it anticipated that a decision will be reached; if so, what is the decision;

(4) whether he will make a statement on the matter?

The PRIME MINISTER:

(1) Since 1979 a number of enquiries were received from certain bodies and individuals, originating from a number of European countries, regarding the possibility to establish a depository in South West Africa for radio-active waste.

(2) When these offers were received they were referred to and considered by the then Atomic Energy Board (now the Atomic Energy Corporation). These offers were declined.

(3) and (4) It is not the policy of the South African Government to allow the storage of radio-active waste from abroad in either the Republic of South Africa or South West Africa.

Ministers:

Rosettenville post office

*1. Mr H M J VAN RENSBURG (Rosettenville) asked the Minister of Posts and Telecommunications:†

(1) Whether the facilities in the present Rosettenville post office building (a) comply with the standards of his Department and (b) meet the requirements of the public; if not, why not;

(2) whether any alternative rented accommodation is available in the immediate vicinity of this post office; if so,

(3) whether his Department is considering making use of this rented accommodation; if not,

(4) whether his Department intends to erect a new post office building for Rosettenville; if so, (a) what site will be used for this purpose, (b) how far will it be situated from the present post office building, (c) what is the total estimated cost of the land and the building, (d) when is the building expected to be completed and (e) what facilities are envisaged in respect of (i) the public, (ii) business undertakings and (iii) parking; if not, why not;

(5) whether it is being or will be considered to use the present site for this purpose; if not, why not;

(6) whether any agreement has been entered into in respect of the post offices in Rosettenville and Townsview; if so, what is the nature of the agreement;

(7) whether he will make a statement on the matter?

†The MINISTER OF POSTS AND TELECOMMUNICATIONS:

(1) (a) and (b) No, because the present hired premises are camped and unsuitable and cannot be extended or improved in a practical and economic way to provide satisfactory working conditions for the staff and adequate public service facilities;

(2) no;

(3) falls away;

(4) yes;

- (a) erven 707 and 708, jointly 1 982 sq metres in extent, situated at the corner of Daisy and Albert Streets,
- (b) approximately 500 metres,
- (c) the land was acquired at R107 000 and the cost of the proposed building is provisionally estimated at R580 000,
- (d) by October 1986, and
- (e) (i) and (ii) all normal post office services, including accommodation for mail delivery purposes and 3 000 private boxes, and
  - (iii) parking for all departmental vehicles will be provided on the site and to the extent that it may be possible, site space will also be made available for public parking;

(5) no, the acquisition of the present site by the Department and the redevelopment thereof for post office purposes will not be a sound proposition from a business point of view and cannot be implemented without serious disruption;

(6) yes, the lease agreement in respect of Rosettenville expires on 31 August 1985 and the Department has an option to extend the agreement by one year. The lease agreement in respect of Townsview expires on 31 June 1985 without cost provision for extension;

(7) the inadequate accommodation of the present Rosettenville post office often results in public dissatisfaction and the re-siting is considered in the interest of all concerned.

Crimen injuria/cruelty to animal: investigation

*2. Mr D J N MALCOMESS asked the Minister of Law and Order:

(1) Whether, with reference to his reply to Question No 10 on 11 April 1984, the investigation of the alleged cases of *crimen injuria* and cruelty to an animal has been completed; if so, what were the findings; if not, (a) why not and (b) when is it anticipated that the investigation will be completed;

(2) whether any progress has been made in the investigation; if not, why not; if so, what progress;

(3) whether any (a) witnesses and (b) suspects have been questioned; if so, (i) how many and (ii) with what result;

(4) whether he will make a statement on the matter?

The MINISTER OF EDUCATION AND TRAINING (for the Minister of Law and Order):

(1) No.

- (a) Because of a complete lack of clues or other reliable information.
- (b) It is not possible at this stage to give an indication when the investigation will be completed.

(2) No. For the reasons mentioned in (1)(a).

(3) (a) and (b) No.

(4) No.

X X

124

Hansard Q. Col. 1881

4/7/84

Khayelitsha

*3. Mr K M ANDREW asked the Minister of Co-operation and Development:

(1) (a) What total amount has been approved for expenditure on Khayelitsha, (b)(i) in what manner and (ii) over what period is this amount to be spent and (c)(i) how many houses are and (ii) what other specified accommodation is to be built during that period;

(2) (a) what amount of these approved funds had been (i) spent and (ii) contracted to be spent as at the latest specified date for which figures are available, (b) on what projects was this money (i) spent and (ii) contracted to be spent and (c)(i) how many houses are and (ii) what other specified accommodation is included in these projects?

The MINISTER OF CO-OPERATION AND DEVELOPMENT (Reply laid upon the Table with leave of House):

(1) (a) R80 486 156.

(b) (i)

A	Overall investigations, design of structure plan and aerial survey	R197 430
B	Development of 1 000 initial sites, township services and a temporary camp ..	R3 941 598
C	Access road and the preparation of a serviced level surface for employers hostels	R1 624 801
D	Erection of administration offices and support centre for a self-help scheme and the erection of 30 demonstration houses	R1 539 029
E	Stabilisation and grassing of sportfields	R100 415
F	Development of further 4 000 sites:	
	(i) Site levelling and stabilisation	R4 763 050
	(ii) Township services, roads and an electrical distribution system and the erection of 5 000 core houses	R63 766 441
G	66 kV powerlines and 66/11 kV substations	R3 212 234
H	Preliminary sewerage purification works	R1 341 158
	Total	R80 486 156

(ii) May 1983 to May 1985.

(c) (i) 5 000 core houses.

(ii) 279 temporary Fletcraft huts (already erected) and 30 demonstration houses.

In addition one employers hostel with 250 beds is expected to be completed by the private sector in the period mentioned.

The infrastructure to house 8 500 single contract workers will be made available to employers for the erection of further hostels during the period mentioned.

(2) (a) (i) R10 823 042 as at 25 May 1984.

(ii) R68 052 929 as at 18 June 1984.

(b)(i) to (c)(ii): The projects are numbered in accordance with the reply to (1)(b)(i) above.

pointed to investigate and make recommendations on existing legislation relating to cruelty to animals; if so, what steps does he envisage in this regard; if not, why not;

(2) whether he will order an investigation into rodeo activities; if not, why not; if so, when;

(3) whether he will make a statement on these matters?

The MINISTER OF LAW AND ORDER (for the Minister of Justice):

(1), (2) and (3) Legislation relating to cruelty to animals administered by the Department of Justice, is being reviewed from time to time, as is, for instance, evident from the increase of the penalty provision by legislation in 1983. There are also other departments concerned with the prevention of cruelty to animals, and liaison with those departments take place whenever necessary. There is at present, for example, liaison with the Department of Health relating to experiments with animals. There are also private organizations and individuals who concern themselves with the protection of animals, and who from time to time propose amendments to legislation. Such proposals are, after consultation with interested parties where necessary, duly considered and decided upon. Legislation concerning the prevention of cruelty to animals cover a wide field and a number of offences carrying heavy penalties is prescribed. Perhaps the problem lies in the indifference of members of the public to report incidents and to give evidence rather than in the legislation itself. I will nevertheless consider the necessity of an enquiry in one form or another into existing legislation or the necessity to make further provision in legislation relating to particular kinds of activities, for example, rodeo activities, if information is brought to my attention requiring such a step. Recent representations received on rodeos must still be considered but I invite the hon member and anybody else who is in possession of relevant information, to make it available to me.

*6. Dr M S BARNARD—Health and Welfare—Reply standing over.

Hansard

Khayelitsha

Q. Col. 1940 6/7/84

*7. Mr K M ANDREW asked the Minister of Co-operation and Development:

(1) Whether the first 5 000 core houses to be built in Khayelitsha will be identical; if not, in what respects will they differ;

(2) whether the initial rentals will be the same for all houses; if so, what will be the initial rental; if not, (a) what will be the (i) highest and (ii) lowest rental charged and (b) what criteria will be applied in determining rentals;

(3) whether rentals will include all (a) water, (b) refuse, (c) sewerage and (d) other specified charges, levies or rates; if not, why not;

(4) whether residents will be able to pay their (a) rents and (b) other services charges at a place in Khayelitsha; if not, (i) why not and (ii) where will such payments have to be made in each case;

(5) (a) what type of temporary housing structures was erected in Khayelitsha and (b) what steps are to be taken in respect of them once the 5 000 core houses have been completed?

The MINISTER OF CO-OPERATION AND DEVELOPMENT:

(1) No, the contracts for the 5 000 core units are subdivided into three basic types, namely:

- (a) Rectangular units of concrete block cavity wall construction with an area of 27 m² and medium pitched asbestos roofs. (Contractor: Besterecta—3 320 units);
- (b) "L" shaped units of concrete block cavity wall construction with an area of 26 m² and a steeply pitched asbestos roof. (Contractor: George Wimpey—904 units);
- (c) Rectangular units of prefabricated factory built insulated concrete sandwich construction with an area of 31 m² and low pitched roofs (Contractor: Murray and Roberts—776 units).

The internal arrangement of the bedroom, bathroom/toilet and livingroom/kitchen is virtually identical to all units.

(2) The question of rentals is under investigation and a decision is still to be taken.

(3) (a), (b), (c) and (d) See (2) above.

(4) (a) and (b) Yes.

(5) (a) 279 temporary units known as fletcraft huts were erected.

(b) People occupying these huts will transfer to permanent structures and the huts will be used for future temporary accommodation when required.

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Cape Peninsula: electricity in townships

Hansard Q. Col. 1941 6/7/84

*8. Mr K M ANDREW asked the Minister of Co-operation and Development:

(1) Whether electricity is available to houses in (a) Langa, (b) Nyanga and (c) Guguletu; if not, (i) why not and (ii) when will electricity be made available in each case; if so, what percentage of houses in each township has electricity available;

(2) whether the first 5 000 core houses in Khayelitsha will have electricity when completed; if not, (a) why not and (b) when will electricity be made available to them?

†The MINISTER OF CO-OPERATION AND DEVELOPMENT:

(1) (a) Yes. Available to all houses.

(b) Yes. Available to about 50% of the houses.

(i) The distribution network is inadequate to supply the rest at present.

(ii) The network can only be upgraded when residents can afford the cost.

(c) Yes. Available to all houses.

(2) No.

(a) Due to the high cost and the extra burden relating to capital redemption and interest which the supply of electricity at this stage would place on the inhabitants.

(b) There is no target date yet as the matter depends on the availability of funds and the ability and willingness of the inhabitants to pay for such service.

*9. Mr K M ANDREW—Health and Welfare—Reply standing over.

Kasigo Township

*10. Mrs H SUZMAN asked the Minister of Co-operation and Development:

(1) Whether any member of his Department or the West Rand Development Board has received any representations or complaints concerning Kasigo Township, near Krugersdorp; if so, (a) when, (b) from whom and (c) what was the (i) nature of the representations or complaints and (ii) response thereto;

(2) whether any action has been taken in this regard; if not, why not; if so, (a) what action and (b) when;

(3) whether he will make a statement on the matter?

†The MINISTER OF CO-OPERATION AND DEVELOPMENT:

(1) As far as we can ascertain, no.

(2) If the hon member knows of anything we don't, she is welcome to bring it to our notice.

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Hansard Q. Col. 1943
6/7/84

Plutonium

*11. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) Whether any arrangements have been made to prevent the use of the plutonium in the spent fuel produced by Koeberg nuclear power station in the construction of nuclear weapons in any country; if not, why not; if so, what is the nature of these arrangements;

(2) whether the plutonium extracted from such spent fuel will be stored in the Republic; if not, where will it be stored; if so, under the authority of what body;

(3) whether he will make a statement on the matter?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Yes. The fuel used in Koeberg is subject to International Atomic Energy Agency safeguards. This entails that any plutonium recovered from spent fuel will also be subject to international safeguards in order to ensure that it will only be used for peaceful purposes.

(2) No. The safeguards agreements applicable to the supply of Koeberg fuel state explicitly that, should reprocessing be put into practice, the plutonium consequently recovered may not be stored in South Africa.

Disposal of the material will rest with the country where reprocessing was done and, as such, will remain under International Energy Agency safeguards.

(3) No further statement is deemed necessary at this stage.

Koeberg: spent fuel

*12. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) What estimated average annual amount of spent fuel in kilograms will be generated by the Koeberg nuclear power station;

(2) whether any arrangements have been made for the reprocessing of this spent fuel; if not, why not; if so, (a) where will the reprocessing take place, (b) what is the estimated cost in rand per kilogram of reprocessing such spent fuel and (c) what will be done with the reprocessed spent fuel?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) At this stage new fuel is loaded into the Koeberg Power Station at a rate of 48 480 kg uranium per annum and a corresponding amount of spent fuel is withdrawn.

(2) No. The standard practice is followed that the spent fuel is stored underwater in the Koeberg pools for several years. Therefore, the decision whether reprocessing should be done need only be made at a future date. This decision will be based on the economic viability of reprocessing at that stage.

(a), (b) and (c) Fall away.

Mossel Bay: nuclear facility

*13. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

Whether a nuclear facility is to be or is being constructed near Mossel Bay; if so, (a) what is the (i) general purpose of , and (ii) estimated total cost of constructing, this nuclear facility and (b) when will the facility commence operating?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

Yes.

(a) (i) Future expansion of the research and development programmes and attendant facilities of the Atomic Energy Corporation which cannot be accommodated on the existing Pelindaba/Valindaba site due to site and other restrictions.

(ii) Not yet determined since the planning phase was only entered into recently.

(b) No decision has yet been taken.

Mr R R HULLEY: Mr Speaker, arising out of the hon the Minister's reply, will the proposed facility at Mossel Bay be able to be used for the reprocessing of spent fuel from Koeberg?

†The MINISTER: Mr Speaker, I do not think I should reply to this question at this stage.

Inanda Dam

*14. Mr P C CRONJÉ asked the Minister of Environment Affairs and Fisheries:

(1) Whether the Inanda Dam will be fenced off; if so,

(2) whether the fence will be erected at a certain level above the top water level; if so, at what level; if not, at what distance from the top water line will the fence be erected;

(3) within what (a) height above the top water level and/or (b) distance from the top water line will persons be required to vacate (i) property and/or (ii) land?

†The MINISTER OF ENVIRONMENT AFFAIRS AND FISHERIES:

(1) No decision in this regard has as yet been taken but the matter will be negotiated with the Government of kwaZulu.

(2) and (3) Fall away.

Hansard Q. Col. 1946
6/7/84

~~320~~

Security legislation: detainees

*15. Mrs H SUZMAN asked the Minister of Law and Order:

(1) Whether any persons were detained in terms of security legislation in May and June 1984; if so, (a) when, (b) where (i) were they detained initially and (ii) are they being detained at present and (c) in terms of what statutory provision;

(2) whether any of these persons are still in detention; if so,

(3) whether they have been charged; if so, with what offence in each case;

(4) whether he will make a statement on the matter?

The MINISTER OF LAW AND ORDER:

(1) Yes.

(a) On 17 different dates between 28 May and 30 June 1984.

(b) (i) and (ii) Except to state that they were initially and are presently being detained at two prisons and 23 different police stations in all four Provinces, I am not prepared to disclose particulars thereof in detail.

(c) Section 29 of Act 74 of 1982.

(2) Yes.

(3) No.

(4) No, except to add that their next of kin are aware of their detention.

Mrs H SUZMAN: Mr Speaker, arising out of the reply of the hon the Minister, will

F.M 6/7/84

(55)

OIL PROCUREMENT

The ripples spread

Sometime this week the Advocate General (AG) is expected to send his report on allegations of corruption in oil procurement to Parliament. Unfortunately the country as a whole will not be any the wiser. The report is expected to be referred directly to a select committee, with the usual built-in government majority, which will eventually decide how much, if any, of it to make public.

There is no way of knowing how widely the AG, Judge Piet van der Walt, has interpreted his investigatory brief. He is an honest and competent official and if there have indeed been cases of officials or brokers unlawfully enriching themselves, he will certainly ~~have~~ dug out the facts. But there is reason to doubt that any investigation that falls within his brief can uncover what has really gone on behind the scenes during SA's oil procurement activities.

Whether or not some officials or oil brokers have taken advantage of SA's supply difficulties to enrich themselves is really beside the point. Indeed there are those who believe that government has focused attention on the corruption issue to divert it from other areas.

This does not necessarily imply that government is covering up anything illegal. Legislation governing oil procurement and distribution is phrased so broadly and the powers conferred on designated officials are so wide (and the penalties of contravention are so severe) that it is difficult to see how government could be guilty of any illegality — short of actually embezzling procurement funds or strategic oil fund reserves. Just about everything is, in one way or another, left to the discretion of the Ministers concerned. A recent amending Bill has broadened the area of discretion.

There are really two related issues to be considered. One is the conduct of the Strategic Fuel Fund Association (SFFA) in buying crude oil for SA and the other is the use to which the very considerable reserves and cash flow of the State Oil Fund (SOF) are put.

Both are private companies in terms of the Companies Act, thus not subject to audit by the Auditor-General, but both receive very considerable amounts of public funds — the one from a proportion of customs or excise duties on fuel products and the other from a levy on oil products imported into SA or manufactured, distributed or sold here.

The customs and excise receipts paid to the SOF were largely employed to finance the construction of Sasol II and III — a requirement that has since fallen away. Government, through the State Oil Fund Amendment Bill, has widened the use to which SOF funds can be put by allowing the Minister of Mineral and Energy Affairs (with the "concurrence" of the Minister of Finance) to decide how surplus funds can be invested. These can also now be transferred to the State Revenue Account. Previously they had to be invested with the Public Debt Commissioners — or invested in other ways in "consultation" with the Minister of Finance.

The real change involves altering the Finance Minister's role from one of being consulted to one where his concurrence is necessary — which suggests past disagreements which have now been resolved in Finance's favour. A similar requirement for the Minister of Finance's "concurrence" replaces the previous requirement for "consultation" in investing the surplus funds of the SFFA Equalisation Fund.

Nonetheless, the Bill aroused deep suspicions in opposition ranks. The PFP's Roger Hulley charged in Parliament that it gave government "a blank cheque" to use SOF funds beyond the control of Parliament or the Auditor General. "Is there," he asked, "a hidden agenda for the vast SOF slush fund which cannot be exposed to the light of public debate and scrutiny?"

Perhaps there is. But, if so, government did not require the amending Bill to make provision for it, or to keep such funds secret, as Hulley would have discovered from a thorough reading of the existing Act.

Although section 2(a)(i) of the Act lays down precise uses for the funds, section 2(a)(ii) blithely adds that they may also be used for "any other object for which that fund may be applied, and which has been designated or approved by the said Minister in consultation with the Minister of Finance." You cannot get much more wide ranging than that.

Slush fund

Hulley's use of the phrase "slush fund" is indicative of opposition thinking. Webster's Twentieth Century Dictionary defines a "slush fund" as one containing "money used for bribery, political pressure or other corrupt purposes." Hulley may well be casting some kind of inference on the information scandal, hinting that government may be doing it all over again.

His leader, Frederik van Zyl Slabbert, obviously does not agree since he went out of his way to exempt all Cabinet ministers from allegations of corruption in oil procurement.

Nonetheless Hulley is not alone in his thinking. Johannesburg, Cape Town and Pretoria are alive with talk about oil funds — and some of the allegations made are wild in the extreme.

Mineral and Energy Affairs Minister Danie Steyn, while conceding that the Auditor-General may at some stage be allowed to audit the SOF, has argued that neither SOF nor the SFFA should be subject to his audit because they are "private companies."

This is a weak argument since both companies are controlled by government nominees. Both are funded by vast amounts of public money. In any case, the Exchequer and Audit Act empowers the Auditor-General to audit the books of just about any organisation — private or not.

In oil matters there are two organisations in receipt of huge amounts of public money that are not subject to public or parliamentary scrutiny. One has been accused of overpaying for oil to the extent of almost R400m while the other has many millions of rands in its reserves.

Some observers, noting that the SFFA has been accused in Parliament of paying more than negotiated contract prices for oil, speculate that in fact there has been no overpayment but that government has used funds for purposes which, for national security reasons, it is not prepared to reveal. It is also speculated that government may now wish to use SOF funds for purposes unconnected with oil — hence the recent amending legislation.

If there is any truth in such speculation it does not necessarily imply illegality — although it does argue that there has been some deft financial footwork.

Could that be the reason why Sasol directors have departed from the SFFA (it is claimed at Sasol's request) and why the SFFA has been largely taken over by the Industrial Development Corporation? It could be so if Sasol men found themselves dealing with matters that had little to do with oil and with which they were not comfortable.

What government could be using surplus funds for is another matter. Anything to do with military or nuclear matters, for instance, is highly unlikely to be made public.

Energy, of course, is a very wide field. Government, in addition to the "catch-all" investment provisions of the State Oil Fund Act also widened the specific provisions for which funds can be used. This was through an addition to the Bill allowing funds to be used for "the acquisition, generation, manufacture, marketing or distribution of any other form of energy, and research connected therewith."

This amounts to a considerable widening of the scope of the Act — and could mean much or little. It certainly lays the groundwork for considerable speculation.

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Argus 9/7/84

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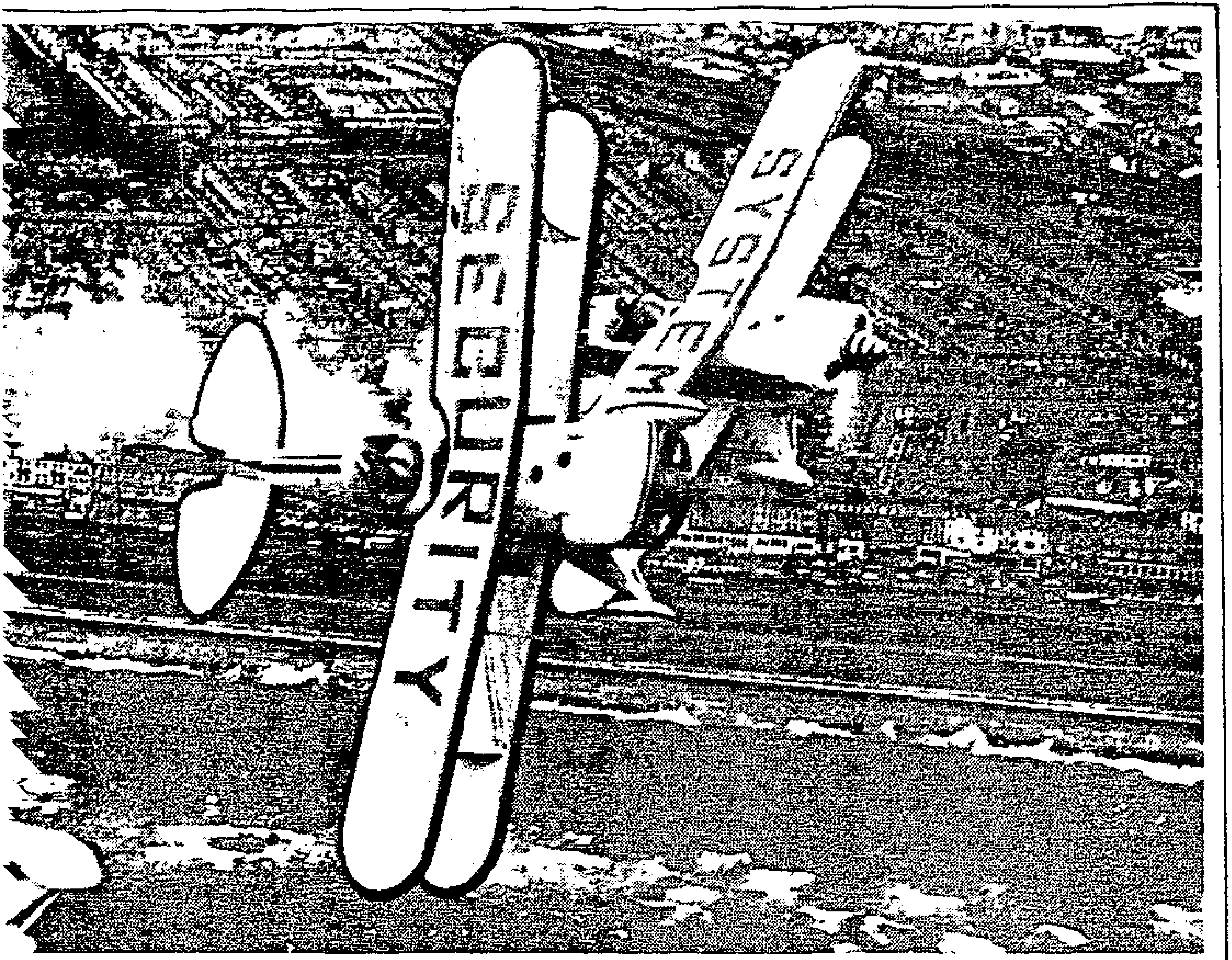
s oil-deal probe



n aerobatic team rehearse above the Lancashire countryside near Fleetwood the Pitt's Special bi-planes seen here collided head-on, killing both pilots.

Political Staff

THE Government does not intend to allow a wider investigation of South Africa's oil deals following the tabling in Parliament of the report of the Advocate-General on allegations of improper contracts involving R385-million.

Progressive Fedetal Party attempts to widen the investigation came on Friday when Mr Brian Goodall, the -party's energy spokesman, gave notice of a motion asking for a select committee to be appointed.

However, on today's order paper giving the business of Parliament the item has been put at the end.

This tactic is often used by the Government to prevent debate on an issue.

The Government last week used the same method to prevent debate on a Conservative Party motion asking Parliament to recommend a commission of inquiry into the alleged falsification and publication of a State document by the National Party.

For debate

Meanwhile, the report of the parliamentary select committee which considered the publication of the Advocate-General's report is due to be debated in Parliament this afternoon.

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The 49-page report was submitted to Parliament on Friday with a recommendation from Mr Justice van der Walt that it remain confidential.

"State security"

In terms of the Advocate-General's Act, Parliament then had to appoint a select committee to consider what part of the report would be published.

In a brief report to Parliament the chairman of the select committee, Mr H J Tempel (NP Ermelo), said the committee had aimed at "maximum disclosure without prejudice to the interests of the security of the State".

The committee was therefore tabling two reports, one to remain confidential and the other with omissions, which could be published.

Give details

It appears that the report to be released, if Parliament ap-

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lance plan e security

Staff Reporter

FROM today visitors to Cape Town's Civic Centre will be issued with passes and subjected to camera surveillance as part of new security arrangements.

Improved control of pedestrian access to the tower and podium blocks is aimed at greater safety for essential public services, staff and visitors.

Director of the council's security services Mr E Bult has said that public access to the second cash hall, large hall, concourse, housing and finance offices, lecture theatre, pensions office and exhibition hall will be unrestricted.

However access to the podium and tower blocks is restricted to four entrances.

Security guards monitoring the entrances issue visitors with passes and closed-circuit television cameras record their presence and the serial numbers of passes, which must be displayed and handed back on exit from the centre.

Certain lifts no longer stop at certain floors.

No passport for SA cricket board head

Argus Correspondent

JOHANNESBURG. — The Department of Internal Affairs has confirmed that the president of the South African Cricket Board, Mr Krish Mackerdhuj, has been refused a passport to go to London.

Mr Mackerdhuj hoped to argue at the International Cricket Conference in London for the continuing sports ban on South Africa.

Instead, leaders of the rival South African Cricket Union, which wants South Africa readmitted to international cricket, plan to attend the world conference.

EMBARRASSED

The union could be seriously embarrassed over the absence of Mr Mackerdhuj.

The cricket board's slogan is "No normal sport in an abnormal society", and it has opposed rebel tours arranged by the cricket union.

The union however argues that South African cricket is integrated.

Vet fails to revive golf partner

Staff Reporter

A VETERINARY surgeon described today how he tried in vain to revive his 59-year-old golf partner who collapsed with a suspected heart attack at Malmesbury.

Dr J W van der Vyver of Malmesbury administered artificial resuscitation to Mr L A S-"Lood" Lemmer of Blaauberg Road, Table View, after he collapsed at the last hole about 5.30pm on Saturday.

A doctor arrived and pronounced Mr Lemmer dead.

Mr Lemmer, manager of a Cape Town textile factory, leaves his wife, two daughters and two grandchildren.

Undersea cable repair nearly done

Staff Reporter

THE South African undersea communications cable will, hopefully, be back in operation today.

The manager of the South Atlantic Cable Company, Mr G C Durand, said today that the repair team which had been working on the cable for more than a week was on the "last lap" of the job.

Argus

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Natal University take surfing title

Surfing Correspondent

THE 1984 Mainstay South African intervarsity surfing contest, held at the weekend in excellent surf at Seal Point, Cape St Francis, was won for the third successive year by Natal University.

Second were highly fancied University of Cape Town, with the University of Poret Elizabeth and Rhodes tying for third. Stellenbosch were fourth.

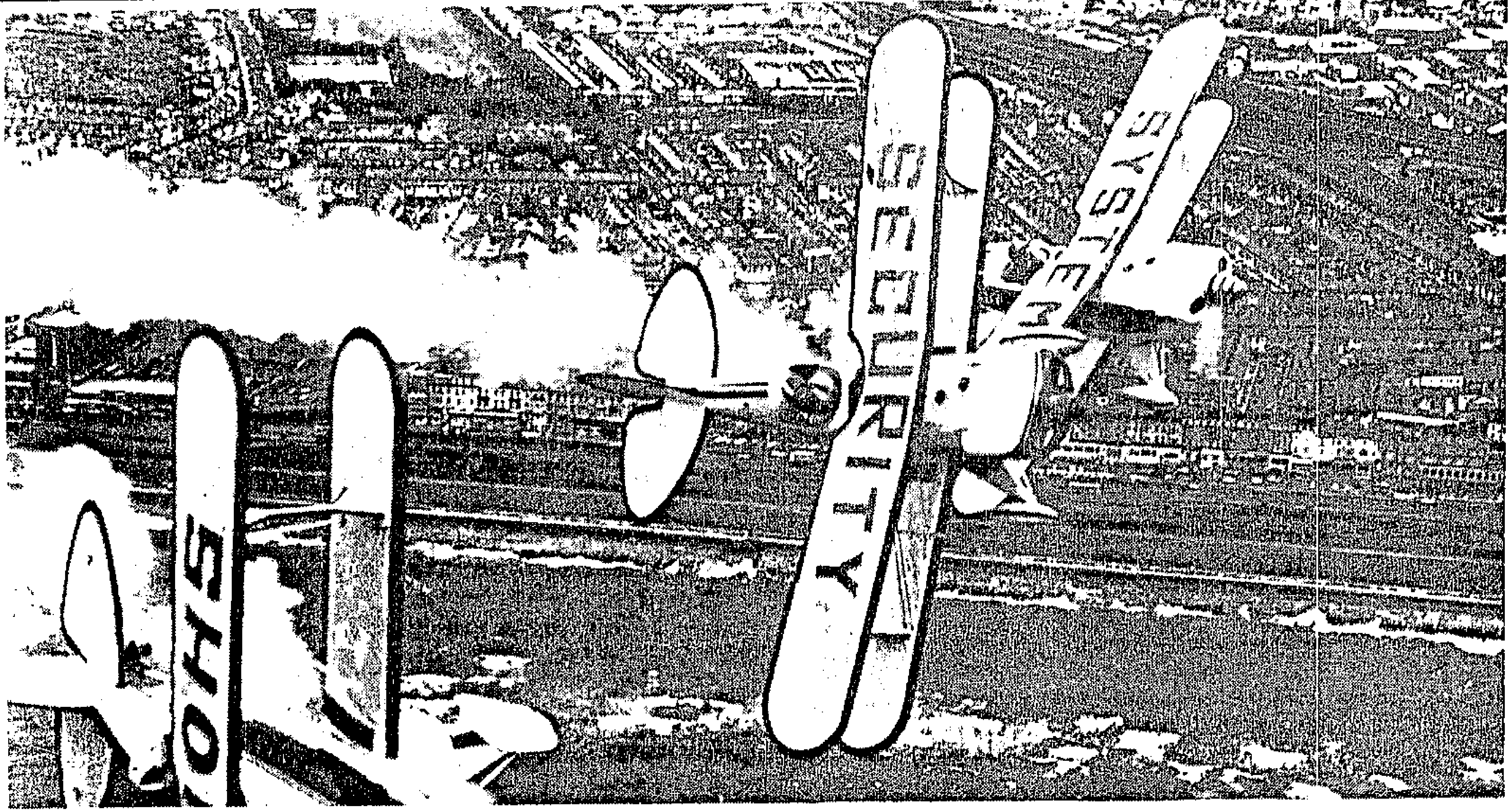
David Malherbe (UCT) won the individual championship, with Natal Springbok Craig Sims second and another Natalian, Bruce Eldrige, third.

A Protea side was selected after the event to surf against a Mainstay invitation team.

The Protea side — in essence a South African universities team — consisted of David Malherbe, Graham Button, Geoff Smith, Brian Scheiner, Craig Sims, Grant Myrdal, Andrey Harvey and Bruce Eldrige.

The invitation team consisted of Australian professional surfers Barton Lynch, Stuart Cadden, Gary Green, Bryce Ellis and Robbie Page, and South Africans Mike Savage, Pierre Tostee, and Darryl Johnson.

The invitation side narrowly beat the Proteas.



Trailing smoke, The British Vixen aerobatic team rehearse above the Lancashire countryside near Fleetwood recently. Hours later, two of the Pitt's Special bi-planes seen here collided head-on, killing both pilots.

Camera surveillance plan for Civic Centre security

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Give details

It appears that the report to be released, if Parliament approves, could give fairly extensive details of the conclusions of the Advocate-General leaving out only names, dates and places.

Mr Tempel today said there would be no cover-up in what would be omitted from the Advocate-General's report.

Only those points of strategic importance to South Africa would be left out. No part dealing with allegations of improper dealings would be omitted.

The investigation was sparked by confidential documents dealing with the country's oil deals being sent anonymously to the PFP and certain newspapers.

'e Australian

Coal shortage sends a bitter chill

CRISIS: Only two days' supply of coal is left.

Pic: MBUZENI ZULU

By SELLO RABOTHATA

A shortage of coal is facing thousands of households and industry on the Witwatersrand, a major coal merchant warned yesterday.

Mr Brian Aires, the managing director of MacPhail Limited, said there are only two days' supply of domestic coal and a perilous four days' supply for industrial coal. He said if the cold weather continues, this critical shortage of coal could mean not only that South Africans are in for a chilly time, but the wheels of the country's industry could grind to a halt.

He said: "Over the past couple of weeks, with the cold weather, stockpiles in merchants' yards have been run down sharply. Right now there are only two days' supply of domestic coal here on the Reef.

"The supply of washed coal for industrial purposes is slightly better — there is enough for four days. But the public should be warned, washed coal and anthracite is in very short supply."

Mr Aires criticised the fact that some coal merchants do not carry sufficient stockpiles. He said it was laid down by the Department of Mineral and Energy Affairs in April 1983 that as part of the coal distribution rationalisation programme, all merchants had to carry sufficient stockpiles.

Strike problems

"Had the department's decree been effectively implemented, we would not have situations like this," he said.

He said the idea behind the programme was to avoid shortages such as the present one. Some merchants do not hold adequate stockpiles themselves at times like this, when the industry is facing short supplies and the collieries have problems such as strikes, the public and industrialists have to suffer shortages.

He said the situation has been worsened in recent weeks because there have been strikes at several collieries. This apparently has caused some collieries to run short of coal. There has also been delays at the collieries.

Sapa reports that a spokesman for the Transvaal Coal Owners Association, Mr Trevor Savage, said he was unaware of a coal shortage. "As far as I am concerned there is no shortage. We are moving full steam and the coal is rolling." A spokesman for the Johannesburg Electricity Department has also said residents need not fear power cuts as the department had sufficient supplies to meet present and future power demands.

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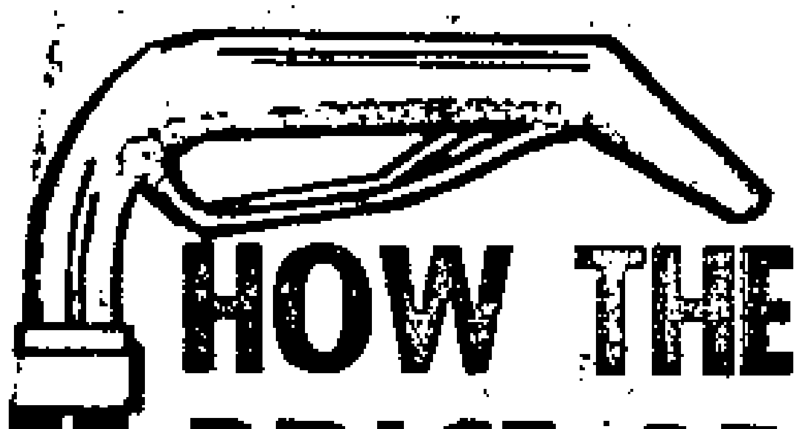

HOW THE PRICE OF A LITRE HAS ZOOMED

These are Reef prices in cents for 93 octane premium petrol when they were reflected in the monthly consumer price index:

April 1970 — 9,173
April 1971 — 9,9
July 1972 — 10,2
December 1972 — 10,4
January 1973 — 10,9
November 1973 — 12,4
February 1974 — 15,1
December 1974 — 16,0
April 1975 — 18,0
November 1975 — 21,1
April 1976 — 23,8
September 1976 — 24,1
February 1977 — 28,1
April 1977 — 28,6
April 1978 — 28,9
July 1978 — 30,1
January 1979 — 33,3
March 1979 — 39,3

Later Reef prices with the date of the rises:

June 8 1979 — 54,2
April 1 1980 — 54,4
April 1 1981 — 55,0
July 1 1981 — 61,0
March 1 1982 — 61,6
April 1 1982 — 64,6
September 1 1982 — 65,2
February 28 1983 — 63,6
August 22 1983 — 59,6
February 1 1984 — 60,2
July 1 1984 — 63,5

SA's fuel-from-coal industry has eroded ta

State appro rise for oil c

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fai

By Stephen McQuillan

International oil companies in South Africa will be able to boost their profits after a deal with the Government, it was disclosed today.

The companies will take about 4c on each litre sold to bolster profits eroded by Sasol production and other developments, 24 Hours was told.

It is believed the move comes after a long-term "understanding" between the oil companies and the Government over increases in production from South Africa's oil-from-coal industry.

The Government's equalisation fund, which takes 1,3c on each litre of petrol, will pick up the tab.

It is unlikely that the extra cash going to the oil companies will have to be passed on to the motorist for some time because of the Government's decision to sell R550 million worth of crude oil from strategic stocks.

The oil is being sold to refineries at today's market prices, and could mean profits of millions of rands. Some of it was bought up to 20 years ago, when prices were low.

Profits from the sale will be used to strengthen the equalisation fund and replace strategic stocks.

A spokesman for the Department of Mineral and Energy Affairs said negotiations between the oil companies and the Minister, Mr Danie Steyn, closed last week.

"The Minister had the Cabinet's authority to strike the deal," he said.

The oil companies had asked the Government several times to improve their profit margins.

The department's Director-General, Dr Louw Alberts, told 24 Hours that the deal came after a professional investigation into the oil business. It indicated that a fair return on the companies' capital investment was justified.

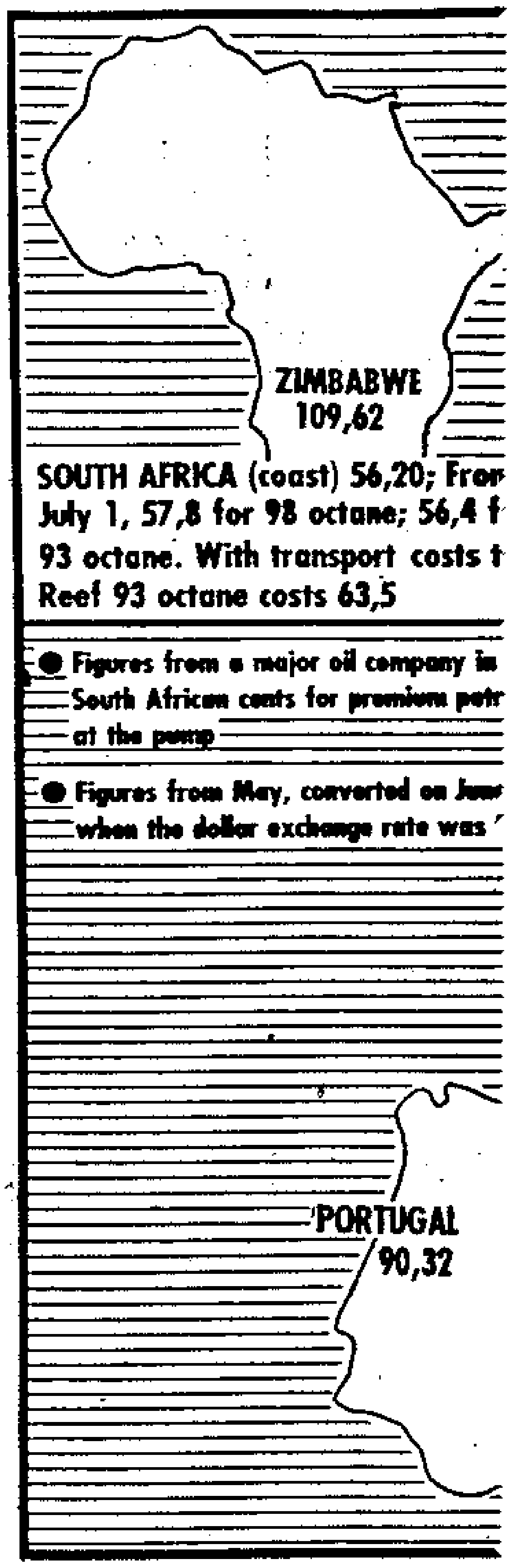
"In the light of that, it was necessary to subsidise the oil companies to between 4c and 4½c on a litre of 93 octane through the equalisation fund," he said. "This has now been agreed to and became effective from July 1."

The equalisation fund was channelled money from various sources, including the sale of some strategic oil stocks.

"I believe the oil companies believe the agreement is reasonable under the circumstances," said Dr Alberts.

A spokesman for BP, which occasionally acts as the secretarial oil company on matters of mutual interest in the industry, said: "A meeting was recently held between the department and representatives of the oil industry on matters of common interest. The question of petroleum prices was raised."

For every cent that the value of the rand dropped against the dollar, South Africa had to pay an average of 0,4c a litre more, according the the department. The equalisation fund acts as a buffer to iron out price fluctuations.



n-coal industry has eroded takings of the private sector

State approves profit rise for oil companies

55 [illegible] Star 12/7/89

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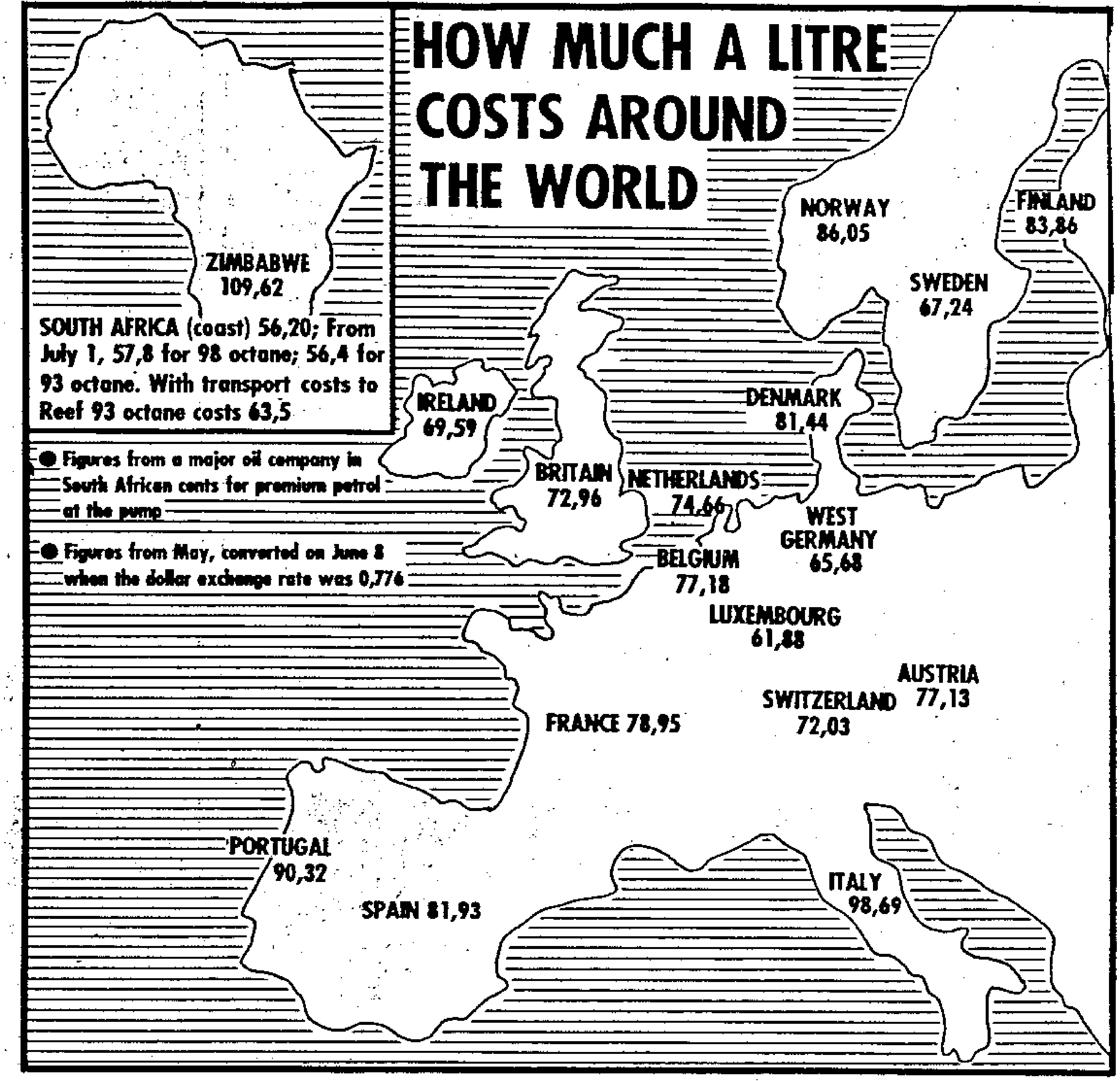


HOW MUCH A LITRE COSTS AROUND THE WORLD

SOUTH AFRICA (coast) 56,20; From July 1, 57,8 for 98 octane; 56,4 for 93 octane. With transport costs to Reef 93 octane costs 63,5

- ● Figures from a major oil company in South African cents for premium petrol at the pump
- ● Figures from May, converted on June 8 when the dollar exchange rate was 0,776

55

OIL PROCUREMENT

Questions remain

FM 13/7/84

The report to Parliament of the Advocate-General (AG) into the alleged oil scandal has come and gone. It has settled some issues, but vital questions remain unanswered.

Two main aspects arise from Monday's proceedings in the House of Assembly, and until these are settled the ripples will continue to spread, as the *FM* has pointed out (*FM*,July 6).

The first question was posed by the *FM* last week, and repeated several times during this week's debate. This was whether the brief of the AG was sufficiently wide to permit a probe sharp enough to penetrate the complex depths of SA oil procurement. The answer, according to the Opposition (and many others) is a clear no.

The second aspect is an old issue, and a key principle: that oil deals, which involve massive sums of public funds, ought to be subject of parliamentary control and the scrutiny of the Auditor General.

The Nationalist Press has had a field day in trumpeting that the PFP's "oil bomb" has exploded in its face. True, the Opposition is obviously unhappy with the outcome but the amount of political egg on any party's face is irrelevant.

The report found no evidence of corruption or improper enrichment by people involved in SA's oil deals. No-one questions the AG's findings, based on his investigation. But serious doubts were cast in the House on the extent of the probe.

The PFP's Alex Boraine called the whole investigation "lukewarm." His colleague, Roger Hulley, said that in view of the staggering amounts of money involved, a far more thorough investigation would have been warranted.

The form of the report also suggests that the AG did not make wide use of his powers of subpoena — both of people and documents. Consequently, the continued uncertainty about the activities of Italian millionaire Marino Chiavelli — who is a SA resident and could have been subpoenaed.

Opposition speakers were shouted down by government supporters who accused them of sour grapes. But there is substance to the PFP's call for a select committee, with the power to call and question witnesses and to receive and examine evidence.

The Opposition questioned the number of witnesses who were called — and the number who were not. Hulley said the report was "strangely silent" on the role played by F W de Klerk, who is a former Minister of Mineral and Energy Affairs. The burden of responsibility was on De Klerk, he said, and he wondered why De Klerk was not interviewed by the AG. "In summing up, I believe there are more than enough unanswered questions to more than justify the appointment of a select committee to investigate in depth."

Harsh words

These are harsh words to be uttered in the public and privileged forum of Parliament. No aspersions were cast on the AG, but the public may be left with the impression that the full story remains untold.

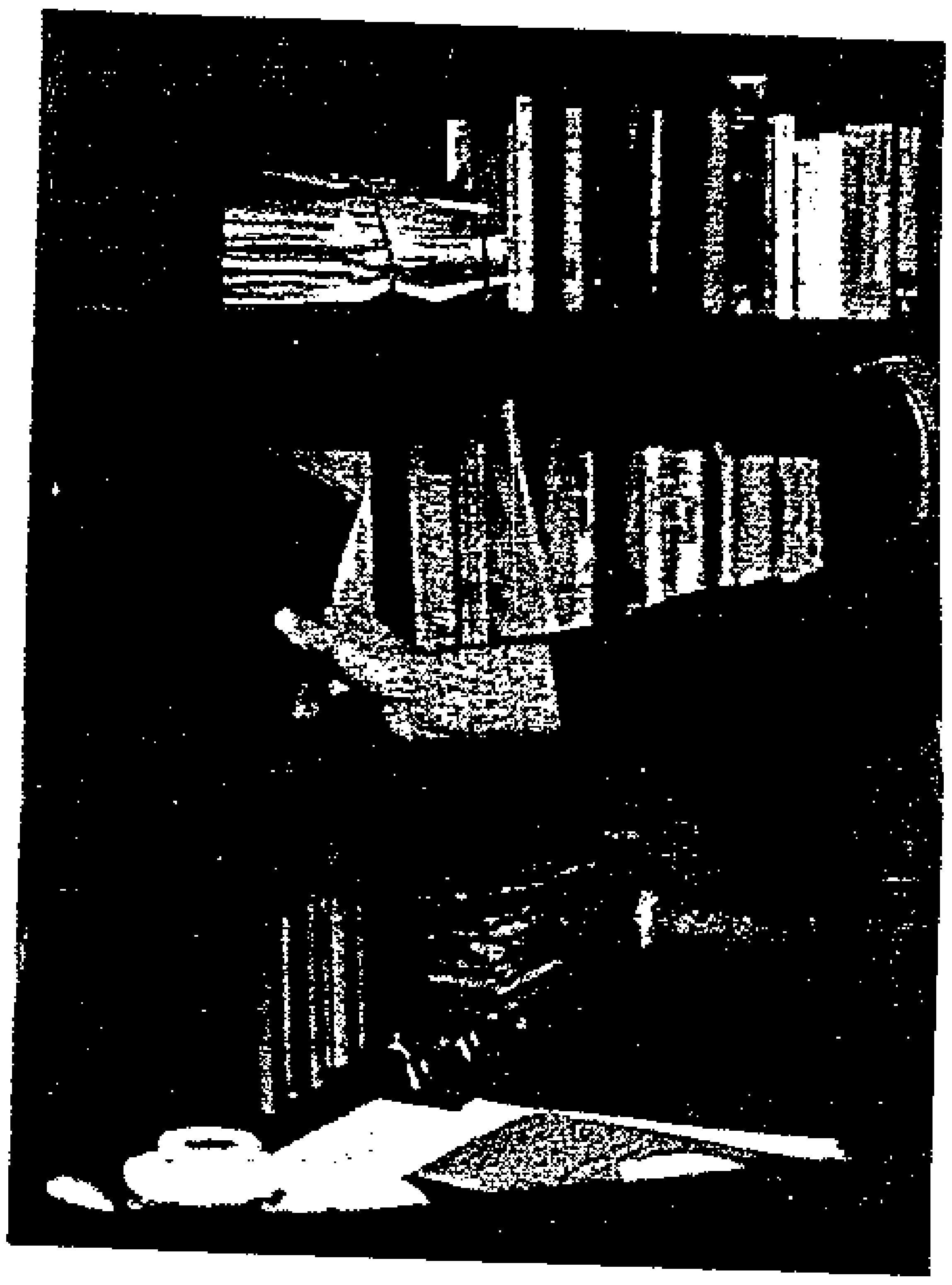
There were encouraging signs that oil dealings might become subject to parliamentary control through the Auditor-General. The AG went to lengths in his report to stress that had there been such control, "criticism and gossip of the kind that necessitated this inquiry would largely have been forestalled."

His recommendations called for a fresh look at SA's crude oil purchasing set-up, particularly with regard to financial control. He said that despite the confidential and sensitive nature of oil deals, it was desirable that State monies levied in terms of the State Oil Fund (SOF) be subject to parliamentary control and preferably also audited by the Auditor-General.

The PFP contends that the root of the problem is government's refusal to concede that money controlled by the Strategic Fuel Fund Association (SFFA) and the SOF is in fact public money.

That point at least has been cleared up. The AG is explicit in his report in that he considers money involved in oil deals as "public moneys."

Mineral and Energy Affairs Minister Danie Steyn said in a radio interview this week that he had indicated before that government was considering parliamentary control of oil deals through the Auditor-General. True, but Steyn has also argued that neither the SFFA nor the SOF should be subject to the Auditor-General's scrutiny because they are private companies.



Slabbert . . . has the

A final interesting point in the AG's report, overlooked by many, was his recommendation that consideration be given to a Fuel Energy Corporation along the same lines as the Atomic Energy Corporation or Armscor.

In this way, he said, the whole structure of crude oil purchases, plus the search for and exploitation of oil resources and the synthesis of fuel from coal and other substances could be combined and brought under effective control with the parliamentary auditing of State monies.

(55)

SUNDAY TRIBUNE, JULY 15, 1984

X

TODAY: Why the slick won't go away . . . two views on watchdog No 1

OIL . . . and the A-G's dossier

Advocate-General
Mr Justice van der Walt

By TIAAN VAN DER MERWE
PFP spokesman on Internal Affairs

IF its report on the probe into oil deal irregularities is the test, then the Advocate-General as an institution for the investigation of improper dealings with public money has come short in its first real trial of effectiveness.

The question must be asked whether such a Government-created institution can really protect the public rather than merely satisfy the Government.

I have my doubts.

While no one outside the Advocate-General's office has had, or will ever have, the opportunity really to match the evidence gained round the oil allegations with the conclusions reached in the report, there are indications that the probe was not as thorough as it could have been.

Roger Hulley MP, in discussing the report in Parliament, noted that:

☐ The Minister responsible for most of the decisions concerned with the deals (Mr F W de Klerk) was not called as a witness.

☐ No effort was made to interview the foreign oil dealers concerned with the relevant contracts.

☐ No independent experts on the oil trade, who may have given a valuable perspective in the matter, were consulted.

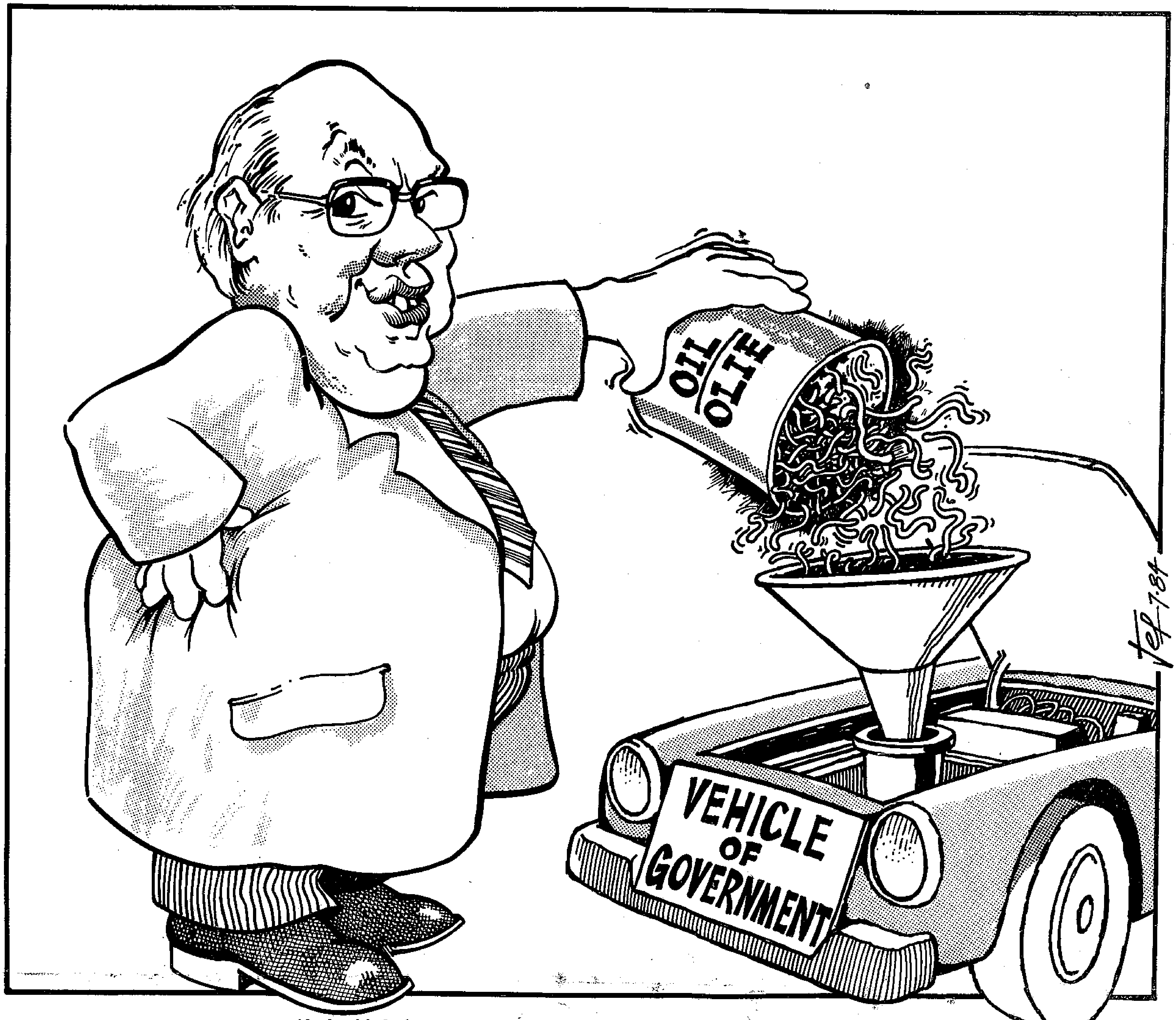
☐ No follow-up was done of what happened to the money after payment to the dealers to establish whether there may have been any kickbacks or laundering.

I was puzzled by the fact that the auditors called to assist the investigation were, in fact, the auditors of SFF, a body involved in the oil deals. It also seems as if the SFF officials were required to explain aspects of the subject matter rather than obtain the advice of independents.

The question then arises: How deep can the Advocate-General be expected to probe if he is sceptical about a particular charge or if there is not the necessary motivation?

The post of Advocate-General was conceived in great controversy. It was the product of a government that was punch-drunk with accusations and revelations in the course of the Information Scandal. At the time the Cabinet was irritated to a point of desperation by speculation of undiscovered and unadmitted irregularities.

The Erasmus Commission which reported late in 1978, clearing the State President, Mr John Vorster, the Prime Minister, Mr P W Botha, and the Minister of Finance, Mr Owen Horwood, of any responsibility, failed to settle public suspicion. Curiously, the very same commission, without any substantially new evidence, changed its stance a few weeks after the introduction of the Advocate-General Bill and found Mr Vorster responsible.



'As I said: As long as I'm at the wheel, she'll be a clean machine.'

Sections of the bill placed the most severe restrictions on the Press, prohibiting publication of the very type of investigative reporting which had opened up the Info scandal, and making the Advocate-General the only institution which could deal with allegations of corruption. These restrictions caused an uproar; both English and Afrikaans newspapers took a tough line against the Government. This uproar was no less intense in Parliament where the then Leader of the House, Mr Louwrens Muller, piloted the Bill. The Prime Minister was heard saying by way of interjection that the bill would put an end to gossip (skindery), a description which was used throughout the Info saga to describe allegations of corruption which were mostly proved to be true as the drama unfolded.

Subsequently, the most offensive of these Press restrictions were withdrawn, but it did not remove the suspicion with which the public viewed the institution of the Advocate-General. It would require of the incumbent an exceptional performance of independence, piercing investigation and ruthless exposure of corruption at some or other opportunity before the doubt would effectively be removed.

The question arises whether it is primarily an institution for the in-depth investigation of possible corrupt activity, or whether its purpose is rather to weigh up a charge of corrupt dealing brought to its notice, and the defence against it, and then come to a conclusion.

If its primary purpose is the latter, then the structure as created by the act is probably satisfactory. To the extent, however, that in-depth investigation is the most important purpose, it is not likely to succeed.

The Advocate-General Act does not shed light on this question of priority, nor does it indicate how the two functions could be reconciled if both are adequately pursued.

The Advocate-General's performance so far confirms the view that either of the priorities must suffer. Not surprisingly it appears to be the investigative function.

Can one expect the Advocate-General to exercise a public watchdog function with the same diligence as that of an opposition party with a strong political motivation?

Can one expect of the Advocate-General the same intense desire to rip open a scandal as a competent investigative journalist would do when he's after a good story?

Can one individual, even if assisted by his own appointees, be expected to fulfil effectively the role of detective, prosecutor, defender and judge?

Can a person pursue an investigation completely without fear or favour if the executive that appoints him may be found to be involved? We have seen during the Info scandal that the Government can act ruthlessly even against a judge.

The answer to these has got to be 'no', which means the Advocate-General can never be public watchdog No 1.

Moreover a raging public debate is more likely to bring forth witnesses and evidence than a behind-the-scenes probe where witnesses may feel intimidated.

I do not believe that the Info scandal could have been uncovered by an institution such as the Advocate-General. If a more open investigation effectively ensures clean government, and in the process some confidential information leaks out, then so be it. We have far more secrecy in South Africa than is good for us.

The Advocate-General has done his bit: now it's up to Parliament to act

By LAWRENCE BAXTER Professor of Law, University of Natal, Pietermaritzburg

THIS week's parliamentary debate on the report of the Advocate-General concerning alleged irregularities and corruption in South Africa's deals was an angry one. The Government, the NRP and the CP accused the PFP of cheap party politicking, and the PFP complained that the select committee had not been given enough time to examine the report. In comment, some newspapers also suggested that the Advocate-General should have conducted a more formal investigation.

Many will have felt uneasy about the finding that there were no irregularities. Can we blame the Advocate-General?

I don't think so.

The report was based on a significant amount of evidence. Brian Goodall of the PFP even complained that there was too much for the select committee to examine in the time available. The report was both critical and constructive: the Advocate-General criticised the fact that the accounts of the Strategic Oil Fund can be neither audited by the Auditor-General nor scrutinised by Parliament; he also recommended that a fuel energy corporation, similar to the Atomic Energy Corporation, should be created so as to effect greater co-ordination of, and control over, the acquisition of fuel. He interviewed officials on oil purchases and the hazards of buying oil on the international spot market.

In the light of all this, the Advocate-General found there to be no enrichment at the expense of the State.

So why the sense of unease?

It seems to me that the report has merely provided another occasion for the expression of a wider sense of irritation, irritation that has been building up ever since the Information Scandal. We have seen too many incidents of corruption to be easily convinced that rumours of new ones are false. Matters are made worse when the root cause of Muldergate — the secrecy surrounding so many government accounts — still persists.

When rumours once turn out to be true, when suspicions are confirmed — as they were in 1979 — only the most serious attempts to eliminate all opportunities for corruption can enable the Government to regain lost credibility. It was no good merely appointing an Advocate-General: He can only investigate after the horse has bolted. The Auditor-General (who should not be confused with the Advocate-General) and Parliament must also be able to continuously monitor public expenditure.

The tragedy of the situation is the harm it does to the office of the Advocate-General. Many people regard his investigation as an exercise in whitewashing. They simply don't believe him when he reports that allegations are false. How many people still believe that in some Swiss bank there lies a fortune stashed away by the late Nico Diederichs? Many a wry smile greeted the report of the Advocate-General which found this rumour to be without foundation. But I wonder if it has ever occurred to the cynics that there might actually have been no secret bank account after all.

I suspect that the real problem is not contents of reports which fail to reveal irregularities so much as the continuing pretense by officialdom of scrupulous honesty in public affairs. The truth of the Diederichs rumour was not the central issue; whatever the findings, the Government has still not satisfactorily addressed the general lack of accountability and control, and so rumours, such as the latest one, will continue to spread.

I think most sober observers would agree that there would have to be some manifest deficiency in the procedure adopted by the Advocate-General to justify the suggestion by observers that he should have interviewed the Minister, or that he should have subpoenaed other witnesses, and so on. He certainly has full powers to do so. But he also has a discretion as to when these should be used. When it seems to him, as it did in the oil investigation, that there is no need to use them, his decision must surely be respected. I have read enough of his other, less-publicised reports to have faith in his judgment.

This is not to suggest that the PFP was wrong to demand more time for the Select Committee to examine his report. It is not the role of Parliament simply to rubber stamp the Advocate-General's recommendations. Instead, the roles of Parliament and the Advocate-General are meant to complement each other: the Advocate-General investigates, reports and recommends; Parliament decides. And MPs must be in a position to take the final decisions which only they, and not the Advocate-General, can make. If they are not, the Advocate-General will once again become the fall guy: Not, this time, for the inaction of the Government, but for the performance of duties which Parliament should itself have observed.

There is another reason why the oil report leaves one with a sense of unease. Many of us are frustrated by the absence of effective remedies designed to deal with complaints, not of corruption, but of plain old maladministration, whether dishonest or not. Some newspapers criticised the fact that the report failed to explain why the purchase of crude oil seemed to be handled so ineptly. As everyone knows, South Africa was really caught over the Salem affair. Even if foreign criminals are able to get away, what about local mismanagement, even if it is not corrupt?

The trouble is that the Advocate-General's brief does not cover maladministration: His jurisdiction is limited to the unlawful enrichment of individuals at the expense of public funds. It is only a full-blown ombudsman who can deal with the wider issues of incompetence. Too many commentators have been selling the idea that the Advocate-General is an ombudsman. In fact, his role is much more confined. We still need an ombudsman — indeed we need many, at all levels of government. And again the Advocate-General cannot be blamed because we have none.

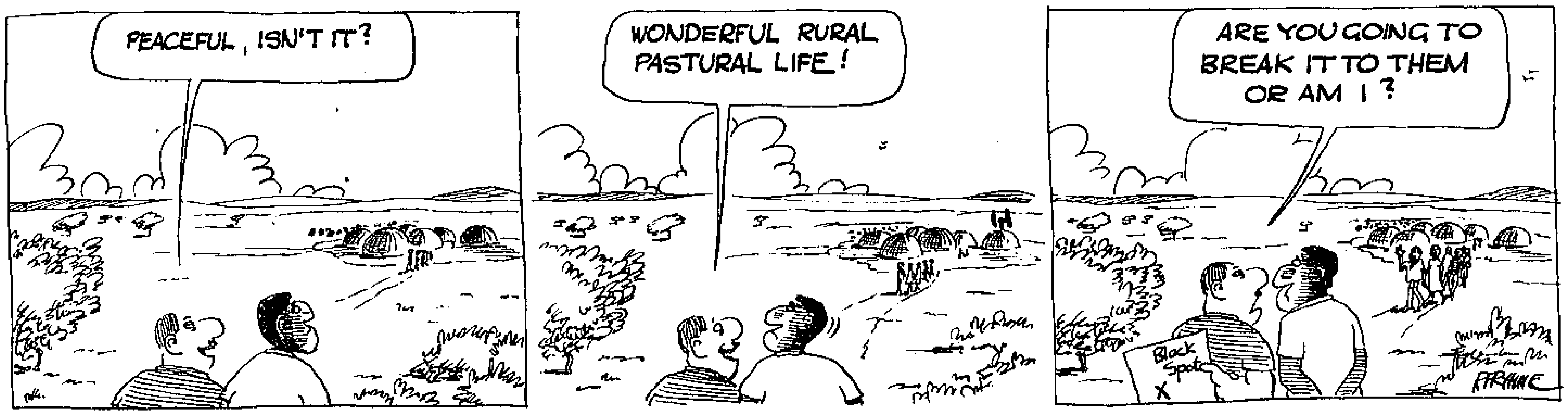
The responsibility lies with the Government to react positively to the Advocate-General's observation that the whole affair might have been avoided had there been proper parliamentary and audit controls in the first place. The Government no doubt fears that this might threaten the necessary confidentiality surrounding oil purchases. But if the Auditor-General and a select parliamentary committee cannot be trusted with the information then who on earth can be?

The Government might also fear the embarrassment that might be caused if rumours of bungles and corruption were confirmed. To counter this take the example of the Salem affair. Any sensible person knows that, given our present circumstances, oil purchases are bound to be risky and there is a high likelihood of being caught by unscrupulous operators. That we were with the Salem. It was an unfortunate affair. But I suspect that there would have been some sympathy with the Government if it had laid its cards on the table and had admitted that it had been ripped off. Instead the rumours were fanned and the public was justifiably annoyed by the attempts to deny the incident and threaten Members of Parliament and the Press.

At the risk of appearing naive, I believe there is a good chance that the Government will react positively. Arguments about greater control and accountability seldom appeal to governments when they possess all the information and are assured of the obedience and loyalty of their employees. But things have changed. The Government can no longer be sure of the absolute loyalty of its servants. At the same time there is not as much money left to throw around and it cannot afford mistakes. Tighter control over its agents' activities is now in the Government's own interests as much as those of the opposition and general public.

The Minister of Mineral and Energy Affairs has promised better legislation next year. If he heeds the Advocate-General's report, much good will have come out of this affair.

GENERAL AFFAIRS by RODNEY PRYNNE



A MATTER OF FACT

IN AN editorial last week Dr Piet Koornhof was described as the Minister of Sport when the then Prime Minister, Mr John Vorster, refused to allow Basil D'Oliveira to tour South Africa with an MCC team. Dr Koornhof was in fact the Deputy Minister of Bantu Administration and Development. Mr Frank Waring was the Minister of Sport.

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C-Times 18/7/84

Price of oil up 18 cents a litre

Staff Reporter

LUBRICATING oil prices had gone up by an average 18 cents a litre, effective from Monday, major oil companies announced yesterday.

Mr Bernard King, financial director of a leading city lubricating firm, said the increase was due to price rises in base-oil and additives, which affected the overall petroleum industry.

A BP spokesman said that the increase was also subject to foreign exchange fluctuations.

The price of oil — unlike petrol — is not controlled by the government and prices are fixed by the controlling oil companies. The price of lubrication oil and products of this nature were subject to normal economic forces, he said. The Motor Industry Federation did, however, provide guidelines to garages in this respect.

Monograde oil used in most cars is up by 16c. The approximate wholesale price of R1,30 will now be R1,46, meaning that garages will now retail this at about R2,70 a litre or R1,35 for a 500ml can.

Multigrade, which till now retailed at about R1,35 a 500ml can, will be R1,45.

Most garages yesterday said they would increase their prices when new stock arrived. A Newlands garage owner said he would increase his price from today, when his new stock arrived. All garages are expected to be charging the new prices by the end of this week.

[redacted] 75

22 companies are now interested in offshore exploration

Race on for oil bonanza

By Stephen McQuillan

Japan will this month join the race for a stake in Mozambique's expected oil bonanza as oil companies around the world mark out their territory for several years of exploration.

The Japanese National Oil Corporation is set to start a seismic survey in the Bay of Bazaruto after winning exploration rights in March, the *24 Hours* team was told.

The work, contracted to Western Geophysical, should last until October.

And, with at least 22 oil companies now interested in Mozambican offshore exploration, a flurry of activity is expected over the next two years.

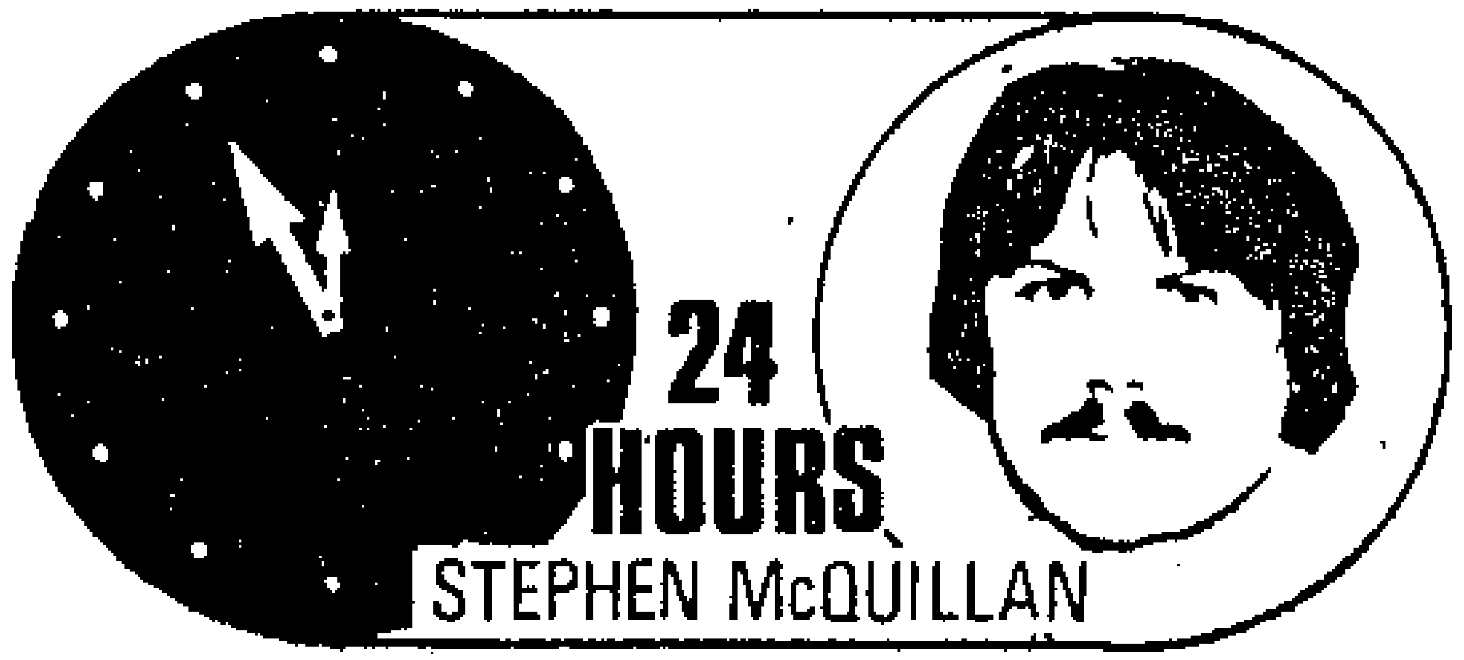
The last oilwell was drilled in Mozambique in early 1972 as Elf Aquitaine completed its drilling programme and pulled out. Hardly any effort has been made to tap the country's potentially abundant reserves since.

Possibly the most significant step since the country's independence in 1975 was a $60 million deal this year between Esso Oceanic SA, Shell Development BV and the government, involving exploration rights in a 13 200 sq km block over the Rovuma basin in the northern province of Cabo Delgado.

Sources in Johannesburg say several South African executives have been visiting Mozambique regularly during the past few months, many flying to Pemba, in the north.

"A couple of weeks ago there was a lot of excitement in Pemba," said a Johannesburg pilot. "In the last six months several South African companies have been active in Mozambique.

"We have to fly because there is hardly any other means of communication. It's the only suitable way if you require a reliable equipment supply."



An internationally respected energy expert in South Africa said it was logical that oil companies should have South African companies with interests in the country as agents. "Oil companies usually involve a reliable local company to arrange good supply routes and offer advice on how to establish themselves in that country. They would probably go in as partners.

"All the west and east coasts of Southern Africa have potential," he said. "Favourable geological formations indicate oil-bearing structures. It is likely they will ultimately find oil in Mozambique."

Professor Richard Dingle of the marine geo-science unit at the University of Cape Town said: "The whole oil exploration industry in Mozambique has been dormant since independence but now they enticing the international companies back.

"This has been going on for a year or so at the most, but there has been no release of data. I would say the potential off the coast of Mozambique is very good.

"One can establish from geological structure good areas to explore — like the river mouths of the Zambezi and the Limpopo. If it is established that hydrocarbons deposits are off the coast of Mozambique, they could contain a lot of oil."

The possiblity of finding oil was good — especially at the mouths of the Zambezi and Limpopo rivers.

INDICATE

The country's offshore geological formations and existing seismic data indicate that Mozambique has the potential to become a Nigeria or Cabinda of the southern subcontinent.

This view is supported by Exxon oil company which produced a report several years ago outlining one of the prime objectives of the Soviet Union's Africa policy.

A French newspaper reported that Exxon had moved the future world oil reserves from the Middle East to Africa and Latin America.

It said geological studies had confirmed that exceptional oil reserves were to be found in several African countries — including Mozambique.

Exxon predicted the country could join Nigeria and Angola as a major producer.

Exploitable gas reserves — at the very least — seem certain. A well blowout in the Pande area in the mid-1960s blew a hole nearly 100 m deep and the width of two rugby fields. It was burning for about 18 months before flames were extinguished by flooding the area with water.

The gas strikes were abandoned by the international exploration companies who were primarily looking for oil.

Technicians noted black smoke — indicating deposits of oil.

The present offshore exploration area is up to 200 m deep and is divided into 17 blocks of 5 000 or 10 000 sq km. It is about as far as offshore exploration is practical because of the country's steep continental shelf which, in places, drops from the coast to a depth of 2 000 m some 100 km at sea.

Despite the country's problems — involving logistics, the economy, security and hard negotiators within the oil indus try — Mozambique is optimistic.

"I am convinced we will discover oil in commercial quantities — it is only a matter of time," said Secretary of State for Hydrocarbons Mr Abdul Osman when bidding opened on the 17 offshore blocks.

14 — DAILY DISPATCH, FRIDAY, JULY 27, 1984

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No Swiss deal says Atomic Board

JOHANNESBURG — The chairman of the Atomic Energy Board, Dr J. W. L. de Villiers, has dismissed a report published in the United States that a Swiss company may be about to sell South Africa a heavy water production plant.

According to the latest issue of Nucleonics Week, an industry newsletter, the Swiss Foreign Affairs Department has already mounted an inquiry, following a United States request that the report should be investigated.

Dr De Villiers said here that South Africa was not interested in heavy water production. The reports were "pure speculation".

Unlike South Africa's light water reactors at Koeberg, heavy water reactors run off natural rather than enriched uranium.

Heavy water can also be a critical component in weapons production.

The Swiss firm the American report says is involved is Sulzer Brothers, an engineering concern that sold Argentina a similar plant in 1980.

Nucleonics Week quoted U.S. State Department sources who said they could see "no peaceful use" for the plant and would therefore "make every effort to stop" the purported sale.

The Reagan Administration has already held up a Swiss request to receive 200 kg of U.S.-origin plutonium from France, pending the outcome of the investigation into the alleged South Africa deal.

The newsletter quotes "other U.S. sources" who speculate that South Africa may be finding its own uranium enrichment process too costly and is thus looking for alternatives.

The United States opposes the transfer of sensitive nuclear technology to any nation that does not accept International Atomic Energy Agency safeguards at all its facilities. Pretoria has refused to permit any inspection of its Valindaba enrichment plant.

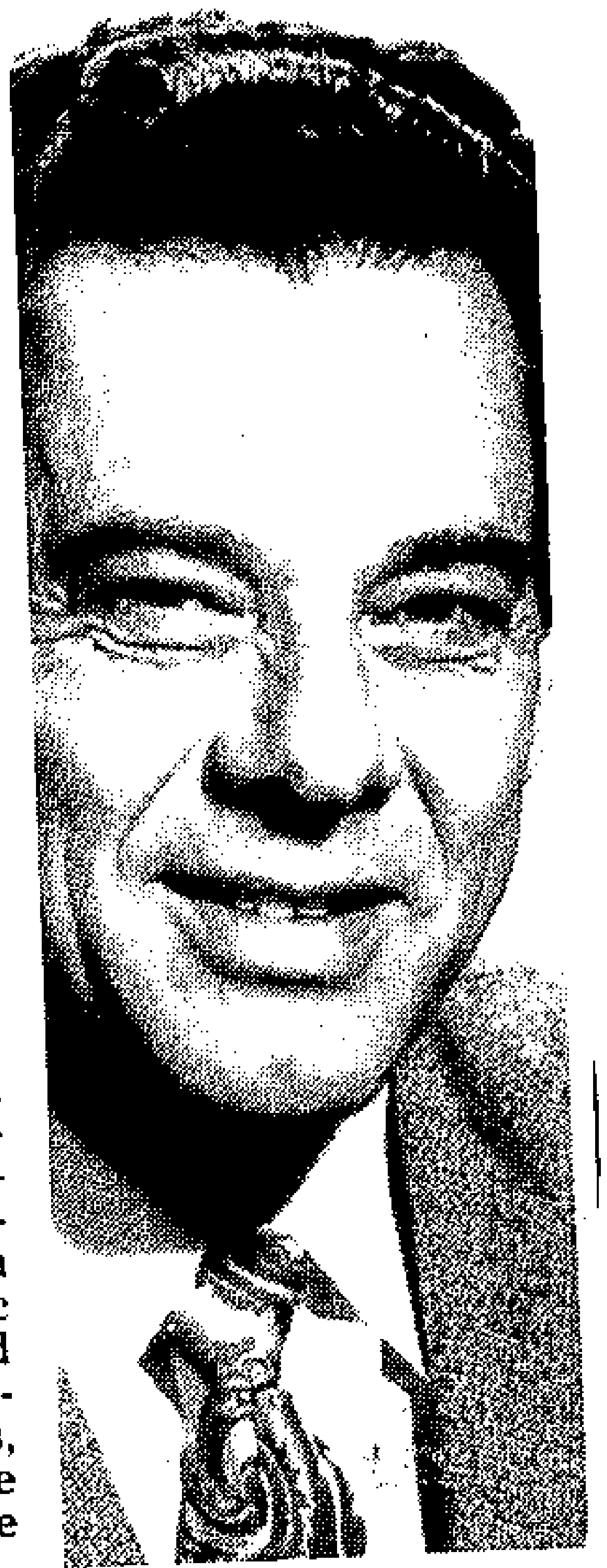
South African officials say of the U.S. report that this country is fully committed to the light water system, and would therefore have no use for Sulzer-type equipment.

"The technologies are totally different, and it would mean going in a totally different direction."

State Department sources quoted by Nucleonics Week said this was precisely what was bothering them.

An Administration official familiar with South Africa's nuclear programme has claimed that Pretoria first showed an interest in a heavy water plant two years ago.

A nuclear expert at the Congressional Research Service, Mr Warren Donnelly, speculated that if Valindaba was proving uneconomic and supplies of enriched uranium were not available from other sources, South Africa might be tempted to adopt the heavy water approach.— DDC.



DR DE VILLIERS

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OIL PRICES

Draw down the stockpile

The normally reticent bureaucrats at Energy Affairs emerged briefly this week to drop dark hints about oil prices. After last February's symbolic reduction of the price of 93 octane motorgas, adverse exchange rate movements are set to drive the price up again — possibly within months.

That's not only bad news; it is incongruous, given that the authorities have not only extended pump trading hours, but raised expressway speed limits to 120 km/h.

Of course, oil refiners do have special problems. Despite high-tech innovations which enable them to cut deeper and with greater flexibility into the crude barrel, refinery tolerances which enable them to vary output of light, middle and heavy distillates are limited.

Swings in demand often exceed the extent to which they can be accommodated by simple technical adjustment of refinery output: one barrel of crude will yield no more than, say, 35% diesel fuel, no matter how sophisticated the plant.

(55) FM 27/7/84

In SA, the level of imports is traditionally determined by the demand for gas oil (diesel) rather than petrol. Output of the latter, boosted by local synfuel production, is considerably in excess of gas oil. Even in the present recessionary phase, there is little to suggest that demand for diesel has flagged.

Longer pump trading hours and easier speed limits suggest the authorities have motorgas to burn; the severe speed clamp (80 km/h) on 9 000 kg vehicles suggests there is a fine balance between demand and supply of gas oil.

With SA coastal refineries operating at less than 60% of capacity, owing to factors such as the recession and increased Sasol synfuel output (which gets preferential market treatment), current levels of crude imports must be substantially reduced. On the other hand, procurement agencies are having to pay for their oil with a rand that is teetering around $0,65. The balance between the two factors is delicate, but it cannot be quantified, because of official secretiveness.

Nevertheless, there should be a good case to be made out for holding fuel prices a while longer by dipping into the strategic stockpile. Energy Minister Danie Steyn has proclaimed that it has been done before. It should be done again. The trouble with oil price increases is that they push up production costs. With SA's generously accommodative money supply policy, this abets our inflationary psychosis, something we could do without right now. The country needs a little price stability.

If that can be achieved by borrowing from the stockpile, the lion's share of which was assembled at less than $3/barrel, then government should do it.

Still no sign of Cahora Bassa power

7/8/84 Star

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By Joao Santa Rita

One of the major gains from the Nkomati Accord — the resumption of power from Cahora Bassa — has still not materialised.

Three months after signing of the trilateral Cahora Bassa agreement amid a blaze of international publicity, no electricity from the dam has yet reached South Africa.

The agreement, signed in Cape Town on May 2 by the South African and Portuguese Ministers of Foreign Affairs and Mozambique's Minister of Planning, gave Pretoria and Maputo 90 days to secure the transmission lines.

Failing this, either party would be able to demand an immediate meeting.

But indications are that for the moment the dam will remain a "white elephant", as it will not be possible to guarantee electricity supplies, despite regular consultations between the parties involved.

"Peace in Mozambique is a prerequisite for reliable supplies from Cahora Bassa," Escom's annual report said.

Under the new Cahora Bassa agreement, electricity from the dam would have accounted for nearly nine percent of Escom's maximum electricity demand during 1983.

An Escom spokesman said the power lines from the dam, sabotaged months ago by Mozambican rebels, had not been repaired.

Portuguese sources said that at least 19 pylons had been down at the time of the agreement, and that the situation had not changed since then.

"We don't know when power will be resumed," the spokesman said.

Consultations between top level technicians of the three countries involved took place at a regular intervals, the spokesman said.

"A group of technical experts was in South Africa last week to discuss the situation."

The spokesman would not comment on what measures the South African Government would take to protect the power lines, which pass through some of the "hottest" war zones in Mozambique.

South African electricity technicians have not been to Mozambique to repair any of the damaged lines, and their Portuguese counterparts there refuse to travel to the damaged sites without adequate military protection.

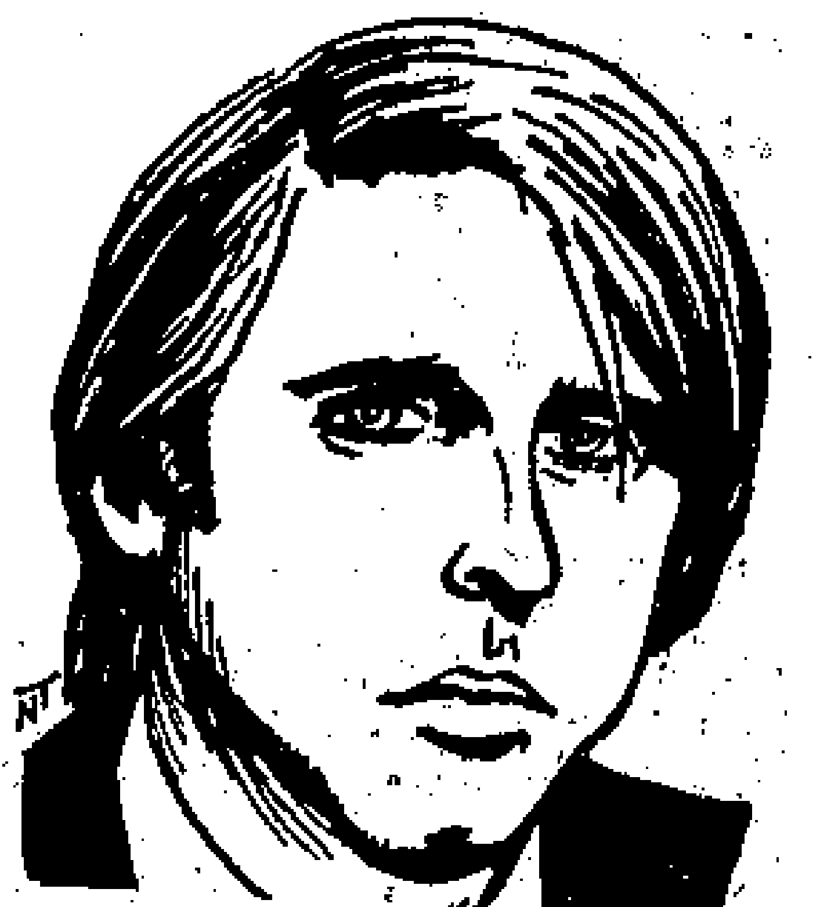
Three months ago, top Portuguese officials were convinced that South Africa would supply Mozambique with logistical support, including helicopters to protect the lines.

But although Mozambique and South Africa have been discussing the issue for several months, it seems no security agreement on Cahora Bassa has yet been reached.

A Portuguese source said the Mozambicans were neither able to guarantee the safety of repair crews nor of the power lines themselves.

"The fact is that the guerillas do whatever they want in the countryside. Without security, Cahora Bassa is not a financial proposition," the source said.

Mr Marc Rich



Mr John Deuss

Shell denies allegations of oil for SA

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6/2/84 Star

The Star Bureau

LONDON — Shell International Petroleum has vigorously denied reports about oil supplies to South Africa which appeared on the front page of one of Britain's major Sunday newspapers yesterday.

The Observer has published several allegations, not only about Shell but about other operations, including those already known concerning two operators wanted by the authorities in at least two countries.

All information on this subject is strictly censored in South Africa, so details of the claims published to the rest of the world cannot be revealed to South African readers unless approved by the local authorities.

The Observer claims to have the portion of the Advocate-General's report which was NOT tabled in Parliament.

The newspaper publishes some details of what appears to be hitherto undisclosed information before the Advocate-General, and claims its reporters' investigations fill in some gaps in the official report.

Apart from the allegations about Shell, which have been denied, The Observer also reports on the dealings of two "freelancers" already known to South Africans.

They are Dutchman Mr John Deuss and American Mr Marc Rich, the subject of comment by the Advocate-General in his published report to Parliament and of many newspaper reports before and since.

Mr Rich is currently based in Switzerland, from where United States officials are attempting to secure his extradition on charges of tax evasion.

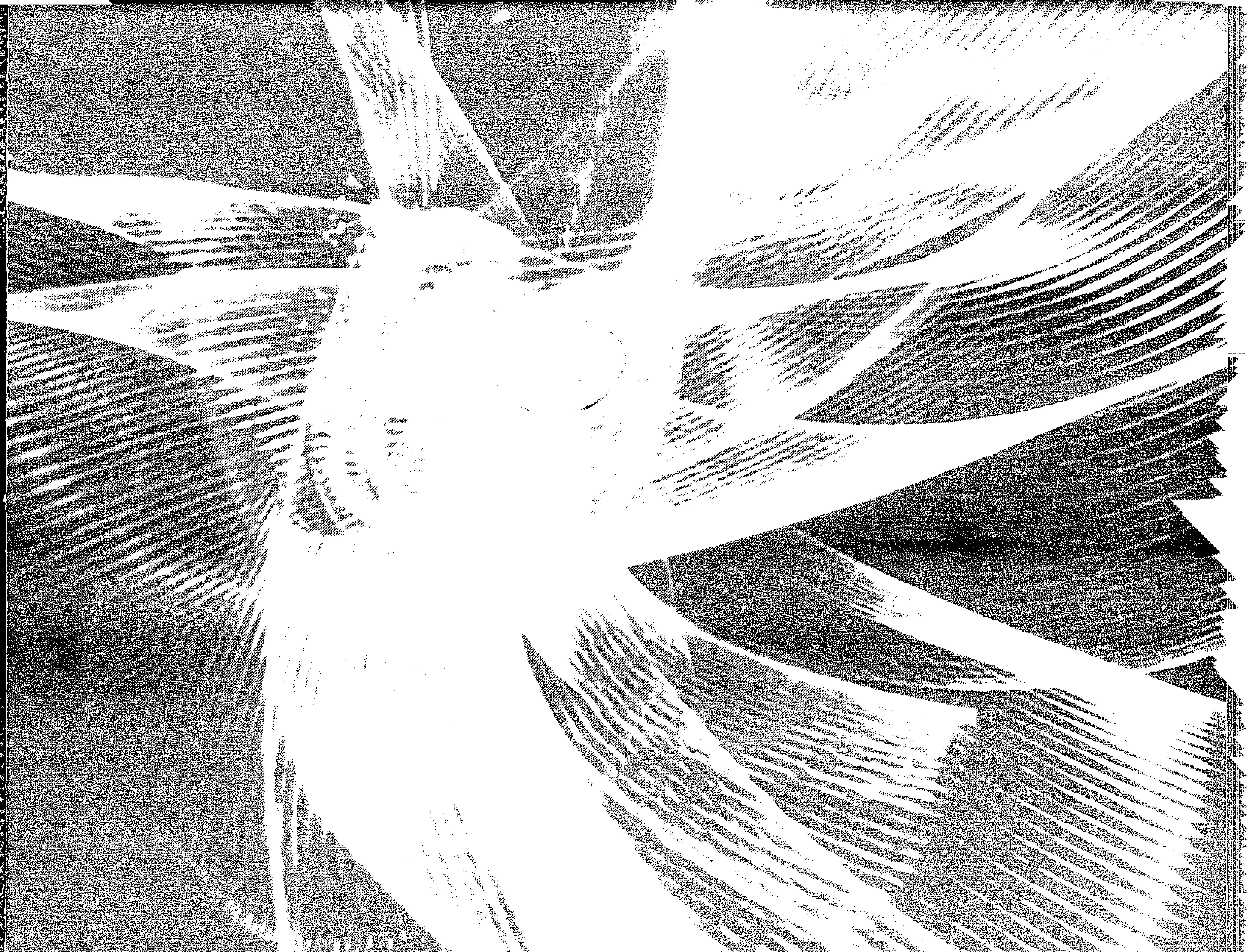
Mr Deuss, a former car salesman, is a Dutch oil trader who currently faces a R160 million lawsuit with the Soviet Union over another oil deal. *The Observer's* front-page investigation alleges that "South Africa paid through the nose" for oil supplies and mentions figures running into many millions of rands.

The Star has reported at length on Messrs Deuss and Rich. Two months ago the *24 Hours* team examined in detail the international dealings of both men. Precluded from this investigation were any South African oil connections which are subject to strict local censorship.

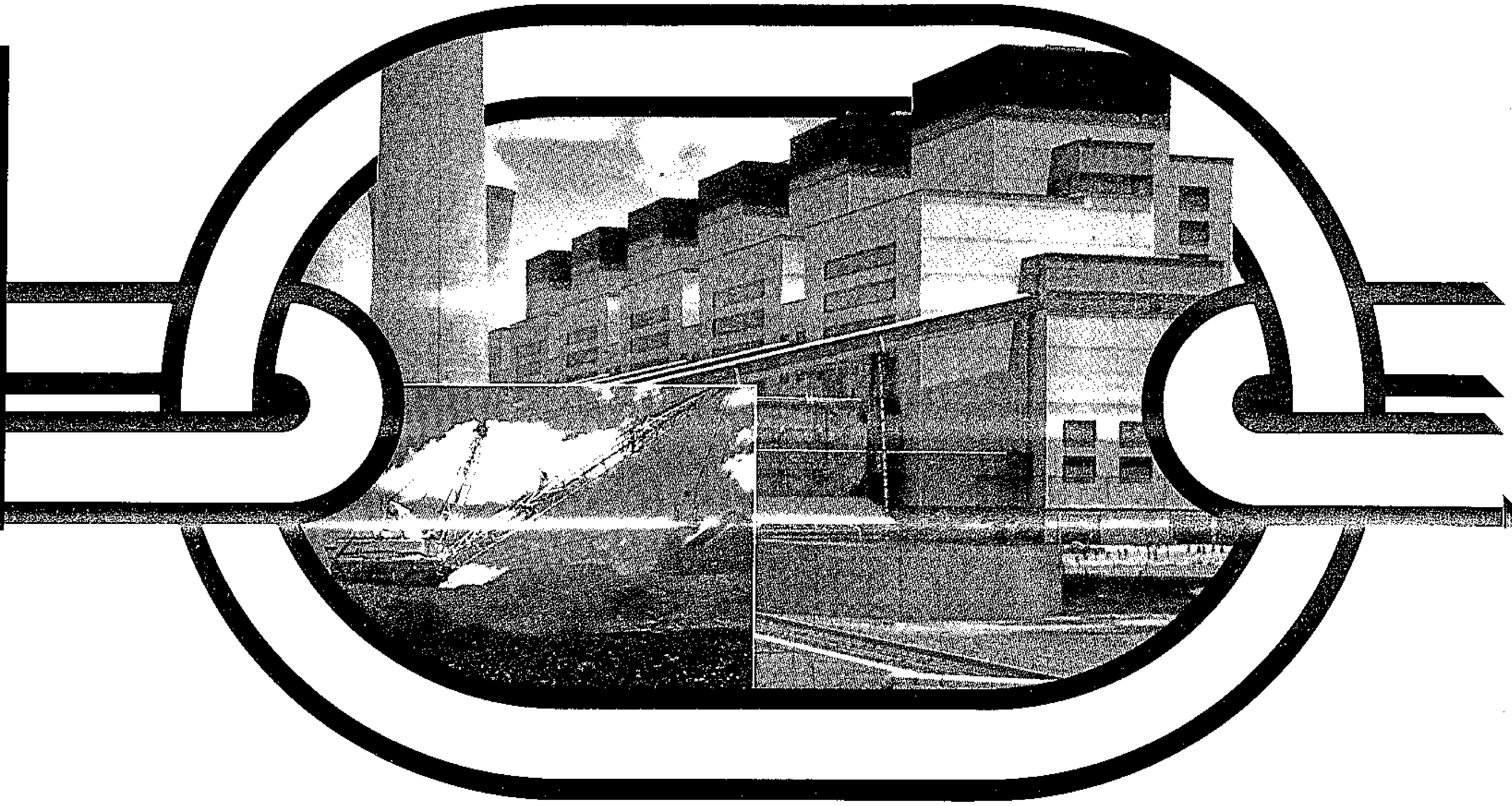
☒ Report restricted

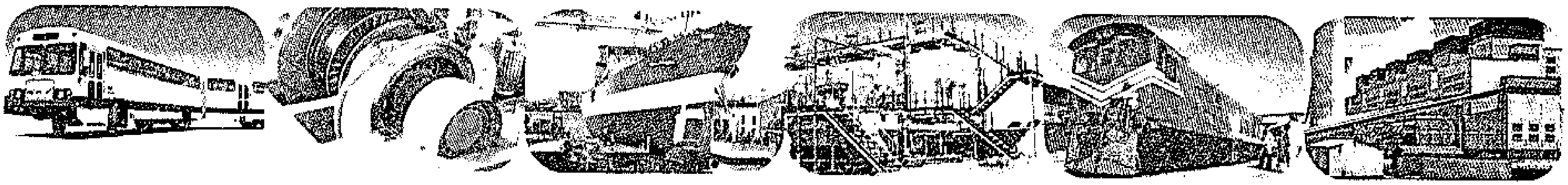
● **This report is censored in terms of the National Supplies Procurement Act, the Petroleum Products Act and the rules governing documents before Parliament.**

ENERGY

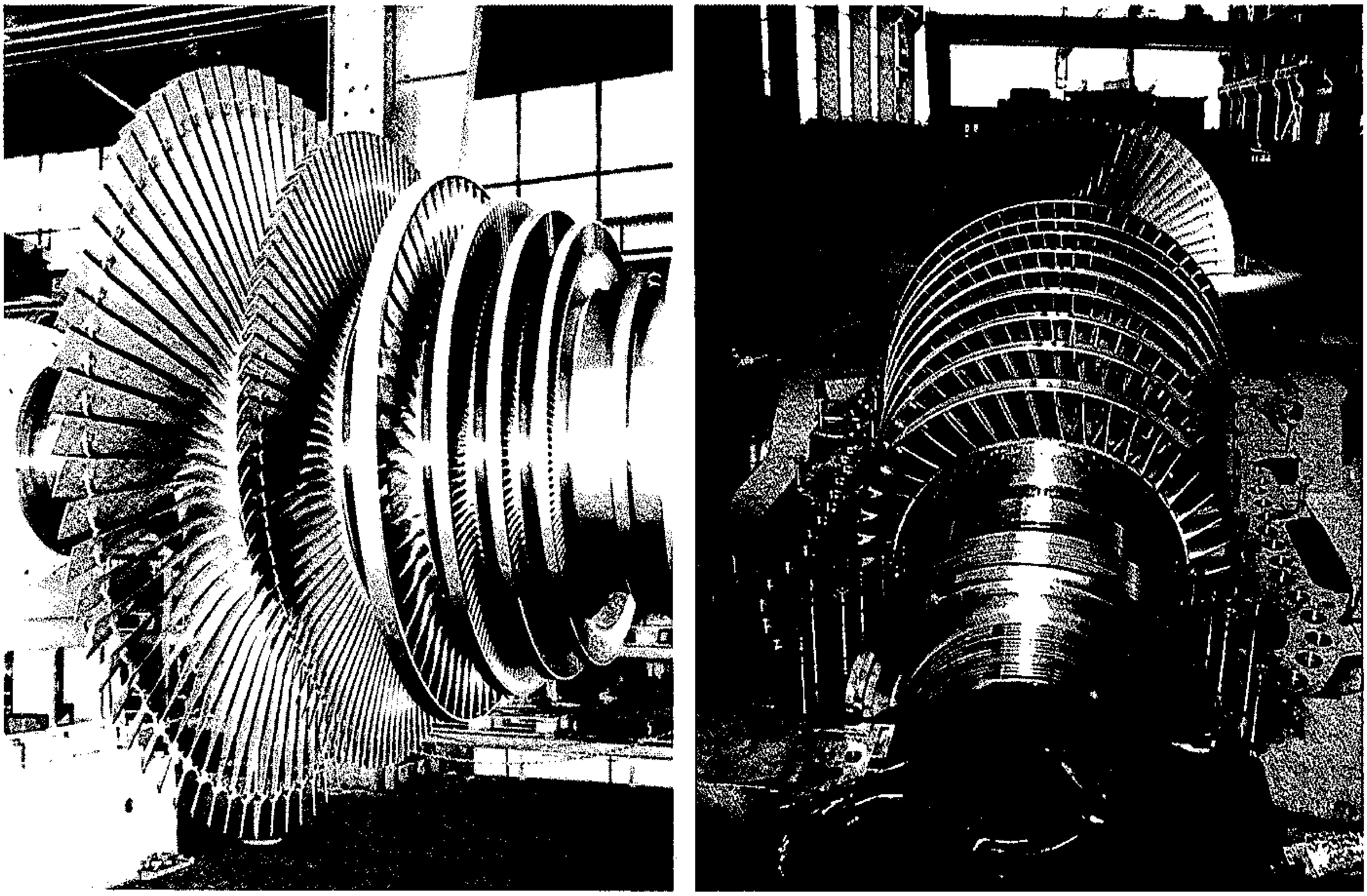


A survey. Supplement to Financial Mail. August 10 1984





IMS IN 'POWER'



Manufacture and erection of a 600 MW M·A·N steam turbine for ESCOM's Matla Power Station where six such turbines have been installed. Lethabo (6 x 618) and Matimba (6 x 665 MW) Power Stations which are now being built will be similarly equipped with M·A·N turbines and Alsthom Atlantique generators in terms of contracts awarded by ESCOM to M·A·N , Alsthom Atlantique and IMS.

BESIDES BEING IN POWER, IMS IS ALSO IN MINING AND MANY OTHER INDUSTRIAL ACTIVITIES AND CAN SUPPLY SUCH EQUIPMENT AS:

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- Nuclear Power Stations
- Power Station Boilers
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- Bulk Materials Handling Systems, incl. Coal & Ash Handling Systems, Stackers & Reclaimers
- Heavy Machine Room & Steel Mill Cranes
- Gas Cleaning/Air Pollution Control Equipment incl. Electrostatic Precipitors
- Feed Water Heaters
- Steelworks Plant
- Chemical Plant
- High Pressure Pumps, e.g. for Feed Water
- Cooling Water Pumps
- HV Switchgear, Transformers & Large Motor Drives
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Engineering South Africa's energy

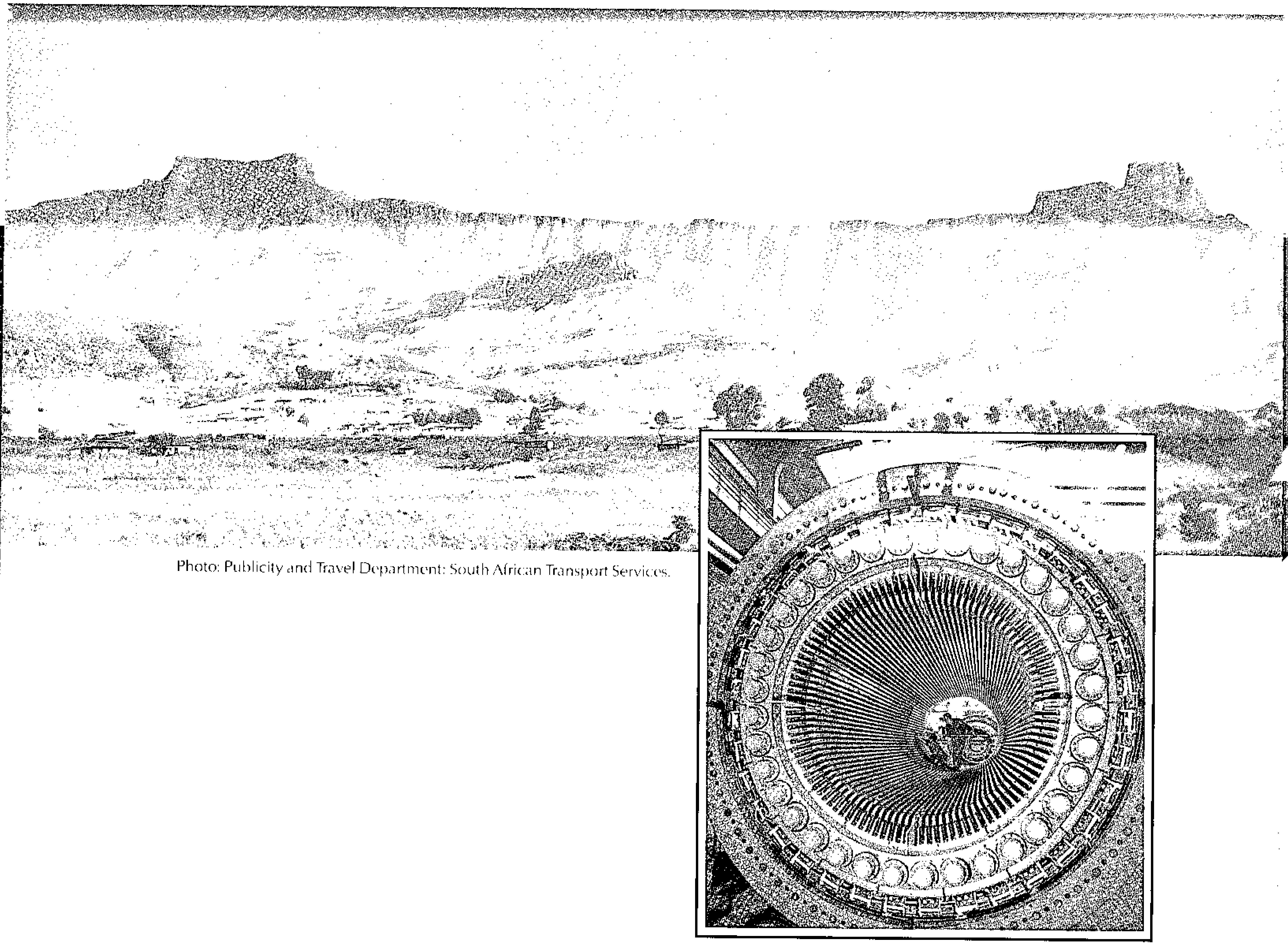

Photo: Publicity and Travel Department: South African Transport Services.

Inspection of the inside diameter of a large Brown Boveri alternator stator core.

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BBC

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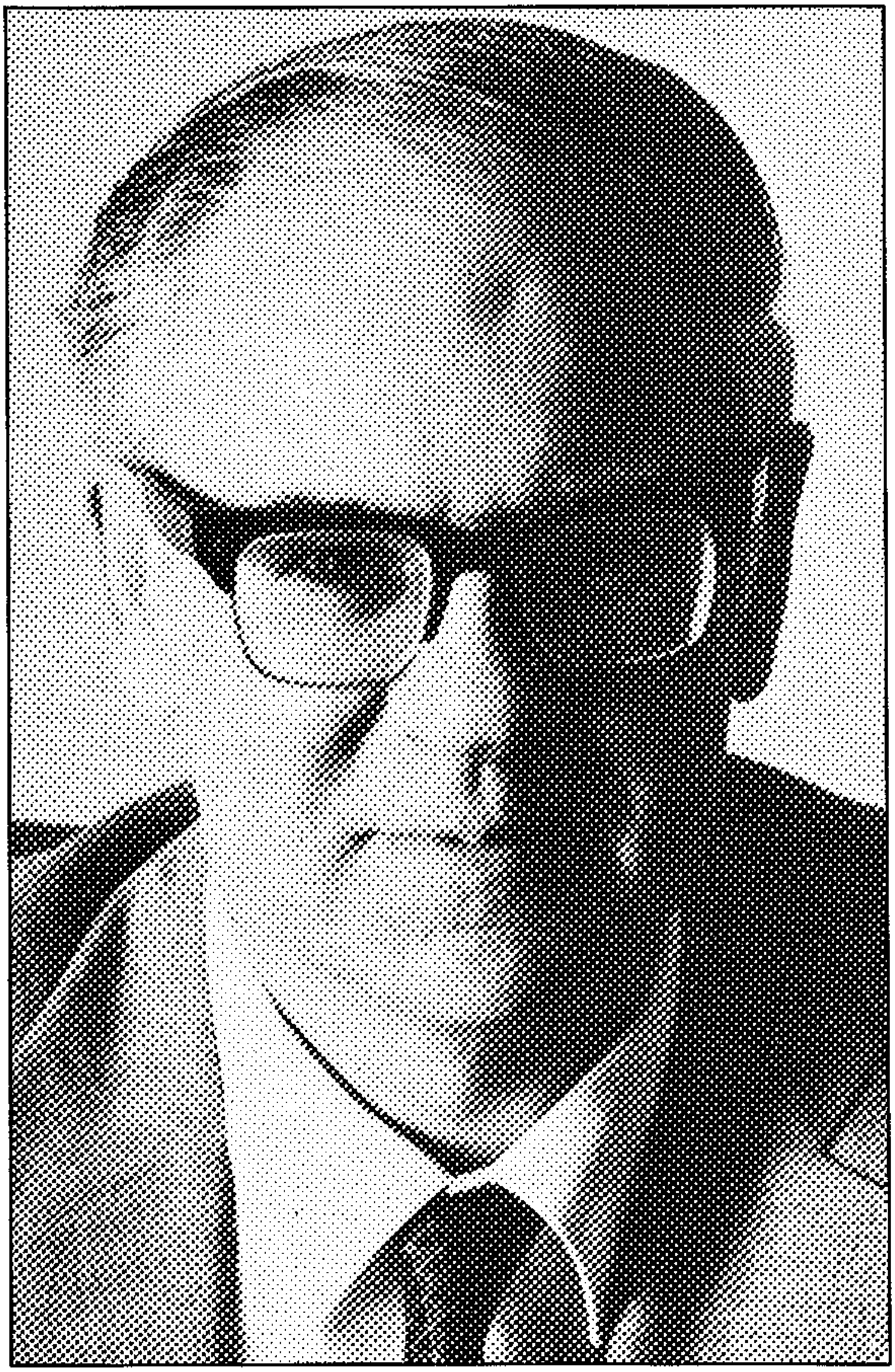


“By planning for tomorrow we lowered operating costs today.”

Keith Prince, General Manager,
Planning and New Development, Iscor.

Iscor is the largest primary steel producer in the country. And as such one of the largest consumers of raw materials and energy. But it takes a lot to keep South Africa growing and prospering. And it takes the efficient management of our raw materials and energy resources to make sure South Africa keeps on growing.

At Iscor we believe in the future of South Africa. If we want to share in it we have a responsibility to help plan for it. That’s why we’ve invested over 6 million rand in the most efficient, up to the minute computerised energy management system. A system that ensures our energy resources will be responsibly managed for the future. A system that proves conserving energy is not only possible but also practical and profitable.

Using a simpler system in the past we were able to monitor, anticipate and control the use of electrical energy within our works. Apart from the cost savings, this control reduced the demand for high short-period peaks of electrical power. Our costs went down and our plants ran more efficiently.

By monitoring the electrical energy consumed in our plants we were able to plot the present rate of consumption, plan for areas which needed more and reduce or switch electricity from less critical production units to units where the need was greater.

The success of this system led to the installation of a comprehensive computer controlled energy centre at the Vanderbijlpark Works. It is at present connected to approximately 2 700 measuring points, with a view to applying the same monitoring and control techniques to all our energy sources including electricity, gas and steam. The potential is there. And the possibilities are endless.

At Iscor we’ve learned energy management works. What’s more, we’ve learned it works hard. And hard work pays off. We’ve proved it. And so can you. Because planning for tomorrow is good business today.

Energy Management A New Concept in Profitability

Department of Mineral and Energy Affairs

VZ OGILVY & MATHER [illegible]

Foreword

In the decade since the first major energy crisis, SA has opened up an impressive array of alternative sources of energy and fuel. Exploitation of the country's massive coal reserves has been stepped up, electrical generation by conventional power stations has steadily increased and the country's first nuclear station at Koeberg is reaching full output.

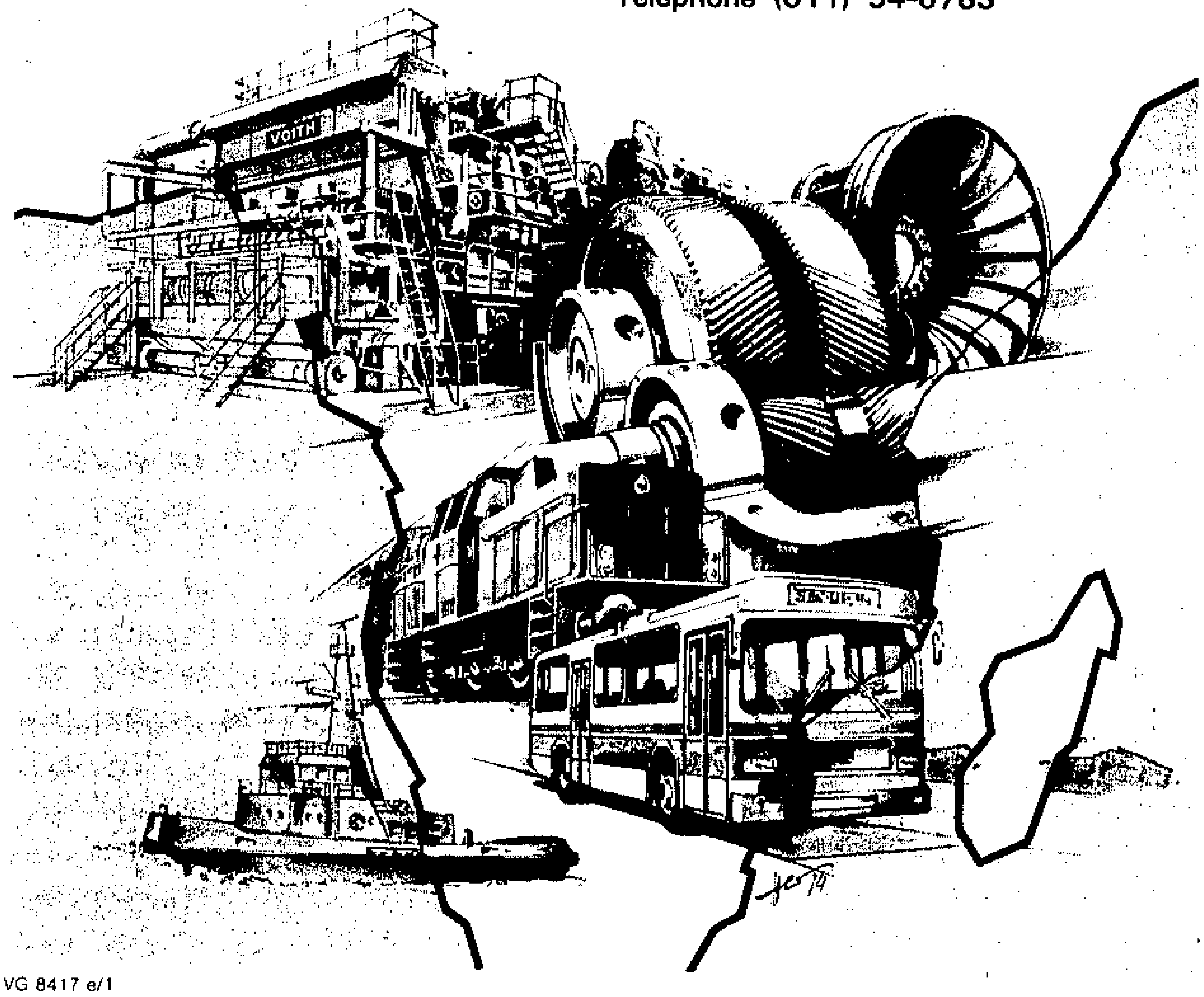
The use of solar energy, particularly for domestic water-heating, is gaining ever wider acceptance, and it is more slowly winning for itself a place in the industrial sector. There are high hopes that offshore gas deposits will soon be commercially exploited, and the search for oil is continuing.

Research into other forms of alternative energy, including wind and wave power, is being closely monitored. But the very abundance of potential options appears to have led to a disturbing level of complacency in some areas.

Experts say that energy research is not yet a major national priority, and that not enough is being done in the important area of energy conservation. They say, too, that SA's cheap power has caused too many industrialists to ignore the considerable cost savings that can be achieved by "good housekeeping," aided by impressive worldwide technological advances.

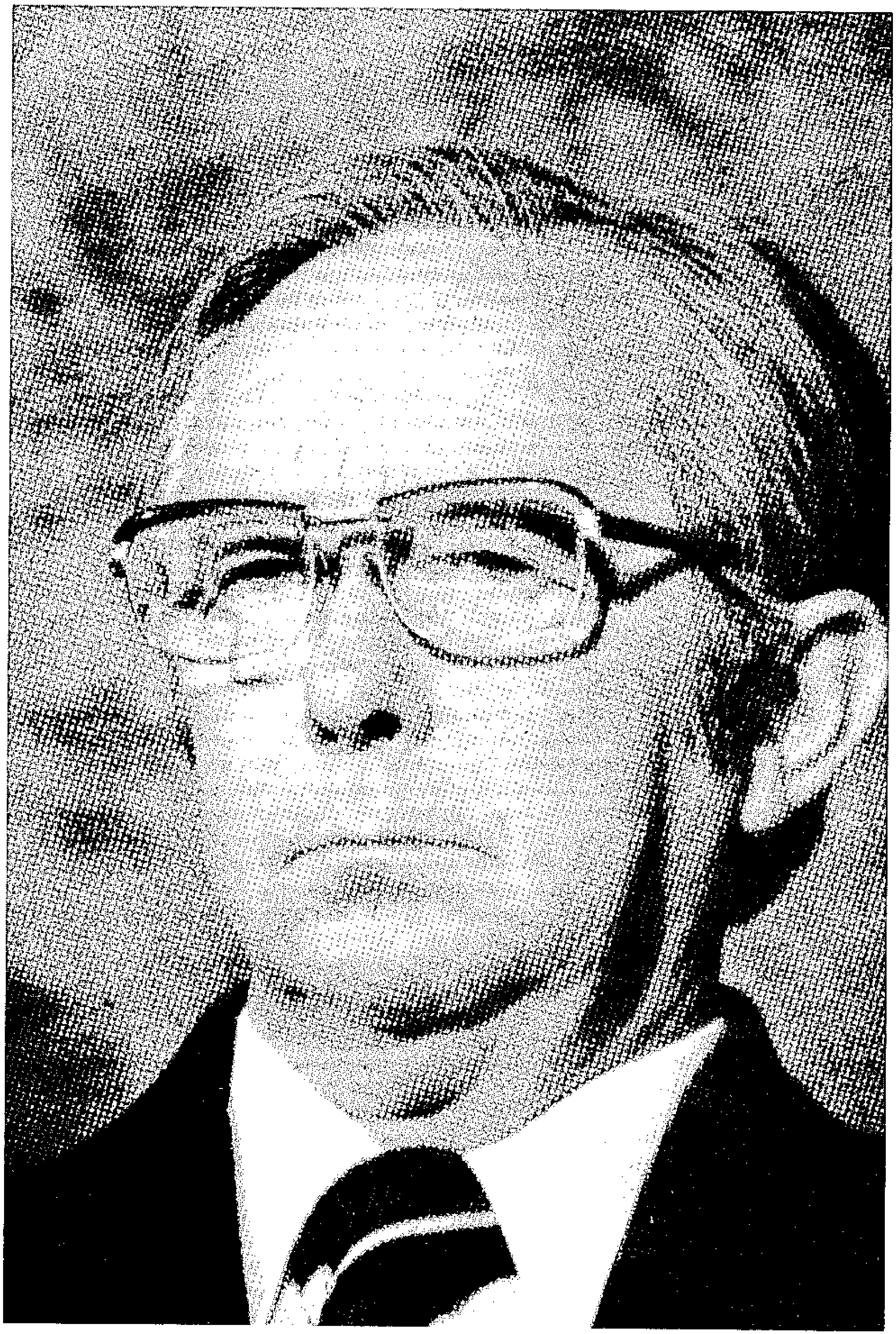
While the decision to embark on positive energy management and conservation must be taken by the private sector, the government has a critical role in increasing general awareness of the benefits of such policies. A strong body of opinion believes much more would be achieved by higher incentives — perhaps in the form of tax relief — for energy-conservation measures.

The National Energy Plan, which is now being formulated for presentation in a White Paper, will, hopefully, address itself to the challenge. SA ignores the energy challenge at its peril.



Making a plan

Although SA is committed to a broad energy strategy, the tabling of a White Paper next year containing a national energy plan has been widely welcomed



Mineral and Energy Affairs' Steyn . . . a daunting portfolio

The dynamics of SA energy supply and demand in the Eighties are now at their most volatile. Nuclear power is an established fact, crude oil supplies are under the closest scrutiny ever, Sasol is on stream with its third plant and there is, hopefully, commercially exploitable gas off the southern Cape coast.

The recent announcement by Mineral and Energy Affairs Minister Danie Steyn that a White Paper on energy is to be tabled for comment during the next session of Parliament is therefore timeous. It will at least focus attention on an issue that for several years has been exercising the minds of many energy experts.

The White Paper will effectively present **A National Energy Plan** which is now being formulated. The decision has been widely welcomed by everyone concerned with energy in SA, particularly as it will help create a structured and co-ordinated approach to solving the country's future energy problems.

No matter how vehemently one may disagree with the existing energy policy, the bed has been made and there is no alternative but to lie in it. But details of future policy can still be honed and improved.

Inextricably linked to any co-ordinated plan for energy supply and demand must be a carefully structured research effort. To this end, the Department of Mineral and Energy Affairs, in conjunction with the Council for Scientific and Industrial Research, has established a National Programme for Energy Research (NPER).

Before arriving at a research plan the Department and the CSIR addressed the likely energy problems facing the world in the years ahead. These are summarised by Dr C F Garbers, president of the CSIR, under three headings:

☐ Economic issues — supply/demand constraints linked to the needs of individual countries and their ability to pay for their requirements;

☐ Strategic issues — the political side to the energy problem; and

☐ Technical considerations — improving the supply base by better recovery and by generating a choice of alternative options.

For SA specifically, research and development strategy is aimed at:

☐ Securing a reliable, uninterrupted supply of energy to all sectors of the economy;

☐ Providing for the country's long-term energy requirements;

☐ Providing energy at a reasonable price for sustained economic growth;

☐ Exporting reasonable quantities of energy; and

☐ Decreasing the country's vulnerability.

and dependence on crude oil within its financial and manpower constraints.

To satisfy these needs, a national committee for Energy Research has been established, whose broad terms of reference are to:

☐ Identify the needs and establish the priorities for energy research;
☐ Make recommendations with regard to research and development funding;
☐ Promote research in the accepted priority areas;
☐ Encourage implementation of successful research and development results;
☐ Co-ordinate the National Programme for Energy Research (NPER); and
☐ Report regularly to government's Energy Policy Committee on the results and implications of the research and development effort;

The NPER will look at energy research under the broad categories of coal, energy in transportation and alternative technology.

Coal is an obvious research priority, as it represents the source of 80% of the country's energy requirements. So is transportation energy, which has been described as the Achilles heel of SA's industrial sector.

Neither of these two areas caters to the needs of the rural and developing sections of the community, nor do they provide for the assessment of renewable energy sources or alternative technology. This is why the third aspect (alternative technology) of the research programme has been established.

SA's energy choices and needs range from those applicable to the industrialised West to those of a developing or Third World country. The range of problems is best epitomised in two areas. On the one hand there is the high-technology approach to electricity generation and the fuel-from-coal programme, on the other the potentially catastrophic deforestation arising from the need for readily available low-density energy — especially for heating and cooking in rural areas.

Most of the coal beneficiation and upgrading efforts in SA have been aimed at larger sizes of coal, above 6mm in diameter. But the evolution of mechanised coal mining methods has led to the production of increasing quantities of unwashed small coal, or duff. Sizes between 0,5 mm and 6 mm are beneficiated and exported, but the fines, of less than 0,5 mm, are simply dumped, because there is no apparent use for it.

Beneficiating coal sizes between 0,5 mm and 6 mm presents no special problems, says Dr Gert Venter, manager of the National Programme for Energy Research, and the smaller grades are being intensively studied.

Breaking the small sizes down further, to below 0,1 mm and to 0,1 mm-0,5 mm, has led to suggestions that future beneficiation plants will incorporate several processes, each of which will be suitable to a particular size or fraction of coal.

Coal between 0,1 mm and 0,5 mm could be amenable to gravity concentration, says Venter, while the ultra-fines (below 0,1 mm) will probably require processes such as froth flotation and oil agglomeration.

Venter estimates that, by taking the 1982 export coal tonnage of 28 Mt as a guide, about 4 Mt of fines smaller than 0,5 mm were dumped, which could have been processed to yield about 2,8 Mt of coal for export.

Energy research throughout the world has accelerated dramatically since the first oil crisis in 1973. The volume of research work undertaken, with each country striving to find solutions to its own particular problems, suggests that a great deal could be achieved through an internationally co-ordinated research effort.

Says Venter: "The more concerted the effort, the greater the likelihood of cutting lead times for the introduction of new concepts and technologies. There are many more benefits than drawbacks to be gained from co-operation.

Short on savings

As SA moves slowly towards implementing a national energy-saving campaign, there are disturbing signs that the private sector is dragging its feet

Most developed countries have long recognised that a key aspect of any effective energy plan must be conservation. Although SA can be listed among them, it has taken a decade since the first major oil crisis to get a conservation programme going — and there are still fears that the country will slip further behind in the global energy race.

Government's initial speed restrictions and the limitation on petrol-selling hours were conservation measures, but in overall terms they were considered more of an inconvenience than a positive step forward.

The most obvious evidence of measures introduced elsewhere in the world range from the demise of the huge American "gas guzzlers" to the emphasis European motor manufacturers have placed on aerodynamics in car design.

But in SA little more than lip service was paid to conservation before Mineral and Energy Affairs Minister Danie Steyn approved an energy awareness campaign, which was launched in March.

There is a strong body of opinion which feels that not enough is being spent on the energy conservation campaign. Indeed, compared with the possible savings that can be effected by a concerted conservation strategy, the amount to be spent on the initial campaign is negligible.

The first step is an opinion poll to determine management attitude towards, and awareness of, energy conservation to give the campaign a base against which any changes in attitudes can be assessed.

One of SA's foremost energy experts, Professor Neville Tully of the mechanical engineering department at the University of the Witwatersrand, believes publicity and education are imperative to any conservation programme. And the R100 000 committed by the department to its current campaign, he says, is hopelessly inadequate.

"SA's energy consumption measured against gross domestic product is very high, and this country is involved in virtually none of the conservation measures now applied widely in the rest of the industrialised world," he says.

A widely held view is that conserved energy should be viewed as a primary energy resource.

While there is no energy crisis, in the sense that energy will become unavailable in the foreseeable future, the cost of supplying energy to consumers is escalating rapidly. "The real energy crisis may turn out to be that consumers will not be able to pay for all the power they require," says Tully.

Japan is probably the most energy-conservation-minded country in the industrialised world, with a thorough energy policy incorporating a clearly defined programme. But many other less developed nations have adopted enlightened poli-

SPARKING GROWTH

Sales of electricity to industry (MkWh)

Sector of industry	1977	1978	1979	1980	1981	1982	Increase over 1981/82 %	Average yearly increase 5 years %
Building cement and quarrying	1 087	1 198	1 121	1 194	1 353	1 413	4,4	5,4
Chemical	3 103	4 117	4 657	5 751	7 215	7 258	0,5	18,5
Engineering, iron, steel and base metals	11 927	13 338	15 600	15 900	15 316	14 754	−3,7	4,3
Foodstuffs, consumer goods, commercial and other	4 819	4 916	5 378	5 688	6 341	6 688	5,5	6,8
Paper and paper products	650	613	719	840	866	846	−2,3	5,4
Total	21 586	24 182	27 475	29 373	31 091	30 959	−0,4	7,5

Source: Escom.

cies. In Israel, for example, it is illegal to build a new house which does not incorporate a solar water-heater.

In Britain, an indication of the serious approach to energy conservation is the country's Coal Firing Scheme, designed to assist companies to switch to coal from oil. An initial £50m was allocated to the programme by the British Energy Office, and a further £25m was allocated to the scheme this year.

The scheme provides grants of up to 25% of the cost of converting to coal existing oil-fired or gas-fired equipment, such as boilers, furnaces, ovens, driers and kilns.

While such a scheme would probably not be necessary in SA, where coal already supplies 85% of energy requirements, the amount spent on the programme is a reflection of the determination with which energy conservation is being approached in that country. SA should take note.

Tully says local coal may be able to maintain its current dominant position for another 25-30 years only. If all possible conservation measures were applied in SA industry, he says, savings of up to 40% of consumption could be achieved by the year 2000. At the very least, he adds, a national target to reduce primary energy demand by 20% by the end of the century should be adopted — "and that is readily attainable. Unless large-scale nuclear energy can be regarded as assured, conservation of energy will shortly become essential."

To fund a concerted conservation programme, Tully suggests a levy on coal. The funds raised could be used to finance research and to subsidise those companies prepared to institute conservation research programmes. A domestic levy of 25c/t would raise about R28m/year.

The Department of Mineral and Energy Affairs has given some thought to the financing aspect, and a pilot study on tax-incentive measures is being undertaken for the department by Pretoria University's Graduate Business School.

But SA's energy research spending is still lower than that of all members of the Organisation for Economic Co-operation and Development, says UCT's Dr Richard Dutkiewicz. On average, it is only about 4% of the amount spent by each OECD member.

The first fuel crisis in 1973 created primarily an awareness of the political weapon of supply curtailment and prompted mainly government activity, including the establishment of the Energy Policy Committee. But consumer concern at the rapidly rising costs of energy gave added strength to the energy conservation movement.

Ten years later, government is on the point of unveiling a national energy strategy which is due to appear as a White Paper next year.

National energy conservation research is funded by Energy Affairs and is co-ordinated by the CSIR, which earlier this year set up the National Energy Information Bank to monitor research carried out by universities and others.

Energy conservation falls under one of three main subdivisions of the national energy programme — alternative technology, energy in transport and coal. Currently, eight projects are under way dealing specifically with energy conservation and rationalisation. These include a report by Professor Tully to the CSIR on potential conservation in SA industry. The Energy Research Institute at UCT is also preparing comprehensive reports.

In February, Energy Affairs presented awards to architects for the first time for conservation-conscious building designs.

While these developments are encouraging, much more needs to be done, and there are disturbing indications that the industrial sector is lagging behind the State.

In April, Tully sent a questionnaire to 1 150 major companies. The excercise was designed to show the level of industry's awareness and interest in energy. The response was an answer in itself — 27 replies were received.

Energy costs ranged from R450m/year for an industrial group to R1 000, but only one respondent had an energy manager. Eighteen of the early respondents said they were "very interested" in energy management and conservation, but two, including a chemical company spending R32m/year on energy, said they were "slightly interested."

One of the reasons frequently given for the lack of energy-saving measures in industry is the current economic recession.

But Tully says: "A large-scale conservation programme involving publicity, education and demonstration projects, modelled on those found to be successful overseas and aimed at improving industrial profitability, could produce significant results in the present economic climate."

One aspect of energy conservation widely applied in the Western world is daylight saving, but studies in SA suggest that the procedure would make no meaningful contribution to local conservation.

Reasons given by the department are that geographic and meteorological factors limit the possibilities for implementation of daylight saving; summer afternoons in SA are long enough for sport and recreational activities; there seems to be no real advantage in a timetable adaptation; and organised commerce and the electricity industry have their doubts about daylight saving. In the final analysis, government's Energy Policy Committee concluded that proposals for daylight saving should be dropped for the time being.

Domestic energy conservation, while a desirable objective, does not offer the volume of savings that could be generated by industry, mainly because home consumption is a fraction of industrial energy use.

The insignificance of the residential factor is apparent from Escom figures: in 1983 it sold 32 729 GWh of electricity to industry and only 1 078 GWh to the domestic market.

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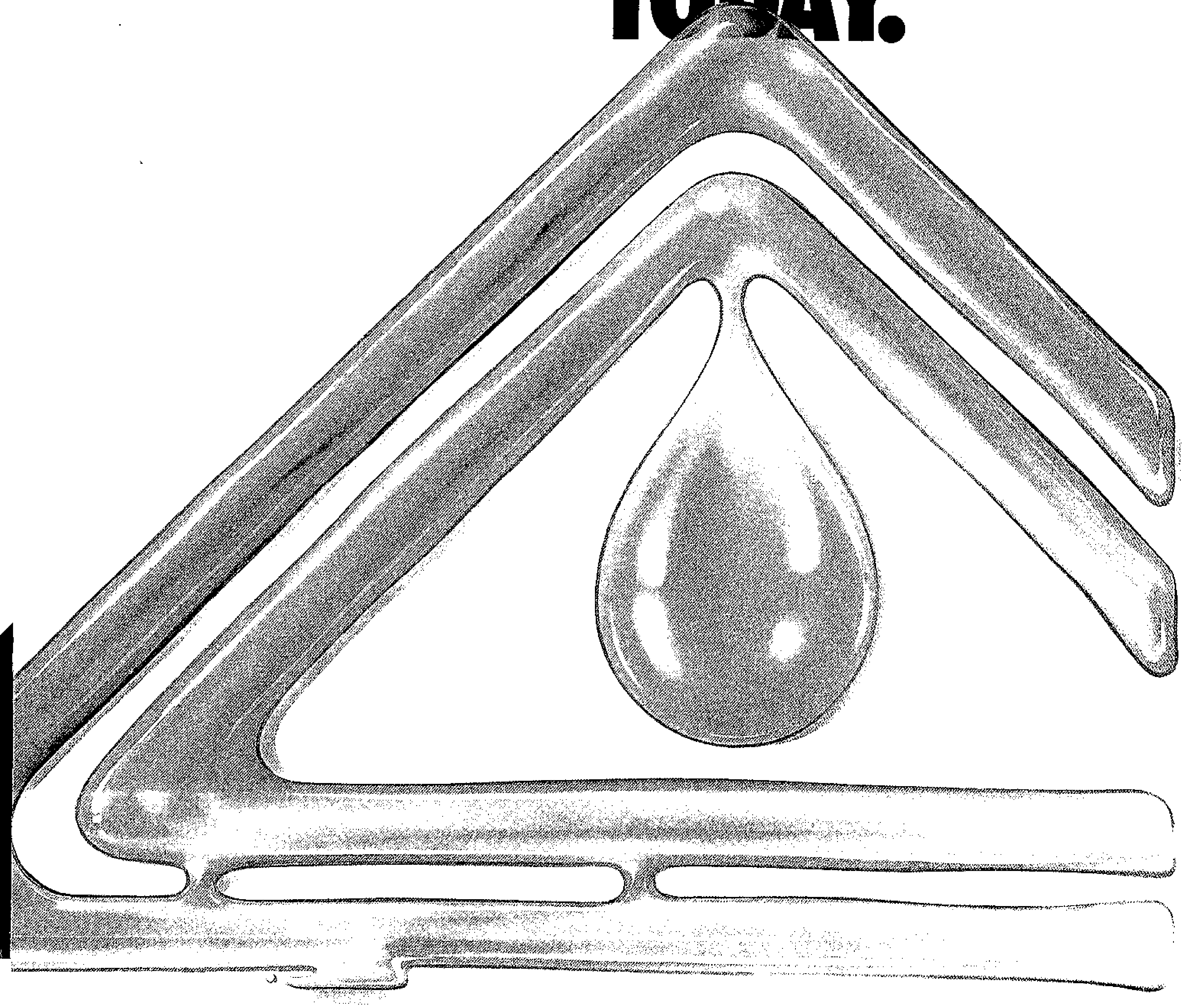

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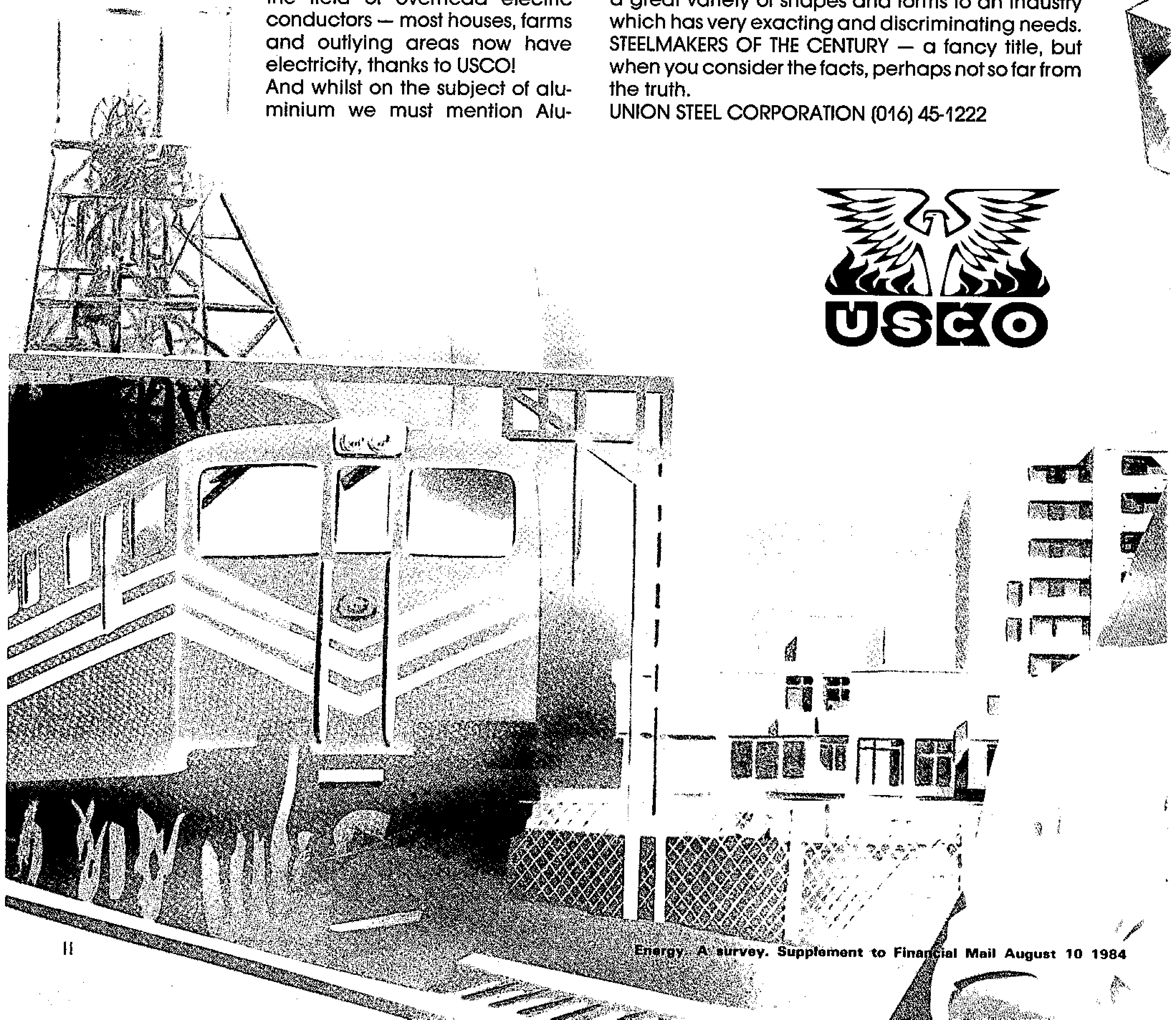
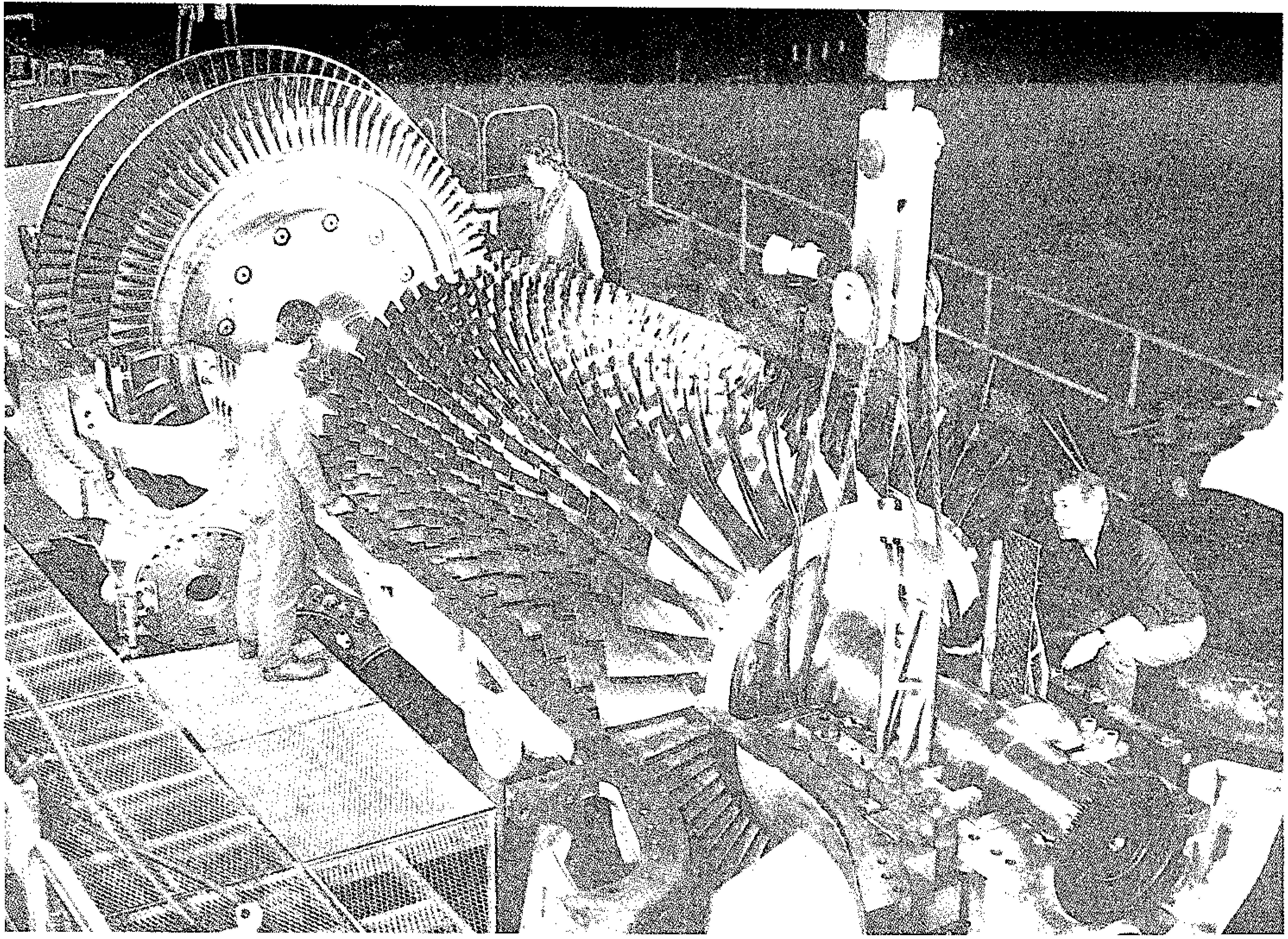


ALSTHOM ATLANTIQUE **POWER BY EXPERIENCE**



ALSTHOM ATLANTIQUE, 100 MW HEAVY DUTY GAS TURBINE DURING ASSEMBLY

Alsthom-Atlantique is the largest manufacturer of turbo generators in Europe. Besides also being the largest supplier of 50 cycle gas turbines for power generation, they were also the first to develop, together with their licensor, an industrial gas turbine of 100 MW output. Today Alsthom-Atlantique has unequalled experience feed-back from its world-wide references which are backed up by the most powerful R & D team in gas turbines.

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The MS 6000, covering 50 to 60 MW
The MS 9000, covering 90 to 110 MW

In addition to packaged gas turbine power plants, Alsthom-Atlantique supplies turnkey, combined cycle power plants. The efficiency of such combined cycles exceeds 45%.

For instance, in Malaysia Alsthom-Atlantique engineered the complete 900 MW gas fired power plant "PAKA" which is presently under construction. The plant consists of three modules, each with two 100 MW gas turbines, a 100 MW steam turbine and an unfired exhaust gas steam boiler.

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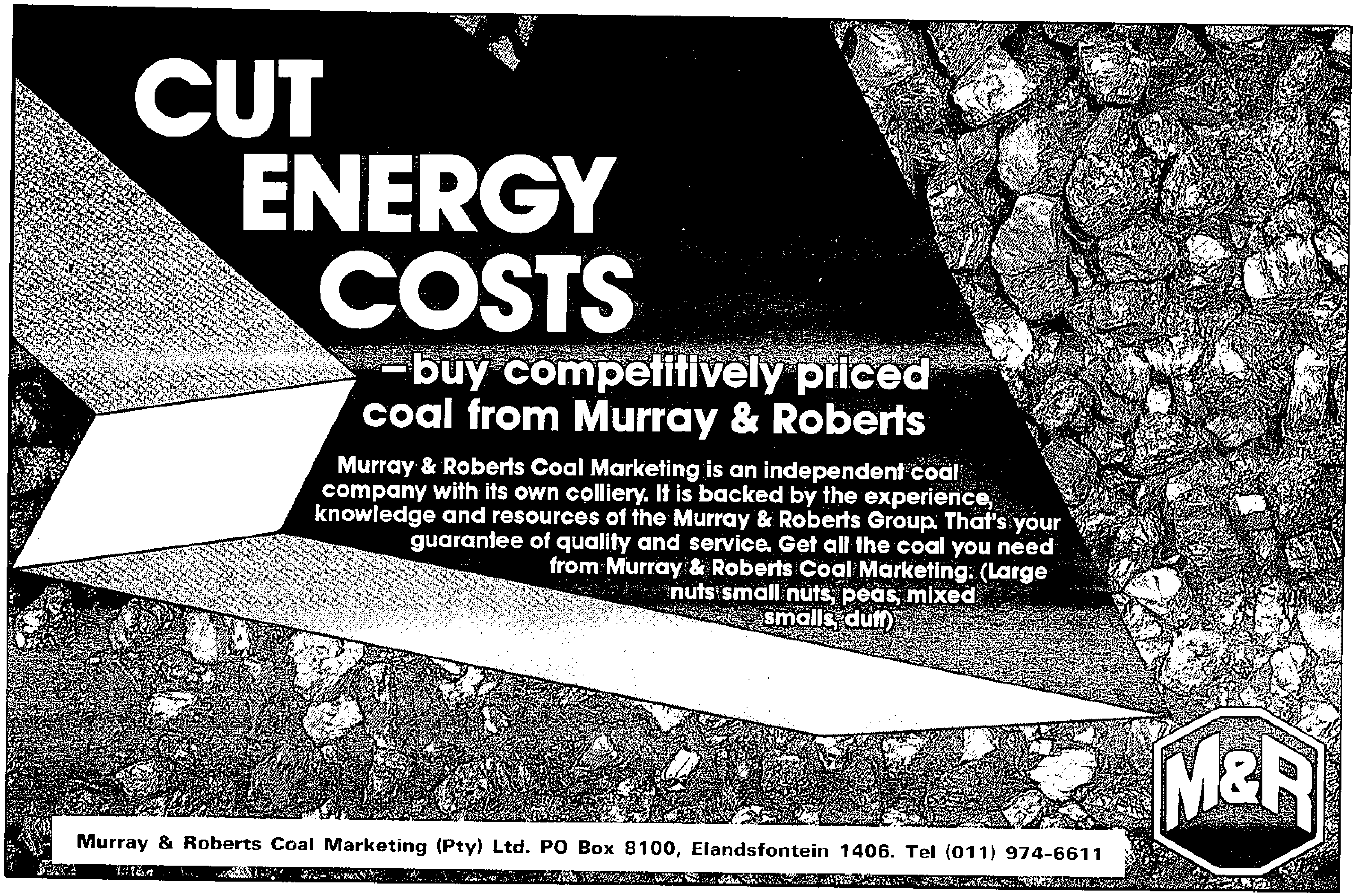
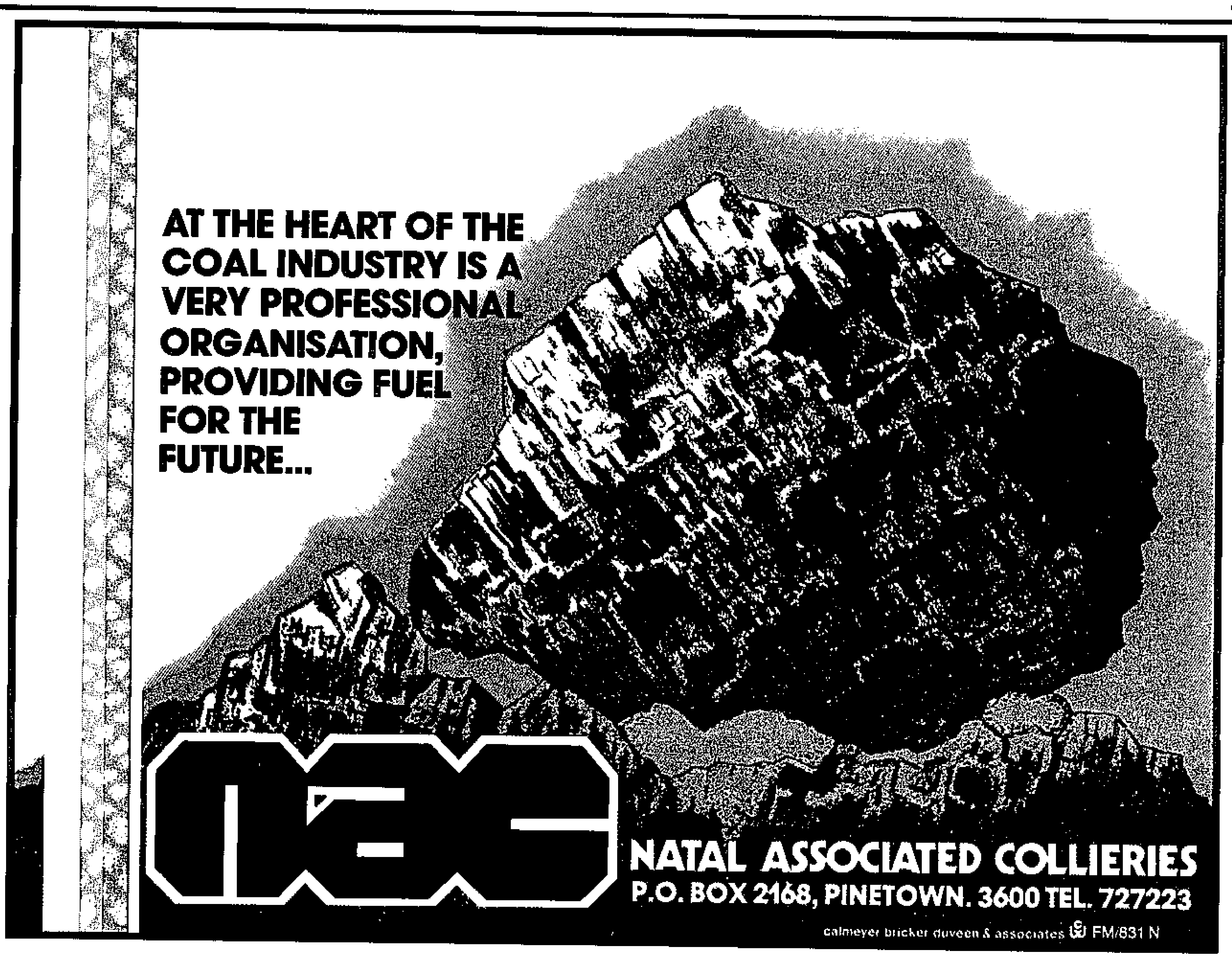
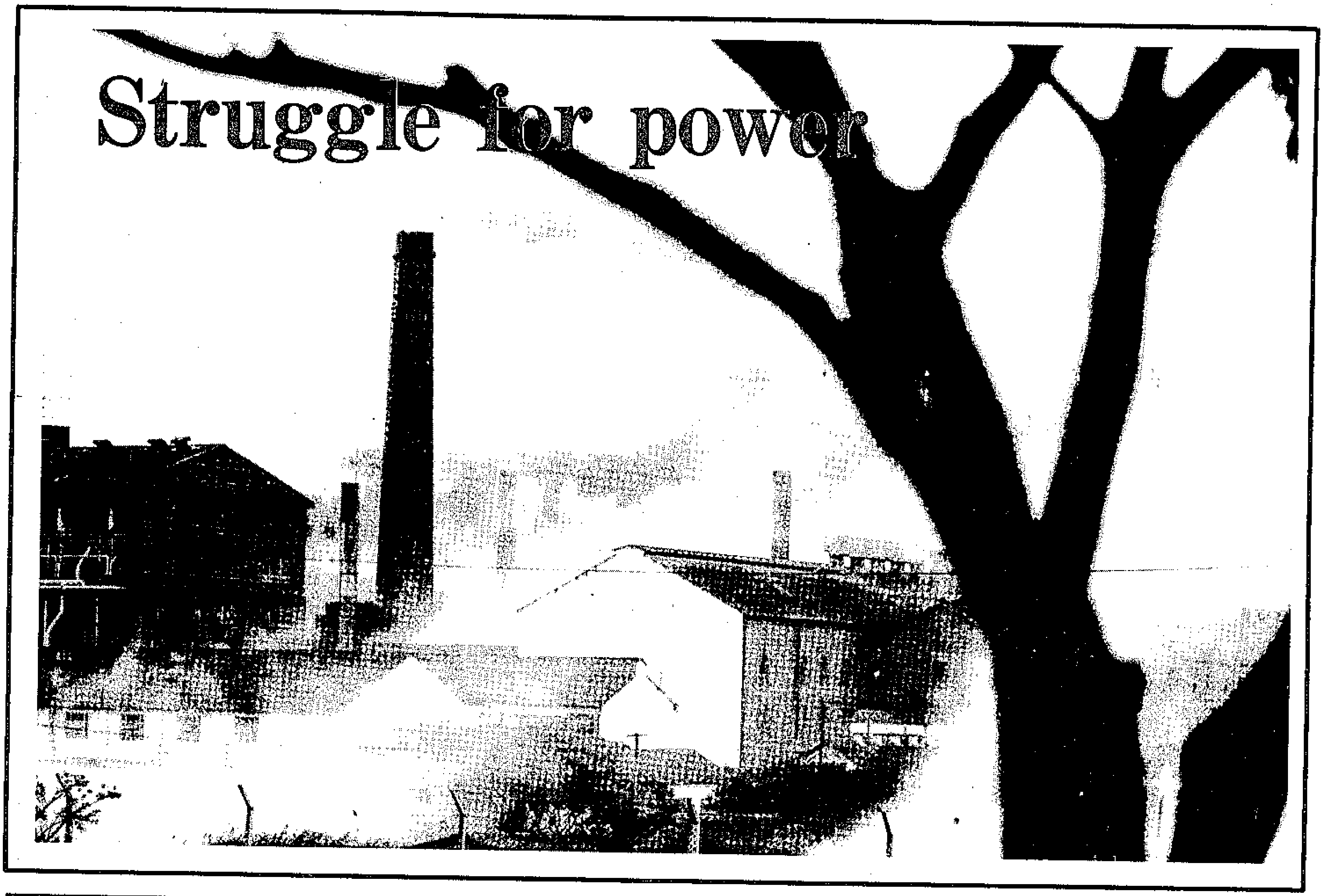




Struggle for power



Energy — n. power; force; capacity to act vigorously; capacity for doing work

So runs a dictionary definition of this invisible commodity, which turns the wheels of life.

For thousands of years the only energy used by man came from his own muscles; his beasts of burden; the wood and dung fires which cooked his food and warmed his home, and the tides and winds which drove his ships.

He has since developed an increasing dependence on energy to the extent that these traditional sources could never by themselves supply all his needs. And today, their contribution to the world's total usage is so small as to be ignored in most published statistics.

The beauty of the older sources was that, no matter how much energy was used, in almost all cases, more would be available for another day — in other words, the energy was renewable. Muscles can regenerate and be reproduced; winds will continue to blow. But, most of the energy used today, such as coal and oil, is non-renewable. Consequently, every kilogram of fossil fuel burnt, leaves the world one kilogram of fossil fuel poorer.

At present consumption rates, the world's oil will be finished before its coal. It took a war in the Middle East in 1973 to start a trend which takes account of these realities. Since then, per capita consumption of all energy in the western world has fallen dramatically, and there has been a move away from oil to coal, natural gas and nuclear energy.

GENESIS
Primary Sources 1983

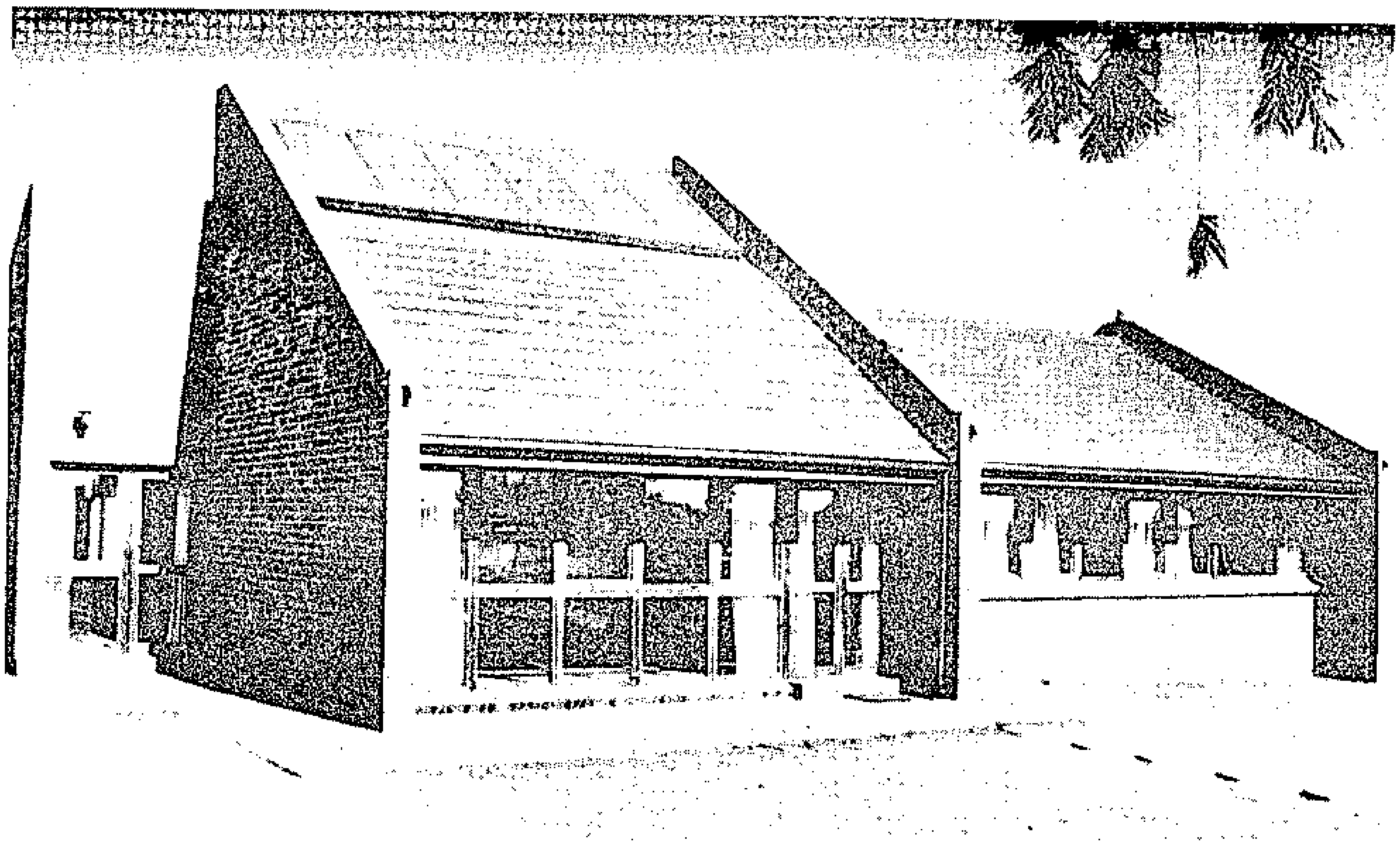
	Total world %	South Africa %
Oil	40,3	16,6
Natural Gas	19,2	—
Coal	30,3	82,9
Hydro-electricity	6,8	0,5
Nuclear	3,4	—
	100	100

The accompanying table shows that most of the world's energy used last year was still derived from oil. It also shows that SA's energy sources differ from those of the rest of the world. Our country is blessed with some of the world's largest deposits of coal.

The other big reason for coal's dominance in SA is that the country is the target of an oil embargo. This has added further incentive to reduce the country's dependence on imported oil by using energy from coal instead. Energy from coal is in the form of electricity from coal-fired power stations, synthetic petrol and diesel fuel.

SA has an immediate need to find alternatives to oil. Sooner or later the rest of the world will search for oil substitutes with similar urgency.

The Department of Mineral and Energy Affairs and the CSIR manage the country's energy research through the National Programme on Energy Research (NPER) headed by Dr Gert Venter. The objectives of the research are to optimise utilisation of the country's energy resources and to reduce dependence on imported crude oil. We are indebted to him and his staff for inputs into the energy overview which follows.



Solar water heating . . coming into its own

NPER's Venter . . . researching the alternatives

OIL FROM COAL

SA leads the world in this technology with its three commercially proven oil-from-coal plants — Sasols 1, 2 and 3. At currrent demand levels, they supply more than 40% of the country's liquid fuel requirements.

A big advantage of oil from coal is that petrol and diesel made by this process is interchangeable with the conventional products. Motorists have no way of knowing whether they are filling up with the petroleum or coal-based version.

This means that Sasol fuels can be fed into the transport infrastructure without any modifications to the vehicles themselves or the distribution facilities (See *Sasol's Role*).

WOOD

Like dried dung and maize cobs, wood, one of man's earliest energy sources, is not likely to make a comeback in place of fossil or nuclear fuels. This is largely because of the sheer impossibility of producing anything like the physical quantities which would be required as well as a lack of thermal efficiency.

However, they still play an important role in filling energy needs of unsophisticated people in rural areas where other sources, such as electricity, are still not easily available (see *Rural firepower*).

METHANOL

Methanol is an alcohol which can be produced from natural gas or coal. It is most suited for use as a transport fuel in the place of petrol or diesel and can be added to them as an extender. However, it does not blend perfectly with these fuels, and, if the percentage of methanol in diesel exceeds 3%, separation of the two liquids can occur unless certain costly chemicals are added.

When used by itself in diesel engines, it requires the addition of certain "ignition improvers" to assist combustion. And, in most cases, conventional petrol and diesel engines would have to be modified for optimum performance on methanol.

If it were used in SA it would almost certainly function as a substitute for diesel because oil chemistry dictates that the country often has to produce rather more petrol than it requires to meet the demand for diesel fuel. Using methanol in place of diesel would help redress this imbalance.

The giant chemical company AECI has proposed putting up a huge plant to produce methanol from coal for use with improvers it has developed.

Methanol has numerous advantages and is probably the best substitute for fuels based on crude oil after Sasol's oil from coal. In the early Eighties it seemed that government favoured construction of a methanol plant rather than a fourth Sasol-type plant. However, for various reasons, it has deferred a decision on this.

Offshore gas finds would provide another reason for using the methanol alternative because the gas could be converted into methanol more cheaply than into petrol and diesel. Capital cost of a methanol plant would be significantly less than the cost of a plant to convert the gas into petrol or diesel. One day SA may use methonal obtained via the coal as well as the natural gas route.

A given quantity of coal will produce more energy if converted into methanol than if converted into petrol and diesel by the processes currently used by Sasol. The reason: methanol can be used in more efficient engines with very high compression ratios and because efficiencies in methanol conversion plants are higher. But production and use of the ignition improvers it would require has not yet been commercially proven.

Methanol has only about half the calorific content of petrol and diesel. This means that a tank full of methanol would take a given vehicle only about half the distance it would go on a tankfull of conventional fuel. Methanol would also require the development of special lubricants as it has a lower viscosity and less self-lubricating properties than diesel.

In this form, methanol cannot be substituted directly for petrol or diesel. It would require separate distribution, storage and dispensing facilities, which would add to the country's total transport costs.

ETHANOL

Ethanol is an alcohol already produced as a by-product of the Sasol process. It can also be produced from renewable agricultural products such as sugar cane, cassava and maize.

At present it is used as a petrol extender in a concentration of about 12%. It can also be used as a diesel extender provided it is blended with additives, such as sunflower oil.

It could also be used as a substitute for petrol or diesel, with certain modifications to engines. Whereas its use as a diesel substitute has not been proven on a large scale, it has, however, been used in place of petrol in Brazil for years.

SA has also had its own ethanol fuel made from sugar cane, Union Spirit, which was used as an anti-knock additive to petrol.

Unlike oil from coal, ethanol production lends itself to smaller-scale operations.

A mouthful of water.

Sounds simple, doesn't it?

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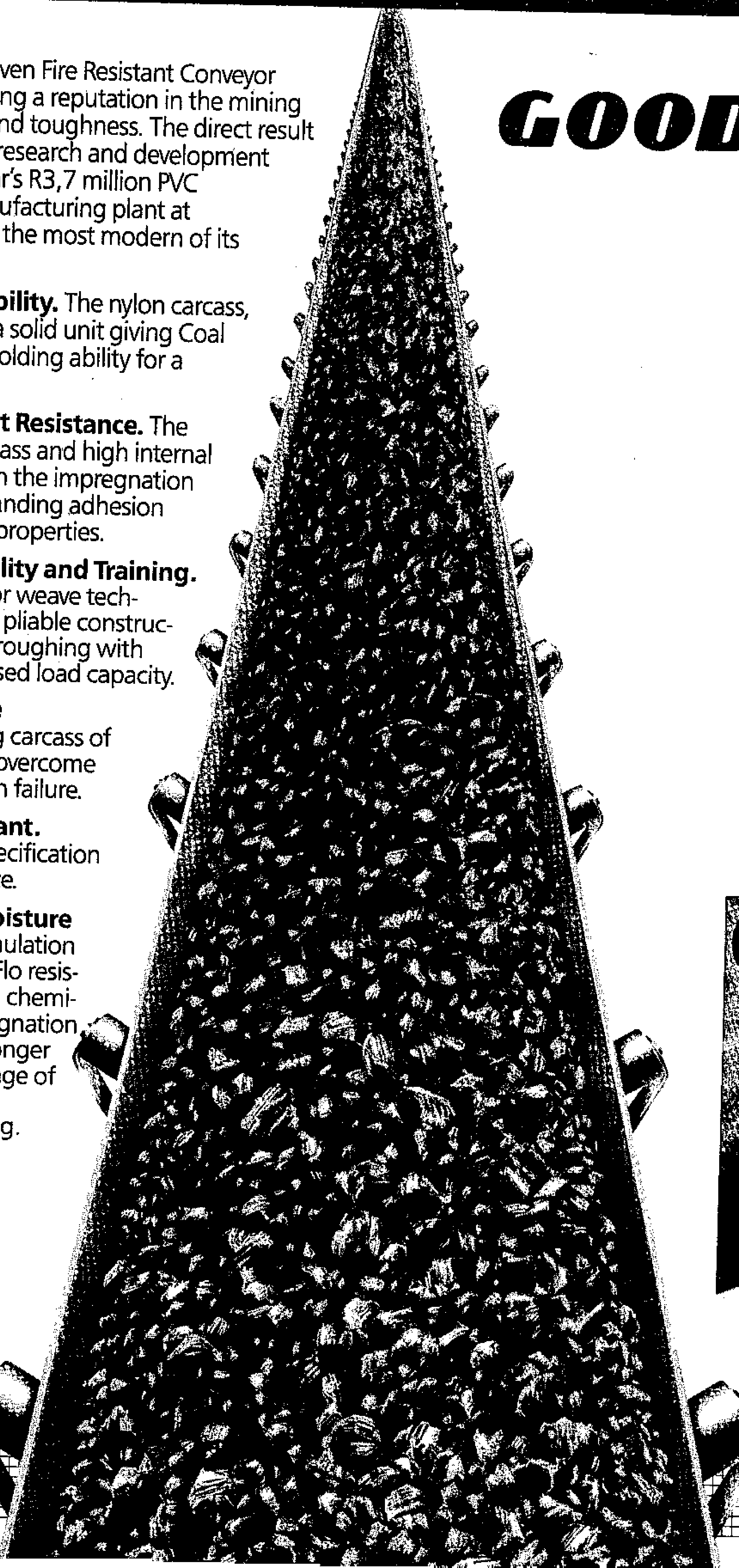

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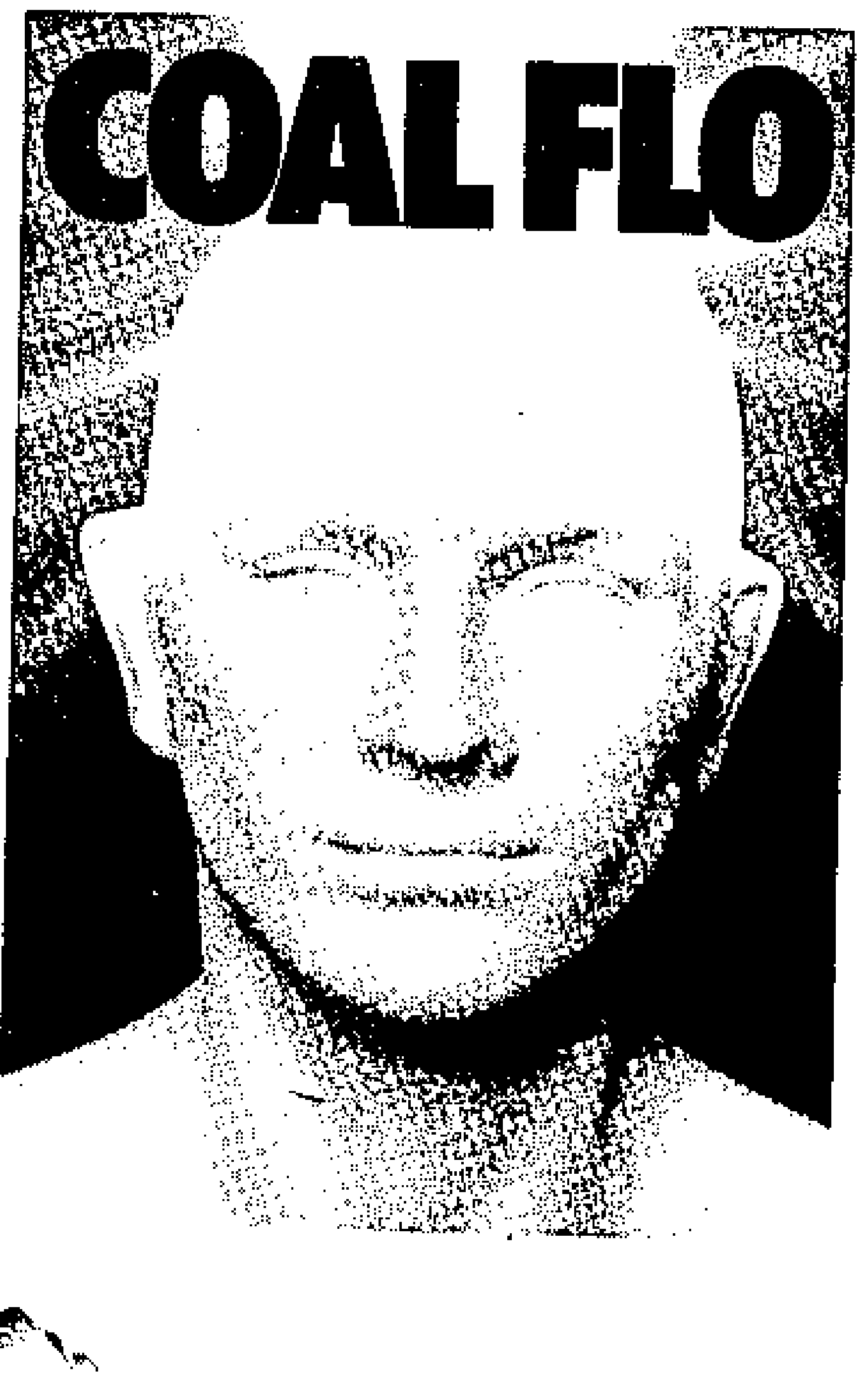
GOODYEAR

RESISTANT TO EVERYTHING EXCEPT PRODUCTIVITY.



RESEARCH AND DEVELOPMENT TECHNOLOGY

GOODYEAR'S GRIP ON INNOVATION

McCANN-ERICKSON 6664

This would suit the decentralised nature of agricultural operations which would supply its main raw materials. It is also fairly labour-intensive and would help bring employment to relatively impoverished rural areas. Furthermore, an infrastructure for the gathering of raw materials already exists in some cases. An example of this is the sugar industry.

However, the economics of ethanol production are uncertain, and because of the country's irregular rainfall, we could not afford a high dependence on energy from this source. Furthermore, many experts predict that, in the foreseeable future, all SA's agricultural land will be needed for food production.

There are also pollution problems in that the production of one litre of ethanol involves producing seven litres of liquid waste. Even though some of this could be used as stockfeed, much would have to be rendered harmless to the environment by costly processing. The Brazilians solve the problem by dumping the waste into their vast river system, something which could never be contemplated here because of our lack of water resources.

TORBANITE

It is not generally known that crude oil was produced in SA during the Sixties. In the middle of that decade, production by Satmar, an Anglovaal subsidiary, reached about 715 000 barrels/year.

It came from torbanite, an oil-bearing shale found near Ermelo, and the oil separation was accomplished with steam.

Production ceased when the richest deposits known at the time were worked out. But the idea was not altogether shelved. Even Sasol considered processing torbanite shale, with its vast steam-raising capability, when Sasols Two and Three were being planned for Secunda, which is in the same geographical area. Research is continuing on torbanite, but details are classified.

SUNFLOWER OIL

With relatively little processing, locally-grown sunflower oil can be converted into an ester with alcohol for use by itself as a diesel substitute in indirect injection diesel engines. By-products of sunflower fuel are oilcake, stockfeed, and glycerol.

Under normal production conditions it would be more expensive than currently available diesel fuel. But, if these by-products could be sold or used, and if farmers were to produce sunflower oil for their own use on their own farms, using their own labour, it could become a proposition for some.

Advantages of sunflowers are that they grow on marginal lands needing very little rain or fertiliser.

Windmills . . . not enough puff inland

Consequently, some farmers could achieve self-sufficiency in fuel by establishing operations designed around the use of oilcake. The Department of Agriculture is developing small plants for use by farmers to process the oil.

NUCLEAR

SA is a natural for nuclear energy because it is a major producer of uranium oxide and has made considerable investment in technology for the enrichment of uranium (see *Escom's role*).

NATURAL GAS, CRUDE

If even a medium-sized oil and gas field is proved in the region of recent finds near Mossel Bay, the country would have total self-sufficiency in liquid fuels.

However, this has not yet been done and the deposits already found may be left to lie there for years because the cost of exploiting them could outweigh whatever level of self-sufficiency they would confer.

Furthermore, far more gas has been found than oil, which adds to the cost of producing usable liquid fuels. A refinery to convert the crude into transport fuels costs far less to build and operate than plants to convert the natural gas into methanol, as already stated, or conventional fuels.

Natural gas could also be used to generate electricity. Probably the best way would be to use it both as a fuel for gas turbine-powered generators, and as a boiler fuel to power steam turbines.

Capital costs of such a plant would not be high but operating costs would. A spokesman for Escom says such a project would not be worthwhile unless the gas could be bought at less than half the current prices for North Sea gas. On the basis of the gas finds off SA so far announced, this possibility seems remote.

The future of the exploitation of SA's oil and gas reserves is, therefore, still in the lap of the gods.

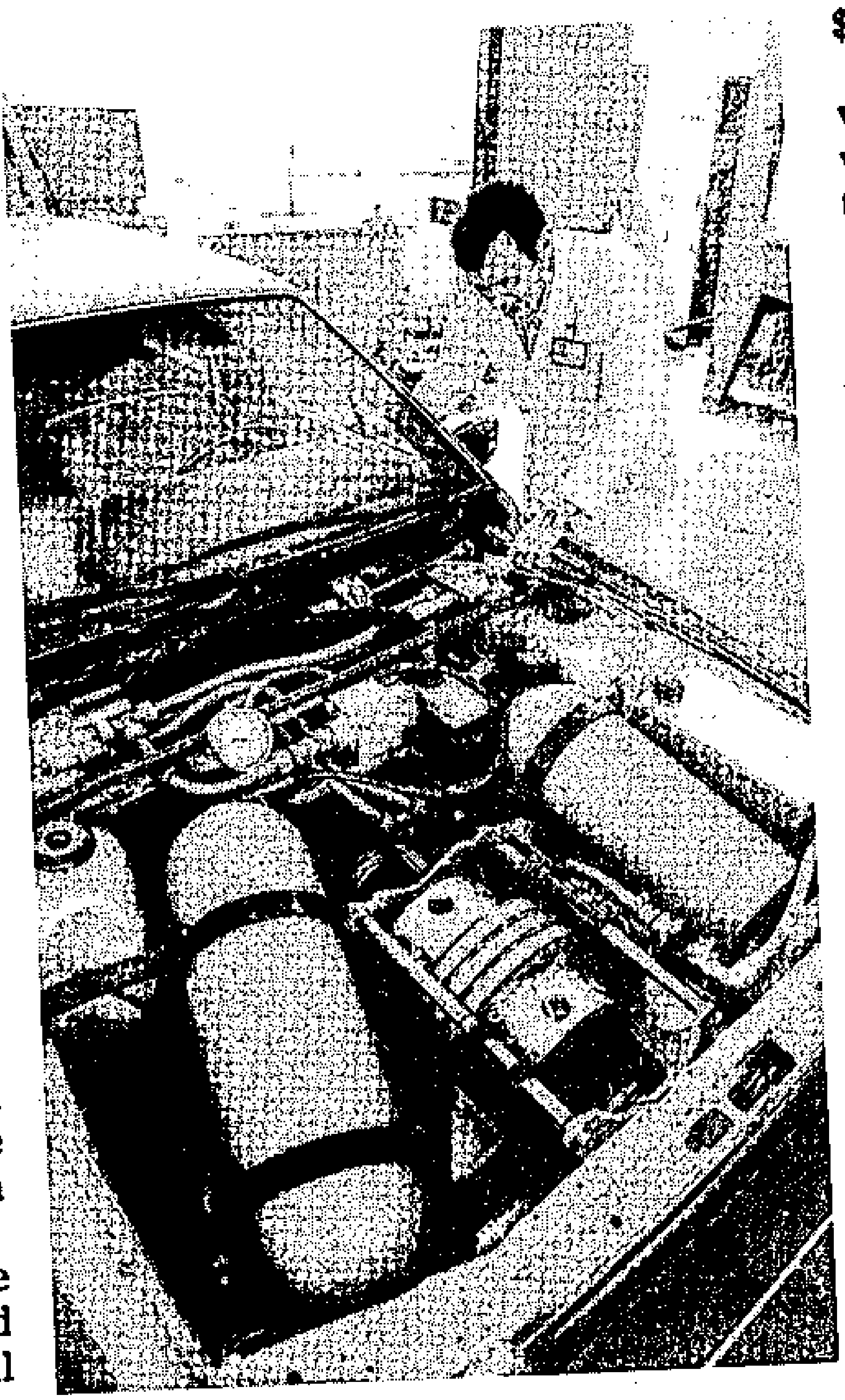
ELECTRICITY

Electricity is by far the most efficient energy form. It would probably be used almost universally if it were not for the great convenience of liquid fuels (see *Escom's Role*).

Estimates by the NPER suggest that a typical electric locomotive used by SA Transport Services achieves an energy efficiency of at least 20% at the wheels; a battery-powered vehicle, 10%; a motor car using petrol from crude oil, 6%-10% and a motor car using petrol from coal, 3%-5%.

Energy savings in certain large SA opencast mining operations have been made by switching from diesel powered trucks to trucks powered by electricity supplied through overhead cables. But, so far, there are no means of supplying in this way on a mass basis to users of public roads.

The disadvantages of using batteries are that battery-powered vehicles have limited range. However, there is hope that this will improve as new technologies become available.



Battery car . . . promising future

HYDROGEN

Many scientists believe that, of all the chemical fuels, hydrogen has the best future. It has a high energy content and, as a constituent of seawater, exists in virtually unlimited quantities.

Research into separating hydrogen from seawater is far advanced. Nuclear power plants on the coast may well be used to provide energy for this purpose during offpeak electricity demand periods.

Another problem is storage, as hydrogen is either a highly inflammable gas or has to be cooled to extremely low, sub-zero temperatures to adopt a liquid form.

One method being investigated by Professor Nico Louw of the University of Stellenbosch involves storage in solid form, such as lithium hydride. The hydrogen can be liberated from the hydride by the application of heat and used as a fuel in an internal combustion, petrol-type engine.

SUPER FLYWHEELS

Professor Gordon Bredenkamp of RAU is studying the likely performance of "super flywheels" — huge rings of steel and copper fully 3,5 km in diameter suspended and constrained in a vacuum by a magnetic field to allow them to rotate in the almost total absence of friction.

He envisages that they would have a linear speed at the rim of about 7 200 km/h to act as giant stores of energy. They would be set in motion by electric power generated during offpeak demand periods. They would then feed energy back into the electricity grid during peak periods when Escom's conventional power stations are running at full load.

They would serve the same purpose as Escom's pumped storage schemes. Here it uses excess power in the grid to pump water into a high altitude storage dam during offpeak times, and allows the water to run down again (turning a water turbine generator in the process), during peak demand periods.

The technique is used to avoid the heavy expenditure on conventional generators, which would be required for only a small proportion of the day when peak demand occurs. However, calculations have shown that, provided they are big enough, super flywheels are far more efficient energy storage devices than pump storage schemes.

SOLAR

Only nine years ago, the experts were saying that solar energy was not a serious competitor with conventional sources. But, since then, the cost of generating electricity by photovoltaics (devices which convert the sun's energy directly into electricity) has come down from $60/peak watt with an efficiency of 3%-5% to $6/peak watt with an efficiency of 10%.

Predictions are that, in some cases, it will be comparable with the costs of conventional power generation methods by the turn of the century.

Already photovoltaic generators are used in remote parts of SA — for hilltop radio transmitters for example, where the cost of connecting the equipment to the Escom grid would be prohibitive, or where it would not be worthwhile making periodic deliveries of fuel to a diesel generator.

The NPER estimates that a photovoltaic complex 5 km by 5 km could produce as much power as the Koeberg nuclear station when it comes fully on stream. This area is not very much bigger than the property on which the Koeberg facilities are accommodated.

Another big application of solar power is in domestic water heating. But, so far, solar water heaters have been bought mainly by the more affluent, who need it the least and live in areas well supplied with electricity. It will come into its own, says the NPER, when it is used in rural areas out of reach of the national electricity grid.

A further application of solar energy called passive solar energy is the direct heating of buildings. Scientists maintain that it is possible to erect buildings on the SA highveld needing only minimal supplementary heating, provided they are correctly designed and constructed. The required design would involve no additional cost.

HYDRO-ELECTRICITY

SA has very little hydro-electricty potential. However, southern African countries, including Zaire, have a potential of 100 000 MW — more than four times SA's present electricity output.

This is one of the cheapest of all forms of energy and its exploitation depends largely on political factors.

WIND, TIDE, WAVES AND GEOTHERMAL

At present none of these energy sources is thought to have much promise for cost-effective use in SA.

Windmills have been traditionally used in SA for water pumping on an intermittent basis, but the country has relatively little wind inland where most of its energy is needed.

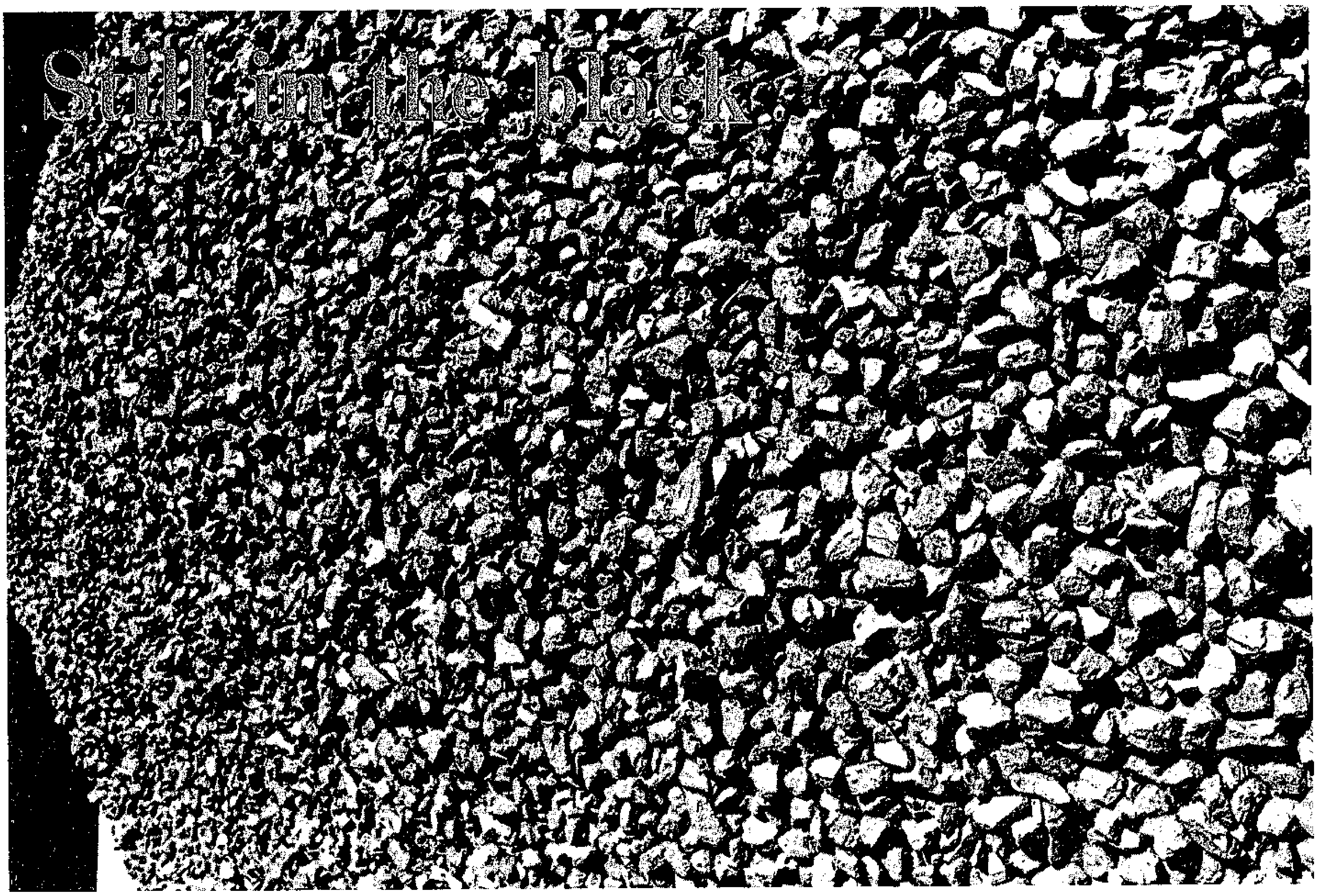
SA's tidal differences are relatively small, about one metre between high and low tide as opposed to about six metres in some parts of Europe.

Wave power is also considered something of a non-starter because many kilometres of coastline would have to be occupied to achieve worthwhile energy

outputs.

There is little volcanic activity in SA and few really hot springs, which means we would have to go very deep to encounter the heat needed to make geothermal energy work. This is perhaps a blessing, since it allows SA mines to reach great depths without the heat problems which would be encountered in other parts of the world.

Still in the black



While the high prices obtained for export coal in the early Eighties have fallen, sales volumes are still increasing

The debate over coal's role in the SA energy equation may be intensifying, but of one thing there is no question: for at least 20 years coal will remain the country's most important primary energy source.

It is a well-documented fact that coal supplies more than 80% of SA's energy requirements. And this proportion is unlikely to fall in the foreseeable future. It is thus natural that any discussion on energy will be weighted heavily towards the means of exploitation and the application of coal-based energy in its many forms.

Apart from its uses in the energy field, coal also plays a major role in the SA chemical industry as the most significant feedstock for this sector. However, the energy sector is where it plays its major role. Coal used in the generation of electricity for the year to December 1982 represented 21,53% of Escom's total costs, or in money terms, more than R550m.

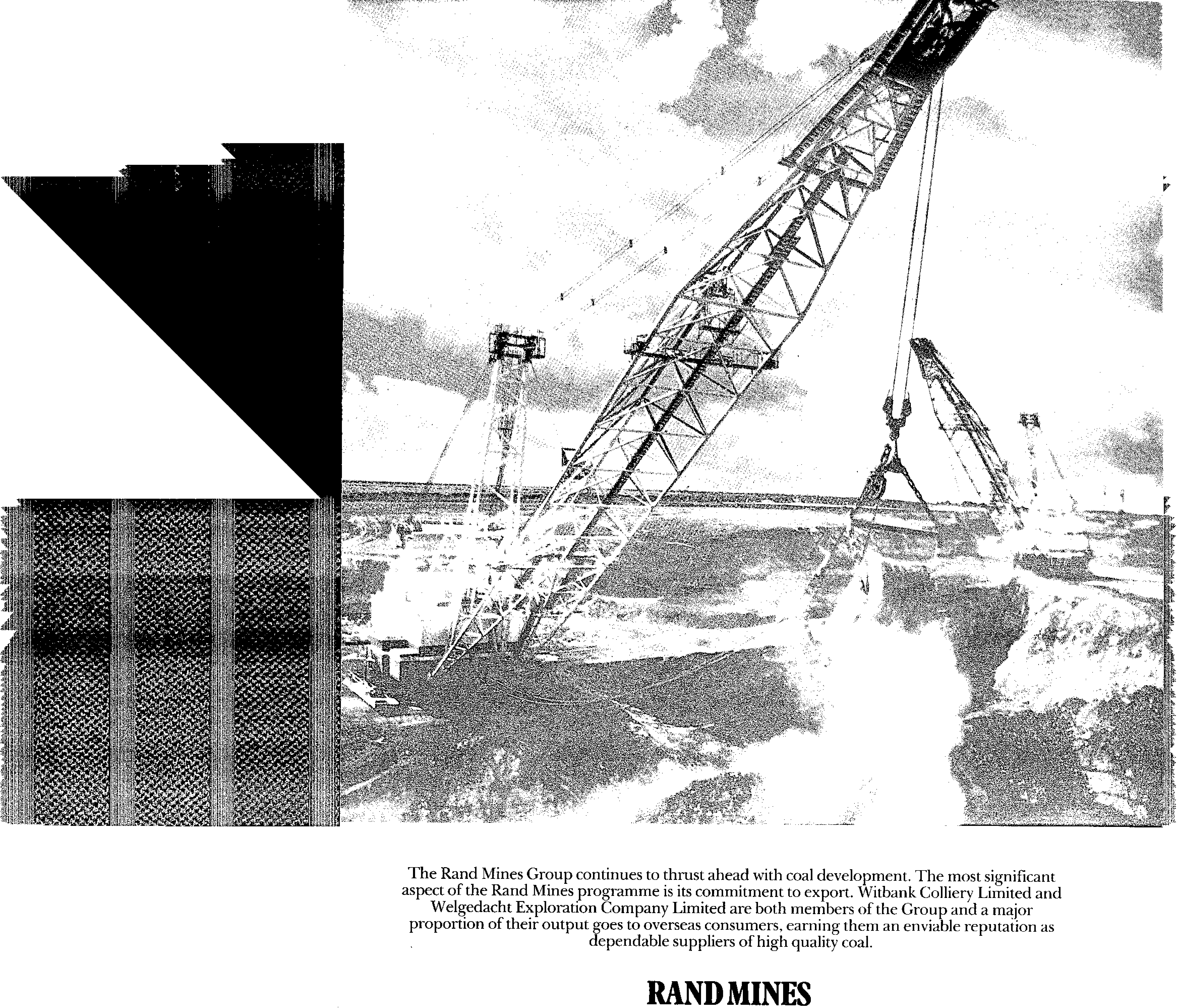
From a global energy viewpoint, coal accounts for about 25% of the world's energy, the biggest single primary energy source after oil. Coal's declining prominence as a world energy supplier from 1950 was reversed in 1975, after a double-barrelled assault from the oil producers in late 1973 and again in 1979.

The inordinate stress that built up in the energy sector from these successive and substantial oil price hikes not only encouraged the development of alternative energy options, but made them an urgent imperative.

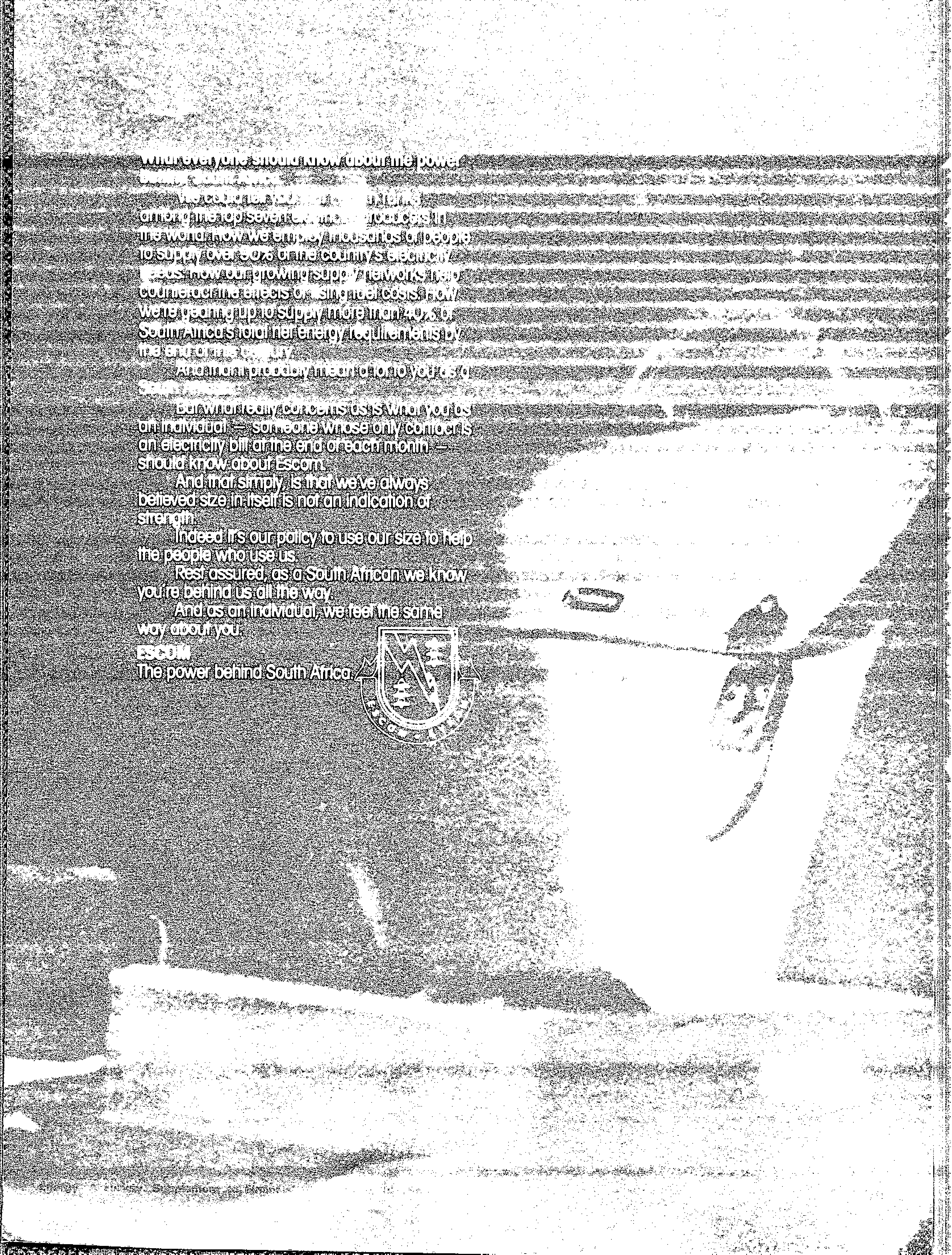
In South Africa the coal revolution was already under way in 1973, and the oil crises of the early Seventies only served to accelerate the energy-from-coal developments. That coal is predominant in the energy scene in SA is thus not at issue. What is at issue is the optimum utilisation of the coal resource, and the problems that attend such an objective.

Coal is a finite resource, and the reserves were re-defined several years ago by the Department of Mineral and Energy Affairs in a paper prepared by Dr Dirk Neethling and his department. The estimates of the coal reserve by Dr Neethling showed that SA had about 113 billion tons of coal, of which 57 billion tons was economically recoverable by existing technology.

This new estimate led to a stepping up of the coal export programme to optimise foreign exchange earnings and so assist the long-term development of the country. With



Energy. A survey. Supplement to Financial Mail August [illegible]



What everyone should know about the power [illegible]

We could tell you [illegible] ranks among the top seven [illegible] producers in the world. How we employ thousands of people to supply over 90% of the country's electricity needs. How our growing supply networks help counteract the effects of rising fuel costs. How we're gearing up to supply more than 40% of South Africa's total net energy requirements by the end of the century.

And that probably means a lot to you as a [illegible]

But what really concerns us is what you as an individual — someone whose only contact is an electricity bill at the end of each month — should know about Escom.

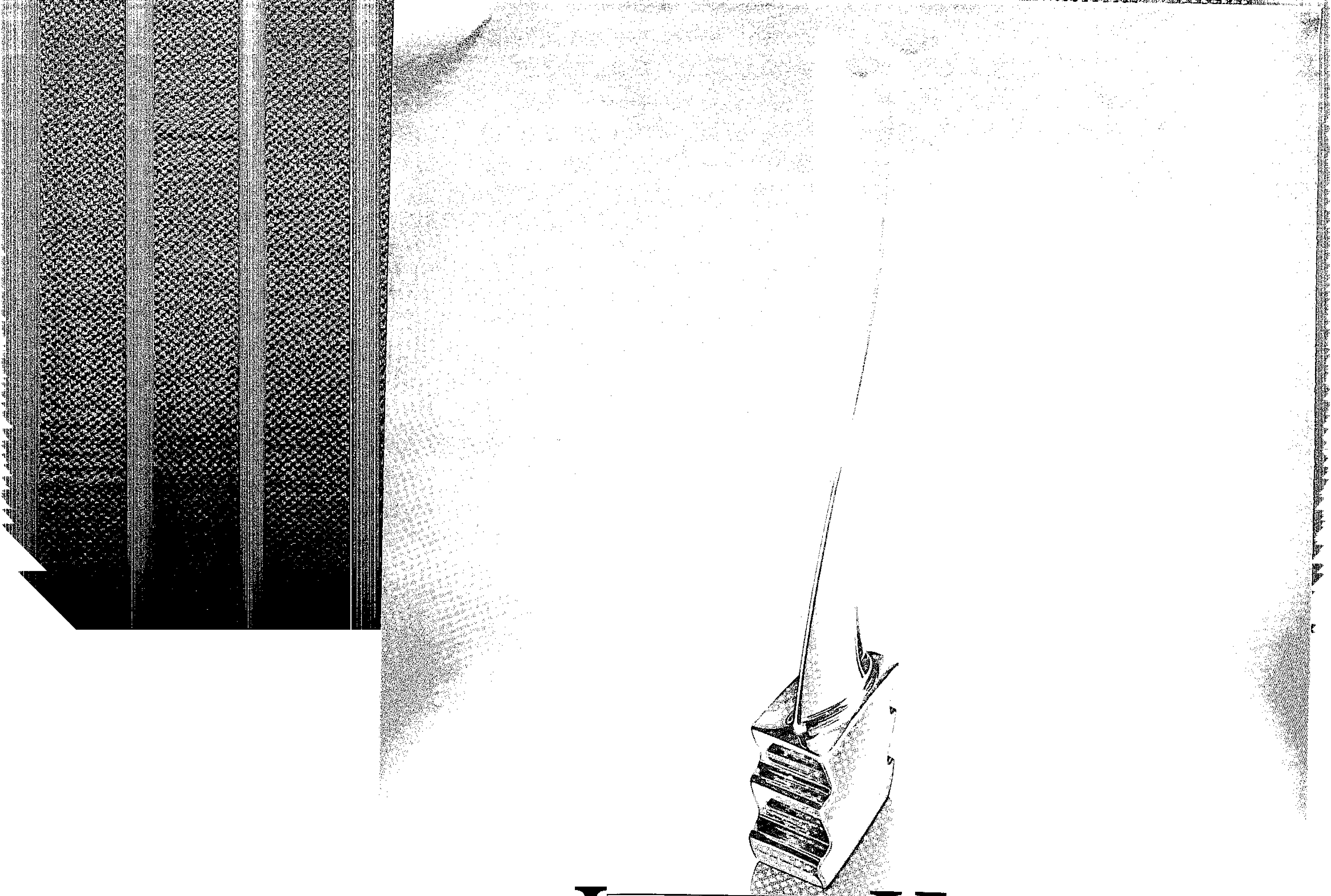
And that simply, is that we've always believed size in itself is not an indication of strength.

Indeed it's our policy to use our size to help the people who use us.

Rest assured, as a South African we know you're behind us all the way.

And as an individual, we feel the same way about you.

ESCOM
The power behind South Africa.



WAITING FOR '89

Coal producers who were "undersold" at the start of 1984 can take heart. There appears to be a substantial improvement in the offing in the light of the higher prices which have started emerging on the world spot market.

After several years of intense growth, both within SA and in its export markets, the passion with which the world once pursued coal has cooled.

But while there is general awareness that the extraordinary coal boom of several years ago is unlikely to be repeated in the foreseeable future, it is also true that the market will show demand and price fluctuations from time to time.

And after the depressed conditions in 1982 and 1983, which led to the downward negotiation of contract prices and to a significant softening in spot prices, people in the industry are beginning to report a more positive outlook for 1985.

Allen Sealey, head of Rand Mines coal division, believes a great deal depends on Poland's ability to overcome logistical problems, specifically those associated with loading.

"The Poles seem to be sold out. They have problems meeting specifications of high-quality coal, and they face the added problem of the military presence on the mines."

In the wake of the union-led civil unrest in Poland in 1982 and 1983, the country's military dictatorship moved the army into the mines to replace striking workers, and the soldiers are still mining.

But the question is how long the military can continue to operate the mines. At some stage, it is reasonable to assume, the Polish miners will return to their own work.

According to Sealey, Poland has reached a production plateau, and seems unable to produce more than 40 Mt of coal a year.

Another background factor is the US presence in world markets. American coal producers withdrew from the market in 1983 when prices fell. However, there is still a supply coming from the US which was determined to maintain supply links, even at a reduced level. Also, US multinationals have continued to supply their associates in other countries.

This year's firming in spot prices may encourage US producers to return to the market.

Coal mine owners in Australia may also be encouraged by the hardening in export prices to consider re-opening some mines that were closed for economic reasons. (An example of such closures is the huge Blair Atholl property, which has never been brought to full production).

Another potentially serious influence on the supply side is Columbia, which is gearing up its production, and has the ability to eventually come to the market with 10 Mt-15 Mt of coal a year.

While the Gulf would be Columbia's primary target market, it is inevitable that some Columbian coal will find its way onto the European markets. And then there's the additional uncertainty created by the UK miners' strike which was still continuing at the time of writing.

While the effect of the industrial action in Britain on the overall market is little more than psychological at this stage, there exists the potential for a significant real effect on the market.

It is possible that Britain's huge stockpile will be substantially reduced by sustained strike action, and the effects of the closure of UK mines could include a renewed bout of defensive stockpiling.

The much-vaunted Chinese onslaught on the international coal market has fizzled out before it could gain momentum.

The cost of installing the infrastructure required to participate in the big league of international coal trading has proved prohibitive for the Chinese, who are loath to apply limited foreign exchange reserves to the provision of coal-export facilities.

"The Chinese are continuously talking to the Japanese about barter deals, but they never seem to deliver," says Sealey.

"They (the Chinese) are unlikely to present a major threat to the market for at least another 10 years."

In summary, the immediate prospects for the coal export market are for some volume growth and limited price improvement in the short term.

Although demand exceeds supply for the moment, this situation will not be permanent.

The best-case outlook for SA producers is that demand could begin to outstrip supply by 1989.

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such reserves, the thinking ran, the adverse effect on coal resources would be minimal

In Phase IV of the Richards Bay export programme, up to 44 Mt of coal a year will be exported, although the target date for this objective is 1987. Actual exports last year were about 27 Mt and about 25 Mt tons are expected to be shipped from the port this year.

Escom is by far the biggest consumer of coal in SA, accounting for well over 50% of total inland demand. In 1981, Escom consumed 53,9 Mt, followed by general trade, with 19,8 Mt; Sasol and other petrochemical users 15 Mt; Iscor 6,7 Mt; anthracite 0,8 Mt and other users 1,7 Mt.

Total inland coal sales in 1981 were 97,9 Mt and this grew to 108,9 Mt in 1982 and 112,5 Mt last year, and it is expected to reach 117 Mt this year. The figures include coal transfers from Sasol's and Iscor's own mines to their plants.

Between 1979 and 1982, the coal-production sector was in a marketing Utopia. The oil crises earlier in the decade had influenced the energy strategies of most of the industrialised world, and coal demand rocketed.

In the midst of this burgeoning demand, SA's major supply competitors, the United States, Poland, Australia and China, were faced from time to time with logistical problems that disrupted supply.

Firstly, the US coal export programme was affected by industrial unrest at the unionised mines. While efforts were made by the non-unionised producers to take up the slack, they could not produce at a rate to compensate for the disrupted production at the bigger mines, and the high rate of exports led to bottlenecks at the West Coast ports, which had not been designed to handle such huge volumes.

Poland was also the scene of severe disruptions to production, resulting mainly from labour unrest (the already legendary union leader Lech Walesa was a coal-mine employee).

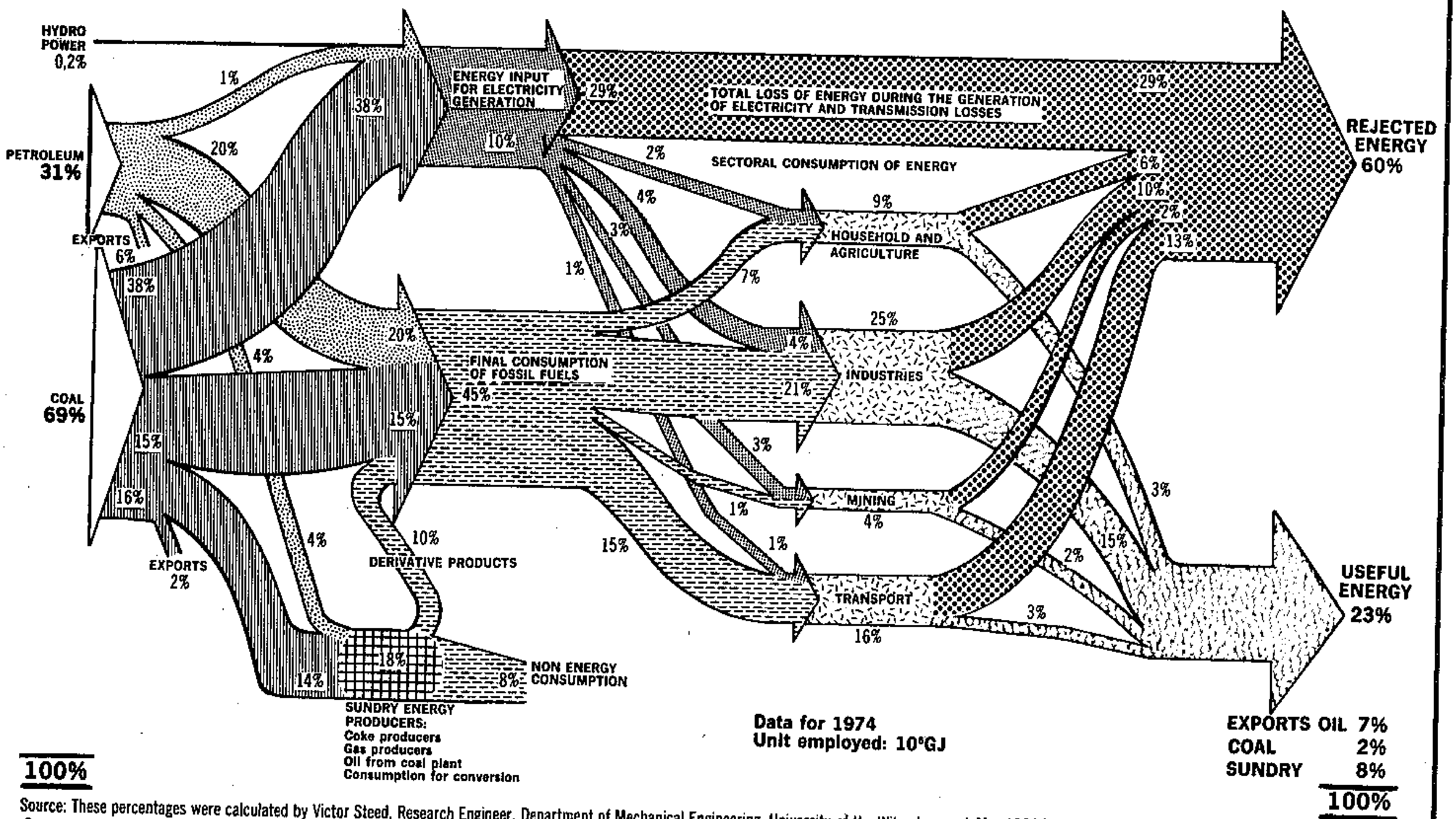
Australia's difficulties were predominantly labour-related and it, too, proved to be a sporadic supplier, whose performance was the source of considerable inconvenience to consumers dependent on consistent supplies to fuel their industries.

SA, relatively free of the difficulties faced by the other major suppliers — the one major constraint for SA exporters was infrastructure at the main exporting port, Richards Bay — took advantage of these market opportunities. And since then, SA has been elevated to a highly respected position in the world coal trade.

The supply difficulties which affected most of the world's major coal exporters presented an opportunity to a host of "brokers," both experienced and inexperi-

SHARING IT OUT

SA energy flow diagram



Source: These percentages were calculated by Victor Steed, Research Engineer, Department of Mechanical Engineering, University of the Witwatersrand, May 1984 from the original published data: Principles of Energy Conservation, Department of Planning and the Environment, 1978, pg 20.

The above flow chart is revealing in many ways. Although based on 1974 statistics (one of the reasons why the FM has been authorised to reproduce it) it tells a story of wasted resources and a huge reliance on a single energy source — coal.

Indeed, latest figures would show that coal has further increased its dominance of the sector in the intervening 10 years and, today, it is credited with more than an 80% share of primary energy generation in SA.

The advent of Sasols Two and Three have helped entrench coal's leadership still further, while the commissioning of Koeberg has added a third source of primary supply, although it amounts to no more than a few percentage points.

In ballpark terms, however, nothing much has changed. It is unlikely, for example, that there has been any significant change in the proportion of energy put to productive use — 23% based on 1974 figures. Of the rest, 17% is exported and the remaining 60% is categorised as rejected energy, much of it literally "going up the chimney."

Much of the loss is inevitable, being due to natural physical laws governing generation and transmission. But "good housekeeping" by every sector could make substantial savings, says Victor Steed, research engineer at Wits University's department of mechanical engineering, who prepared the chart.

enced in the global coal trade. And while many of these operators made vast profits out of the demand pressure, others were later to face the harsh realities of the bursting bubble.

It was inevitable that the major suppliers would succeed, even if only partly, in resolving their problems. Labour unrest diminished as the global recession took its toll on employment, and the improvements to supply lines coincided with a real downturn in demand.

By late 1982 the party was over, and the position of strength from which SA exporters could negotiate contractual terms rapidly deteriorated to the point where prices were negotiated lower in 1983 than the previous year.

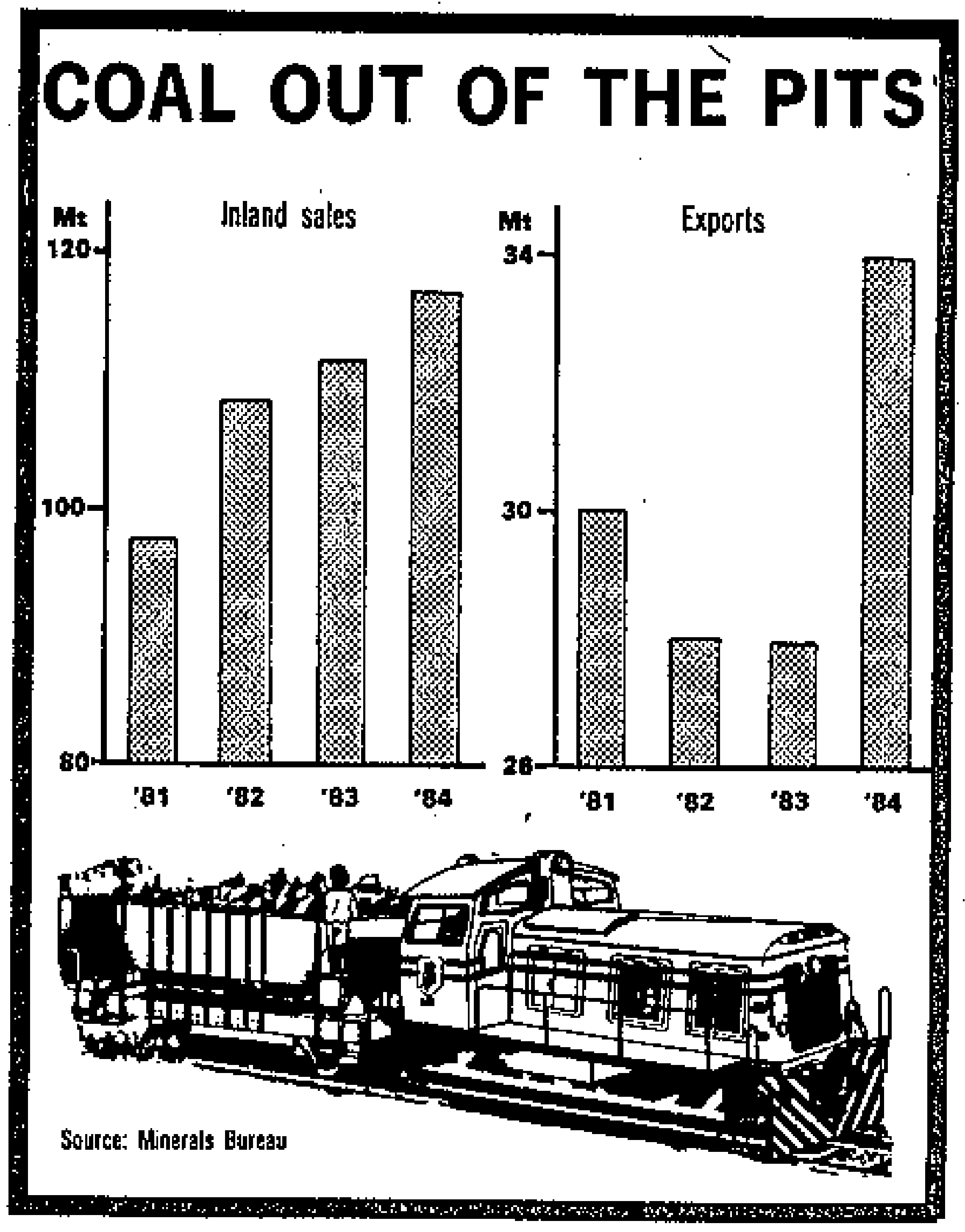
This was the first time in five years that prices of export coal had dropped, and the once-urgent approach to increase facilities at Richards Bay was dissipated.

For coal producers, 1983 was a year of reckoning. Improvements to delivery performance by the traditional majors in the coal industry put pressure on spot coal prices, and contracts were re-negotiated.

Thus, while there was no significant change to the contracted supply volumes for 1984, there was less fat in the market, and producers who had previously benefited from the supply of any surplus in their export quotas at attractive spot-market prices, were faced with a return to a more stable market environment. This effectively removed the cream from the coal export cake.

The outlook for coal exports in 1985, from both a volume and a price perspective, is better than for this year, but the halcyon days of the 1979-82 are over as far as price goes.

In 1981, coal exports totalled 29,9 Mt, falling back to 28,2 Mt in 1982 and rising again to 29,7 Mt in 1983. And 1984 exports are


COAL OUT OF THE PITS

Source: Minerals Bureau

expected to rise again to 34 Mt.

In terms of Phase IV of the Richards Bay development programme, exports were expected to reach 41 Mt by 1985 and 60 Mt by 1990.

Escom has delayed the commissioning of some new plant due to a substantially reduced demand growth in 1982 and 1983, which has led to the downward revision of electricity demand projections.

Iscor, battered by the global recession, has faced a dramatic fall-off in steel demand, and has cut production across the board. Its coal offtake dropped to 6,3 Mt in 1982 and then dropped again to 4,8 Mt in 1983.

Two customers who continue to demand more coal are Sasol and the general trade sector.

While Sasol's 1982 coal consumption was 11,4 Mt, it rose to 22,2 Mt in 1983 and, this year, it is expected to total 27,7 Mt.

Taking a breather

Growth in demand for electricity in SA is lower than it has been for 30 years; Escom is making good use of the lull to catch up

It is difficult to avoid superlatives when describing Escom, SA's electricity generating authority. It is one of the largest utilities in the world and, with assets of R15,6 billion, the biggest organisation in SA.

Its brief in terms of the Electricty Act is uneviable: produce the electricity required for the country's economic development at cost. That, of course, means make no profits and make no losses.

Clearly such financial targeting is impossible to accomplish in the short-term and, this year, Escom is carrying an accumulated deficit of R257m. But then, last year, it pulled in revenue of R3 302m and spent R2 757m on fixed assets.

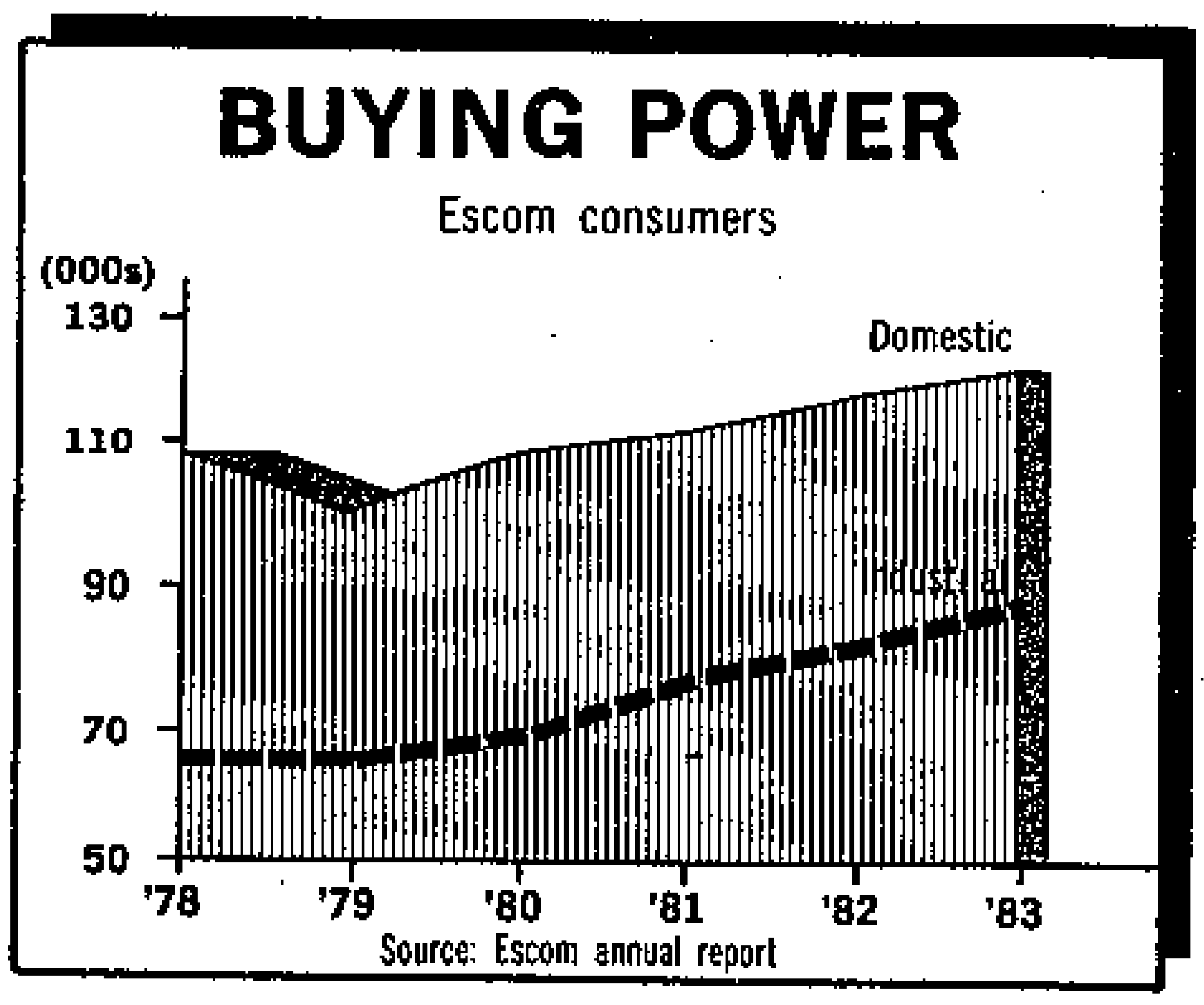
Formed by Act of Parliament in 1922, it is directed by seven commissioners appointed by the State President. It has no shareholders and raises funds for expansion through local and overseas loans and from operating revenues. At present, some 30% of its capital expenditure is self-financed from revenues.

With a sent-out generation capacity of 23 000 MW, it produces almost 94% of the country's electricity requirements and about 57% of electricity usage of the entire continent of Africa.

It is also one of the country's fastest-growing major organisations and, in 1983, assets surged nearly 30%, thereby supplanting Sats at the top of the SA Giants league (Top Companies, May 4).

The growth is entirely due to the growth in electricity demand which, for the last 30 years, has been increasing at an average of more than 8% a year — effectively doubling every 8½ years.

The growth in electricity is attributable to the expansion of the economy and to a switch from other energy sources. This is partly because of the deliberate attempt to reduce dependence on imported liquid fuels. But electricity is about the most efficient energy source available and, for this reason alone, its share of total energy usage has been steadily increasing over the years.


BUYING POWER

Escom consumers

Source: Escom annual report

It now accounts for about 23% of the country's energy and, by the turn of the century, the figure could be as high as 36%.

Escom's growth has caused concern both within government and in the private sector circles. The worry is that, with nothing to stop it getting bigger and becoming relatively even more important in the economy, it could become a law unto itself.

These concerns have found greatest expression in tariff increases over the last few years. On one occasion the Prime Minister himself publicly called on Escom to reconsider a particularly high tariff increase. It duly reconsidered.

Government has since appointed a commission of inquiry into the country's electricity supply. Many observers are hoping it will recommend changes in the legislation to place Escom under more direct government supervision. But this will not solve Escom's biggest problems which it shares with utilities the world over.

Firstly, costs in general and of capital in particular, continue to increase. And no longer are there savings to be found in generating efficiency because the technology has reached a plateau. For example, no increase in efficiency is possible to cover steeper interest payments, which rose from R722m to R940m last year.

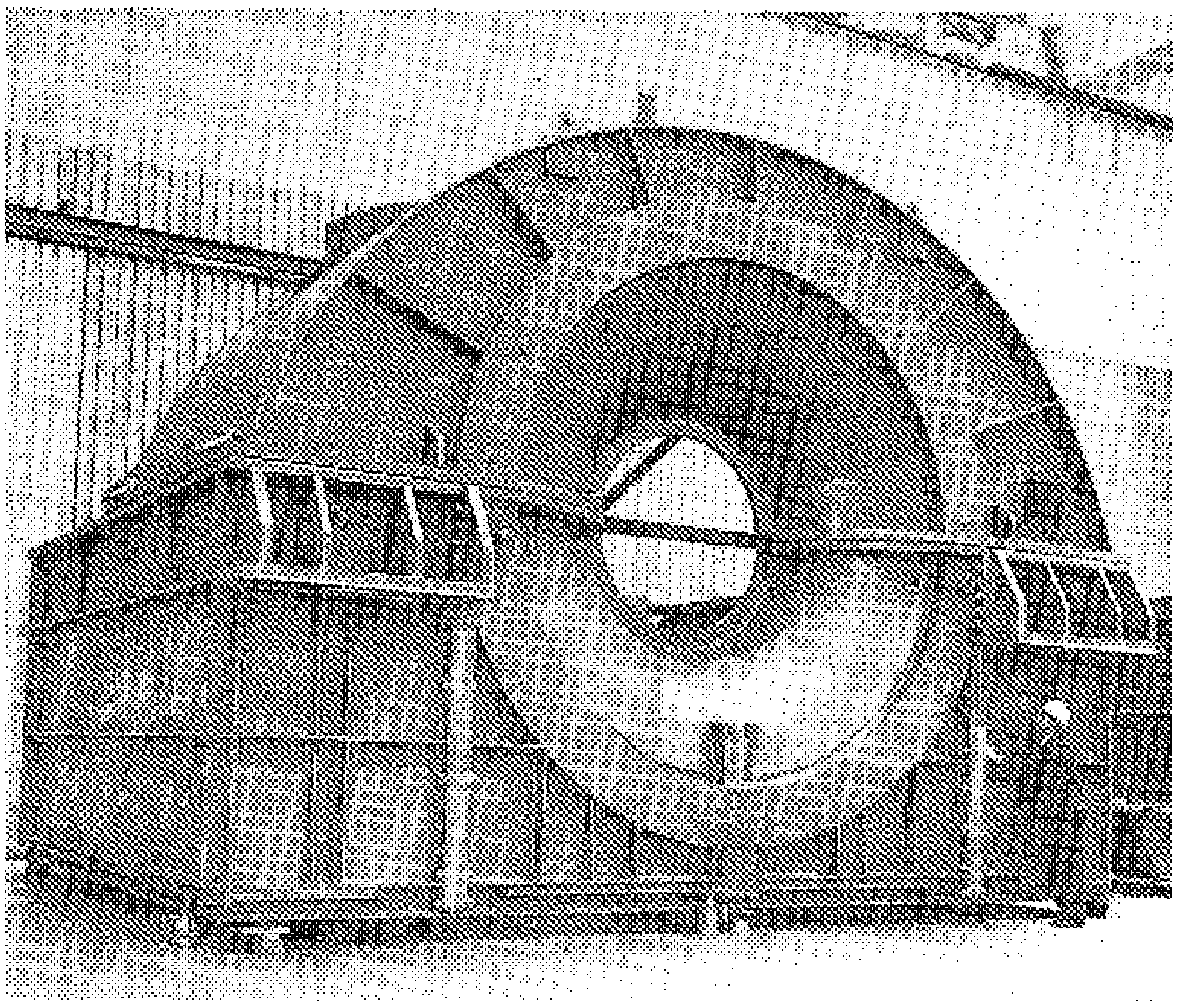
Secondly, the most easily extracted fuel resources are starting to run out. They are thus becoming more difficult and costly to obtain.

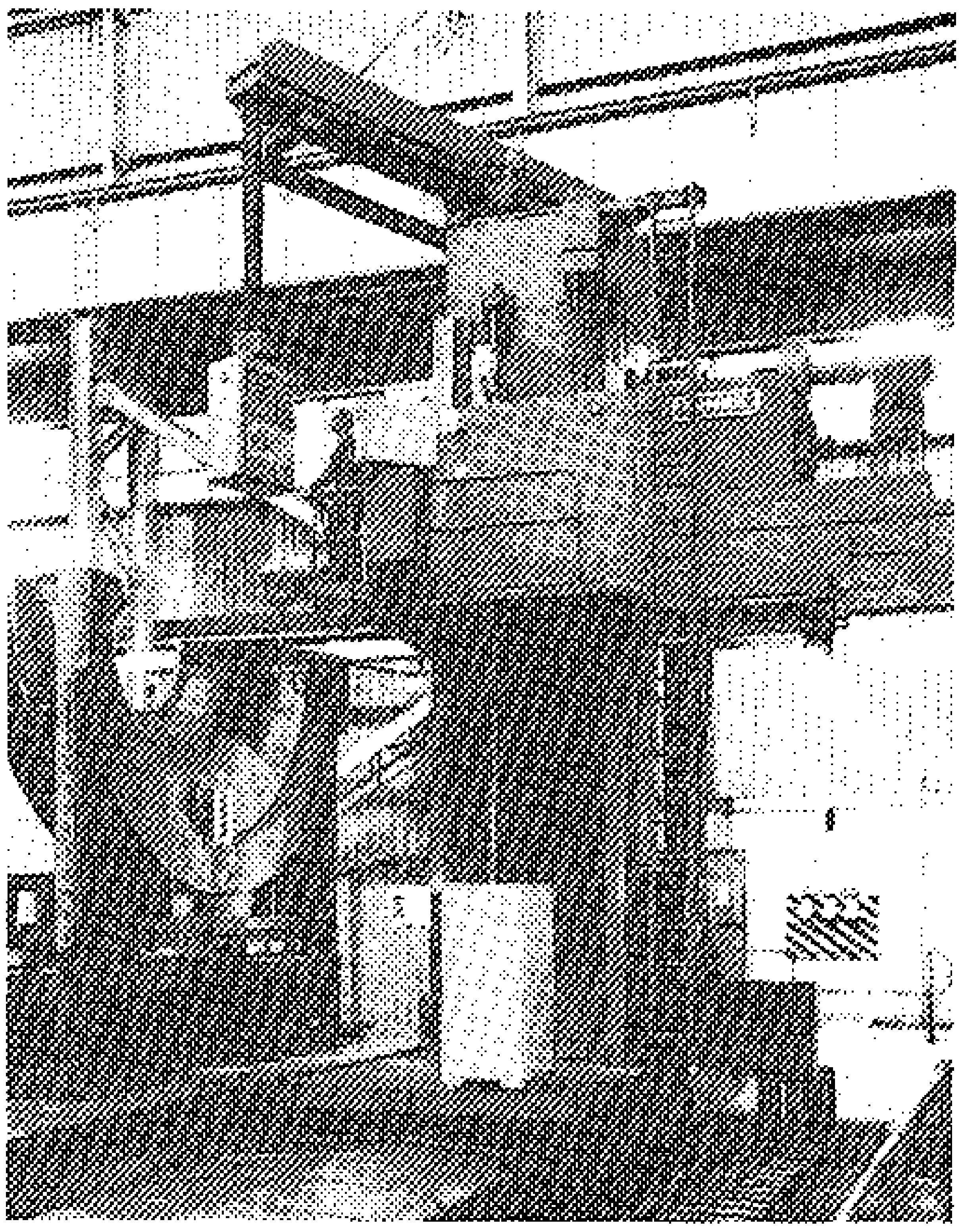
Last year, electricity sales grew by only 2,2%, the lowest figure in 36 years; growth the year before was hardly much better at only 2,4%. These figures reflect the national and world recession and the worst drought suffered by SA in more than a century. But they may also suggest that growing energy costs are forcing SA to follow the trend in developed countries to become less energy-dependent.

The market delivered another message recently: the chemical company AECI announced that it was putting up its own R51m 36 MW generating plant at a new factory and the Bophuthatswana government announced a R84m 60 MW plant, the biggest single industrial investment in that territory. Escom says the AECI investment was considered viable because steam was needed for the manufacturing process, anyway, and cogeneration was economical. And the Bop development was undertaken largely to demonstrate the country's ability to create its own capacity — irrespective of cost.

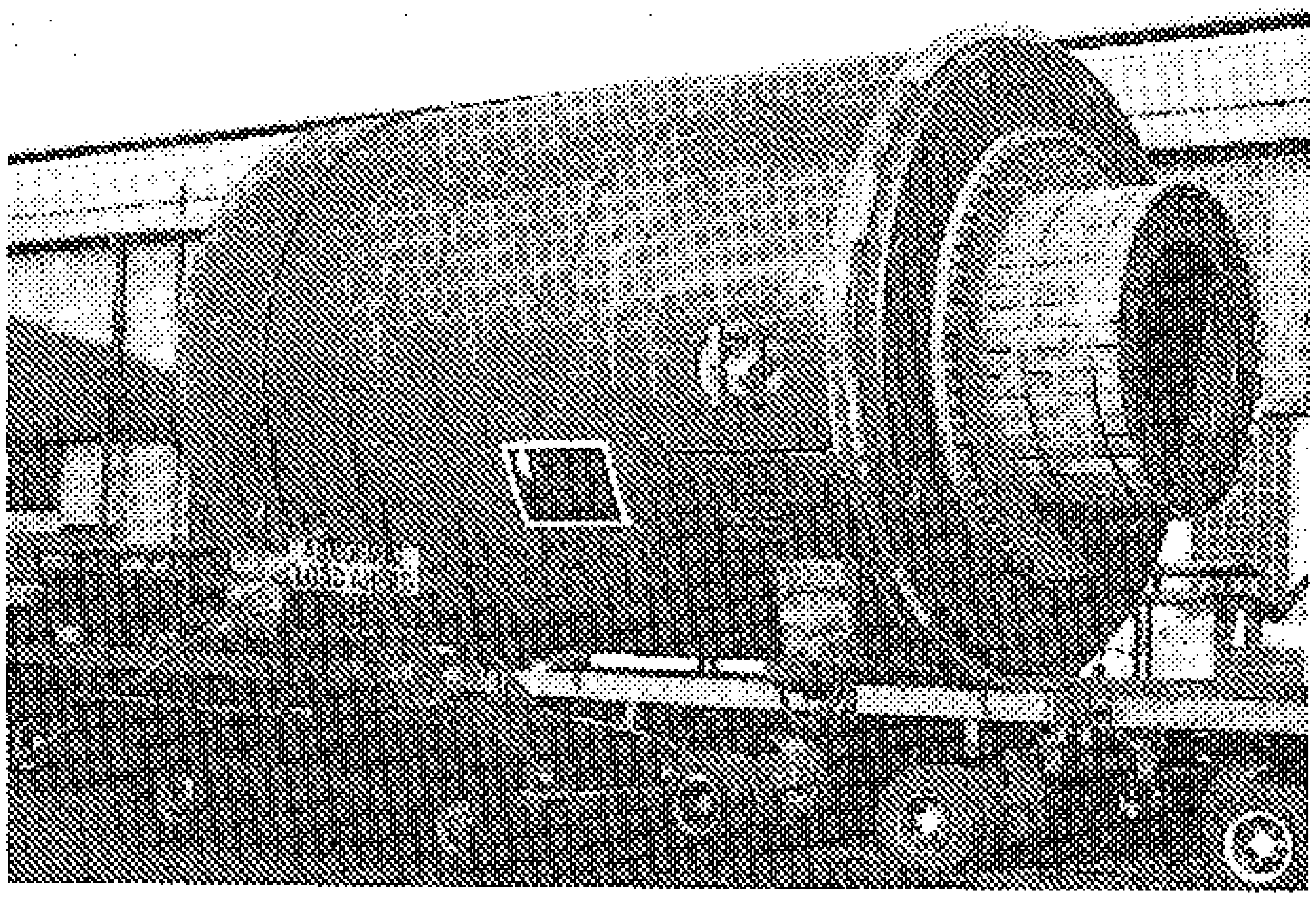
These relatively small plants will not be as efficient as Escom's giant new 3 600 MW stations. But they can probably be justified economically as they form part of bigger schemes.

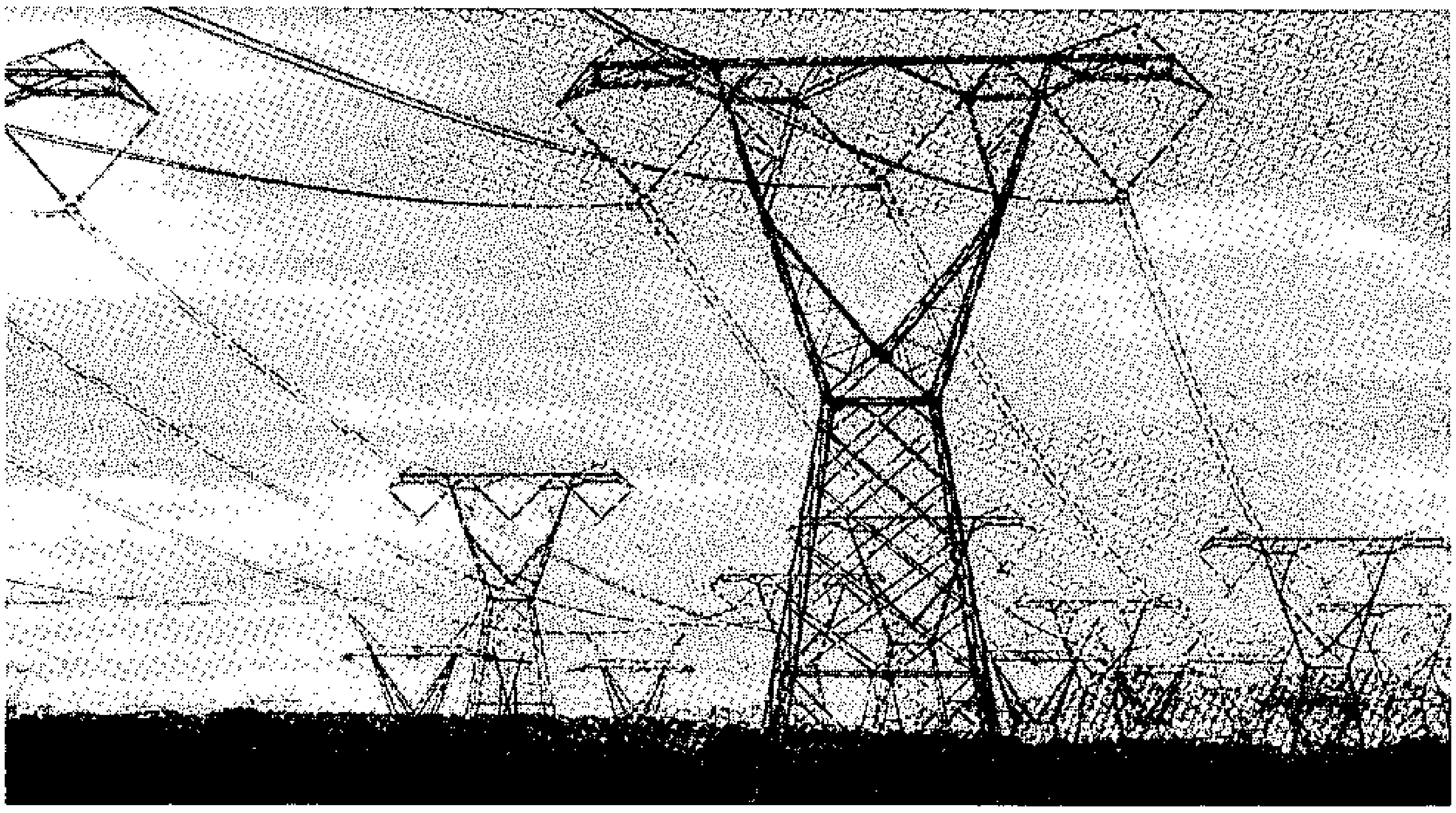
The good news in this below-par growth and new non-Escom plant is that the Com-





Above: LP Turbine exhaust box 11,8 m long × 7,8 m wide × 8,1 m high; mass 150 t.
Above right: NC Innocenti floor borer machining exhaust box section.
Right: Tube mill for power station boiler unit 3,95 m diameter × 6 m long; mass 100 t.





mission will need to put in less new facilities of its own. This, in turn, will keep down average generating costs.

Also, Escom's assumptions that growth in electricity demand will be about three percentage points above growth in the gdp, which have held good for the last few decades, may have to be revised.

Apparently no such revision has yet taken place but, all the same, Escom has deferred for nine months the commissioning of two 600 MW generator sets which were to have come on stream in about five years. Presumably this step was taken purely as the result of the weak demand growth over the last two years. However, Escom's latest prediction is that the average growth rate will be about 7% in the near future and will then taper down to just above 6% a year by the year 2000.

Wisdom or witchcraft?

Escom's accounting method is many things to many people. But critics would do well to remember that the commission is firmly bound by an Act of Parliament

Does Escom make profits? Or is the deficit shown in the annual accounts a genuine reflection of the organisation's trading results over the year?

To this question there are several answers, depending on whether the reply comes from an Escom employee, an academic or a businessman. The system of amortising loans over their life instead of depreciating assets over their useful life is central to the anti-Escom argument.

If a power station has a useful life of 35 years, but the loan covering the financing of that station has a life of only 23 years, then for 12 years the income on that station is cream on the cake. Or, as the argument goes, it is free power for the consumers in years to come, paid for by today's users. If a depreciation method was employed, the cost of the station would be recouped through tariffs over the useful life of the operation.

Escom's accounting system has been described as "witchcraft" by one business academic, and although his tongue was firmly in his cheek, the system certainly deviates from conventional accounting methods. Escom's GM (finance), Len te Groen, agrees that it is different, but he strongly rejects the notion that it should be revised merely to conform.

"People criticise the accounting mechanisms, but these are not negotiable. They are a way of achieving a specific goal within the framework of governing legislation and operating demands."

Escom's te Groen . . . building capital reserves

Escom would be more prepared to entertain debate on the level of internal funding. Not that it believes there is anything wrong with the existing funding mix, but this is a position which the organisation will defend.

The facts of the matter are that Escom's operation is controlled by the Electricity Act. And, in complying with the requirements of the legislation, it believes the fund accounting method is the only suitable solution.

On the question of internal funding — Escom does not have share capital, but uses funds to achieve the "impossible" (financing its own development without making a profit). The three funds which form the assets side of Escom's balance sheet are the Capital Development Fund (CDF), the Redemption Fund and the Reserve Fund.

The CDF is the target of the most voluble criticism, and the way in which the CDF is funded is the crux of the profit or loss argument. Contributions to the CDF are treated as costs, which means that actual operating costs are loaded, and as such, can lead to deficits, or losses.

Annual contributions to the CDF are limited by statute to 6% of total borrowings and the total CDF, excluding interest, may not exceed 30% of total borrowings. Loans in this context are not defined in the Act.

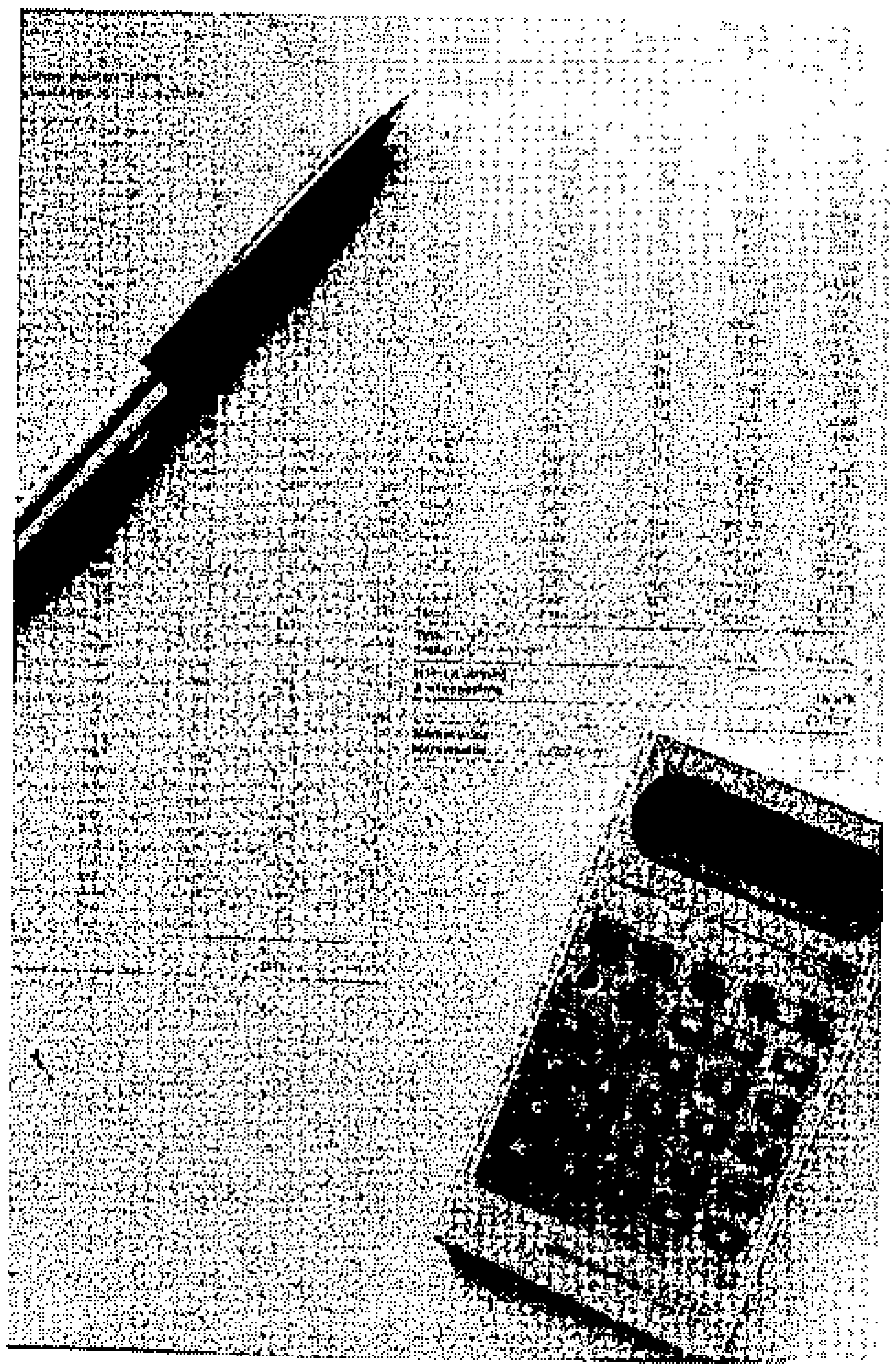
But why the need for internal funding at all, when the capital markets of the world are available to such a prime borrower?

Explains Te Groen: "Try and borrow money abroad, and the first question that is asked is: 'How much of your funding is internal.' Once a prospective borrower has a satisfactory level of internal funding, and provided all the other determinants, such as security, are present, then the capital markets of the world are available. But not without internal funding."

Apart from the CDF and the external borrowings, Escom makes substantial use of project finance. As part of the tender package, when a new power station is being contracted, the winners of the contract are required to provide a proportion of the financing for the scheme.

Why, asks Te Groen, do South African contractors not take the initiative and arrange competitive financing packages? In virtually every major capital goods exporting country in the world there are facilities available to assist customers to finance large projects, and this is a key factor behind Escom's continued use of overseas suppliers on many of its power station projects.

The time has come, says Te Groen, for SA to consider a form of financing for major projects to enable local contractors to compete with those abroad. Justification for State assistance lies in import replacement, which must be as strategically important as exports.



Escom balance sheet ... calculated by statute

"To make the South African contractor more competitive, the local company must be in a position to offer Escom a financing package, equivalent to those offered by European countries, on the basis of an extended credit facility," says Te Groen.

The one imponderable for contracts granted to SA companies is the cost factor. "We know the amount of the contract, and the period is assured, but the most crucial aspect, cost, is an unknown under the present system."

Te Groen believes SA contractors should take the initiative and make a case to the Industrial Development Corporation for assistance. The IDC should be able to justify sponsoring such schemes on the basis of genuine import replacement.

"On large contracts we find excellent financing for the foreign portion of contracts, and a reasonable degree of financing for a small proportion of the local content. But what happens to the rest of the local portion?

"Unless the costs of local contracts can be pegged, as they are on foreign contracts, South African contractors have no hope of competing with their overseas counterparts for Escom contracts."

Mixing it

Generating power is one thing; generating it at the right time, in the right quantities and at the best price is another

Like so much of industry the world over, Escom is certainly not immune to the problem of peaks-and-valleys in demand. To meet the problem, therefore, it has to create optimum-mix generating equipment, some of which can be switched on or off at will.

In a typical Escom day, demand tends to fluctuate by about 30%. Coal and nuclear stations, while economical for providing power at constant levels over long periods, are not suitable for regulating supply to meet varying load conditions. They are used, rather, to supply Escom's so-called "base load," while hydro-electricity, pumped storage schemes and gas turbines are employed to kick in the additional power at times of peak demand.

In countries like Norway, hydro-electricity is also used to supply base load. But limited SA water resources prevent the running of Escom's two hydro stations at the Hendrik Verwoerd and P K le Roux dams for anything but short periods.

Escom has one pumped storage scheme in the Drakensberg and another under construction. A pumped storage scheme works rather like a mechanical battery, in that, during off-peak demand periods, surplus power from the Escom grid is used to pump water to a high-altitude storage dam. During peak demand periods, the water is allowed to run down again and generate electricity by turning a turbine.

But Drakensberg also pumps water to the Sterkfontein Dam near Harrismith. This dam was opened as a drought crisis measure and discharges into the Wilge River, from where it flows to the Vaal Dam. As a precaution against further water shortages in the Transvaal, Drakensberg's rate of supply to Sterkfontein is being increased.

THE GENERATION MIX
Sources of Escom's power

	Actual 1983 %	Optimal %
Coal fired	91,3	80,0
Gas turbine	1,6	1,7
Hydro electric	2,5	4,1
Pumped storage	4,6	4,2
Nuclear	—	10,0
	100	100

Note: Excludes 1 350MW imported from Cahora Bassa.

Escom's two gas-turbine stations, Acacia in Cape Town and Port Rex in East London, provide good illustrations of the different economics of peak-load and base-load generation. They have lower capital costs/kilowatt of capacity than conventional coal-fired plants, but their running costs are far higher — about 80 times that of hydro and 20 times that of coal. They are thus economical only if their annual load factors are of the order of 1%, unlike coal and nuclear plants, which are most economical at load factors of more than 60%.

The backbone of Escom's generating plant is its coal-fired power stations. The more modern ones, which have a capacity of at least 3 600 MW, are large by any standards and are situated on top of dedicated coal mines, which provide them with 10 Mt-15 Mt coal/year.

Costing about R3 000m each in today's money, they represent the state of the art in coal-fired power generation. They are situated in SA's coal heartlands, mainly in the eastern Transvaal, with some in the

PLUG INTO THE SUN WITH INTRADCO SOLAR

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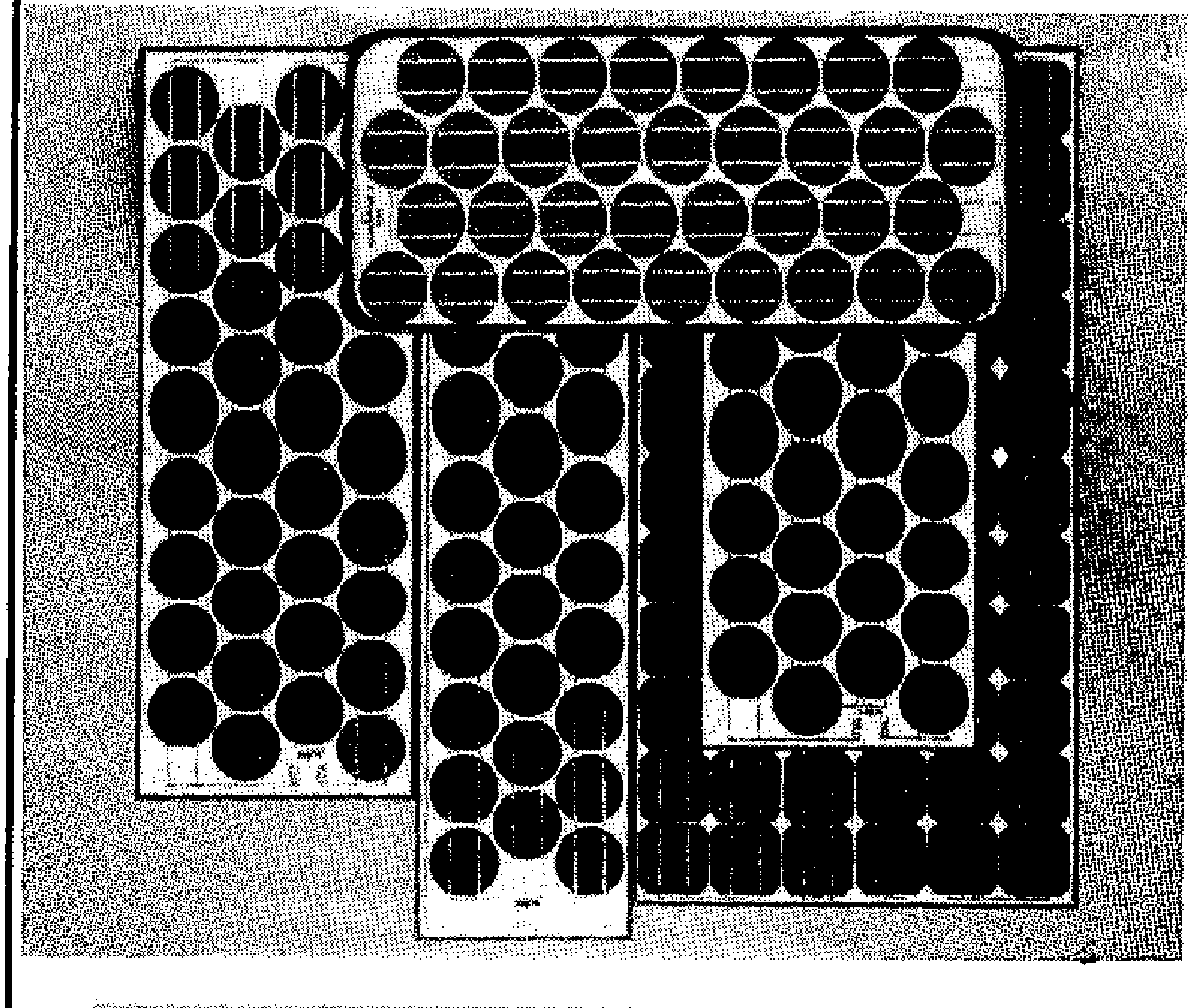

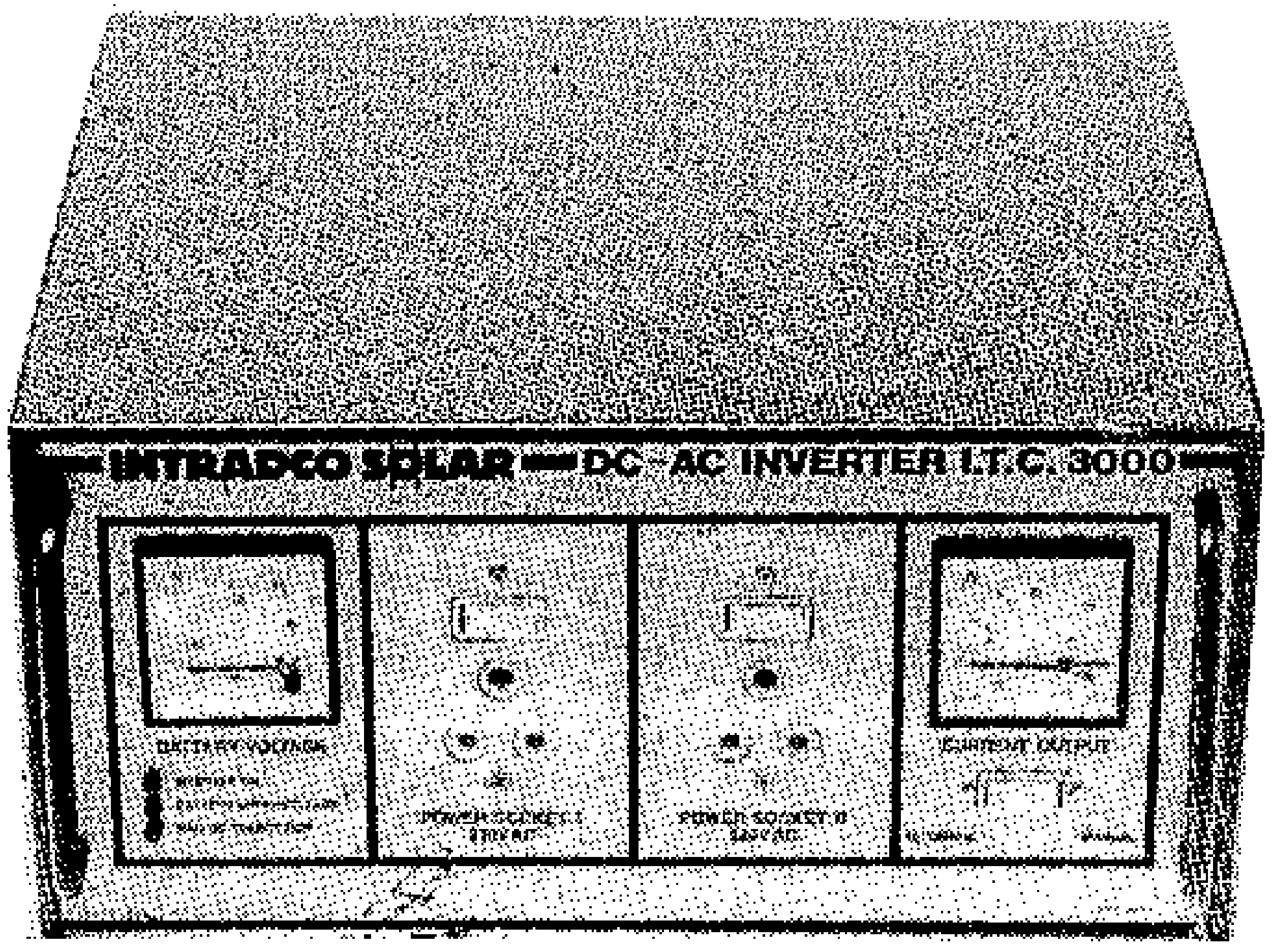

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Solar panels charge specially designed Intradco Batteries which, in turn, provide you with as much electrical power as your need. Intradco inverters, regulators and panels provide the exact amount of power.

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northern OFS and northern Natal. So far, two — Matla and Duvha — have been completed, and another five — Kendal, Lethabo, Majuba, Matimba, and Tutuka — are under construction. The combined capacity of these last five stations will be 19 000 MW, which is almost equal to Escom's present total installed capacity of 23 000 MW.

Each of these stations has six boiler/turbine/generator sets capable of producing at least 600 MW. Escom believes that, with sets this size, it can use the minimum of capital, manpower and coal per unit of energy produced. It also reckons that six such sets are the most which can be effectively handled by one power station management team.

Sets generating as much as 1 300 MW have been built elsewhere, but, with such large and complicated plants, maintenance shutdown periods tend to be long. If such a set were to fail, it would remove a relatively high proportion of the total capacity at a single stroke. Furthermore, Escom uses SA's relatively low-grade coal, which would make boiler design unpractical, if not impossible.

Another limit on total size of a power station is simply that the coal mines supplying Escom's thermal giants are already among the world's biggest. A bigger station may need to be fed by more than one mine, which would add to coal transport costs.

One drawback of the geographic concentration is that, with conventional technology, these power stations would consume more water for cooling than the area could supply. Even for existing plant in this area, Escom had to spend nearly R19m as its share of the R28m emergency scheme to obtain pump water during the drought last year. Accordingly, Kendal, Majuba and Matimba will be the biggest air-cooled stations in the world. This will raise costs by about 8%.

One 922 MW unit of Escom's first nuclear power station at Koeberg came on stream this year. When its second unit is operational in a year or so, the station will be supplying a little under 8% of Escom's total output.

As mentioned below (*Sticking with nukes*), Koeberg's power will cost more than power from a conventional coal-fired plant, even after adding the cost of transmission from the eastern Transvaal to the western Cape. But certainly this was not always the case.

The original sums assumed that enriched uranium for the nuclear fuel elements would be supplied by the US. However, after the Carter administration reneged on the agreement, Escom had to go elsewhere and pay a higher price. Capital cost also escalated after Escom added a number of new safety measures.

There is a possibility that costs of Koeberg power will come down if new agreements on uranium enrichment are reached. But even if they do not, coal prices are likely to rise more rapidly, which would make the nuclear option relatively more attractive.

But it is not just cost which has prompted Escom to plan for the increased use of nuclear energy next century. Unless it does so, there will simply not be enough coal to provide for the electricity needs of our grandchildren. Estimates prepared by Escom show that, even with lower demand growth rates mentioned above, generating capacity in the year 2030 will have to be in the region of 250 000 MW, more than 10 times the present figure.

Escom's annual coal consumption will be 900 Mt, as against 55 Mt last year. And coal committed for use in Escom's power stations over their life expectancies of 40 years will be a staggering 45 000 Mt, or 78% of SA's currently estimated exploitable reserves.

Few laymen care much about what happens so far in the future. But Escom is forced to plan for it. It prepared these estimates more than seven years ago and has since found no reason to change them. Consequently, unless revolutionary new technologies are developed in the interim, it will have no option but to prepare for a nuclear age.

Sticking with nukes

Although nuclear power stations are out of favour in the US at the moment, Escom continues to believe that they are the best long-term alternative to coal

As Koeberg approaches full generating capacity, the future of nuclear power in SA has become the focus of the energy industry's attention.

Although coal still has many years to go as the country's prime source of energy, at this stage nuclear power is the frontrunner in the race to find a replacement.

Escom's nuclear boffins continue to believe that the Koeberg technology is the most suitable for SA conditions — and is likely to be used again. Current thinking on this score is that one more nuclear station will be built by the turn of the century. And thereafter there may be some acceleration in the growth rate of nuclear energy.

Graham Spencer, Escom's GM (nuclear), says the new generation of nuclear power generators may go to a greater size — Koeberg is an 844 MW station, and the French and Americans have gone to 1 300 MW — but there will not be much change to the technology. Says Spencer: "We are in a period of technical consolidation in nuclear engineering, rather than dramatic innovation."

The site for SA's second nuclear power station is still under consideration, but a doubling of Koeberg's output remains a possibility. "We did pretty well at Koeberg, and if we build another, similar, unit on the Koeberg site, we would look at the same kind of building time scale."

Why Koeberg again? The main advantage would be that the infrastructure already exists and a second station could ride in on the back of the security and environmental controls already in place.

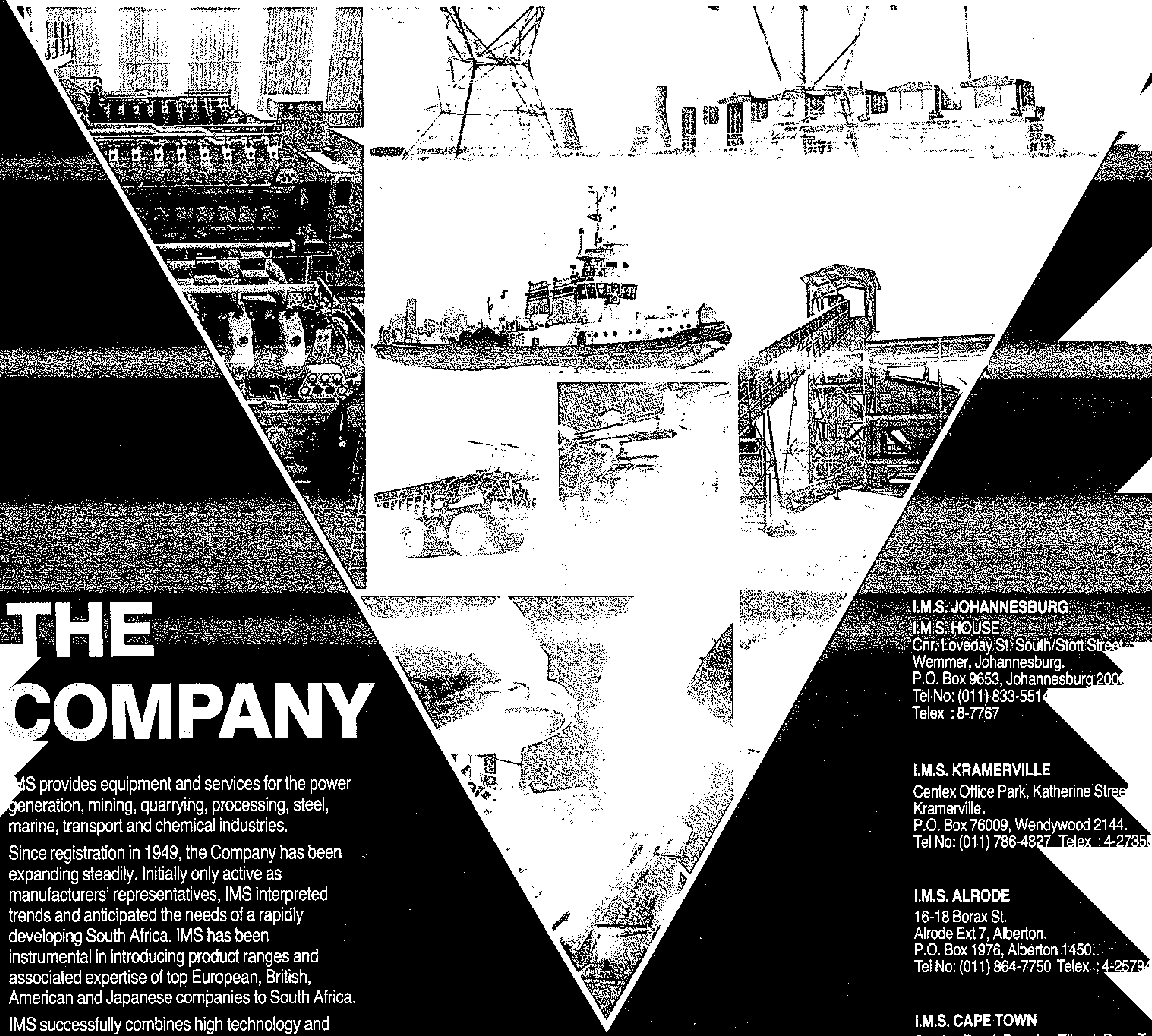
If a greenfields site is selected, these aspects would have to be addressed afresh, with an obvious cost disadvantage against the established and suitable Koeberg location.

With nuke stations out of favour (in the US, for example), the obvious question is whether SA should persevere in this field at all. But the switch-off in the US nuclear power industry was not the result simply of people being anti it, claims Spencer. It was also linked to a four-year period of extremely low growth in power demand. This was accompanied by concerted efforts by environmentalists to sabotage construction via the courts.

They succeeded, through frequent court actions, in causing costly delays to many of the planned nuclear projects in the US. Indeed, by the beginning of this year more than $30 billion worth of construction work on nuclear plants had been shelved or cancelled. But Spencer believes a renewed surge of electricity demand in the US will signal a revival of its nuclear programme.

IMS

Industrial Machinery
Supplies (Pty) Ltd.



THE COMPANY

IMS provides equipment and services for the power generation, mining, quarrying, processing, steel, marine, transport and chemical industries.

Since registration in 1949, the Company has been expanding steadily. Initially only active as manufacturers' representatives, IMS interpreted trends and anticipated the needs of a rapidly developing South Africa. IMS has been instrumental in introducing product ranges and associated expertise of top European, British, American and Japanese companies to South Africa.

IMS successfully combines high technology and know-how of its Principals with South African manufacturing industry. Local content accounts for more than half of turnover.

Various specialist departments are capable of dealing with projects ranging from the supply of components to handling complete turnkey installations.

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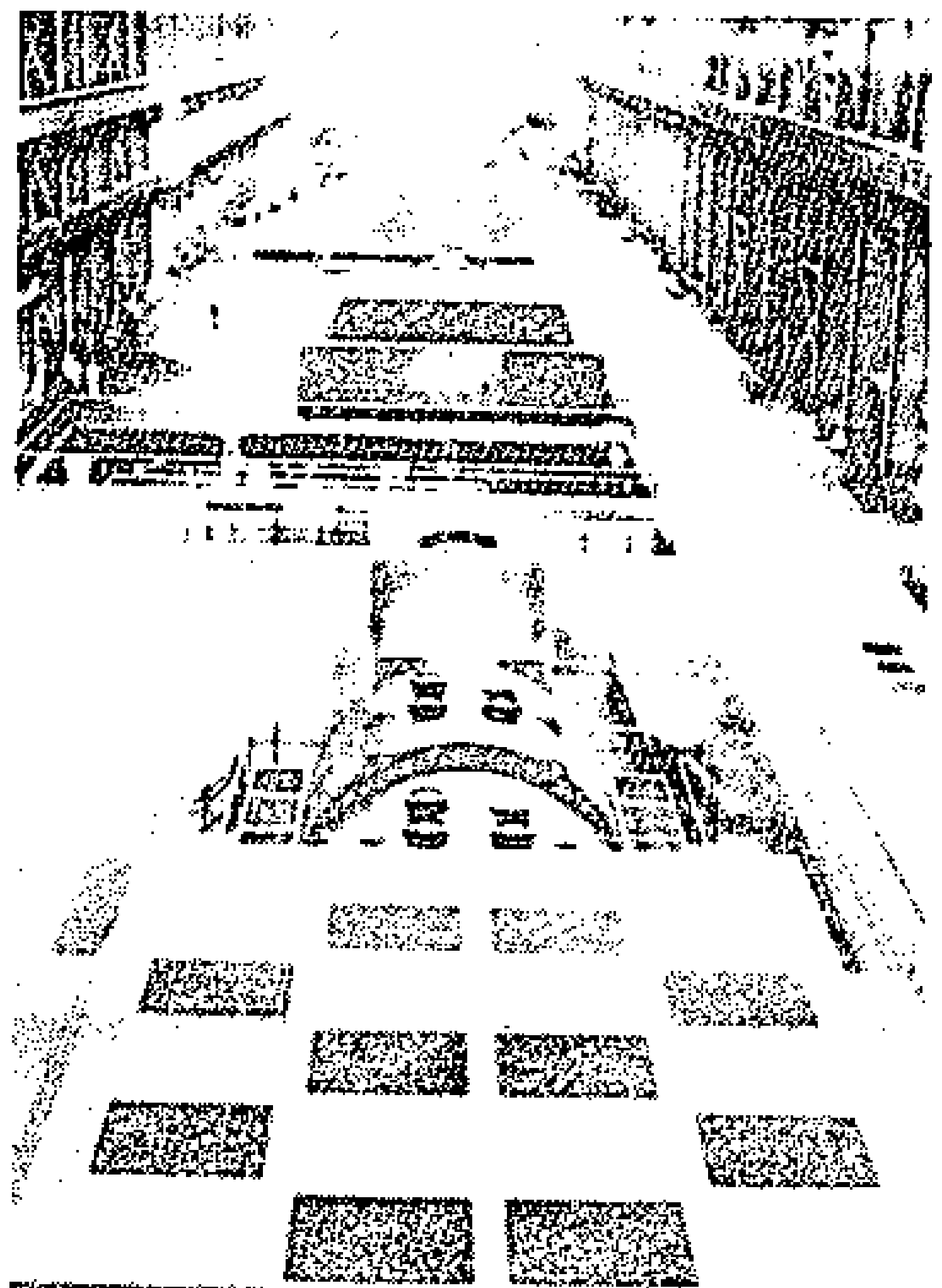

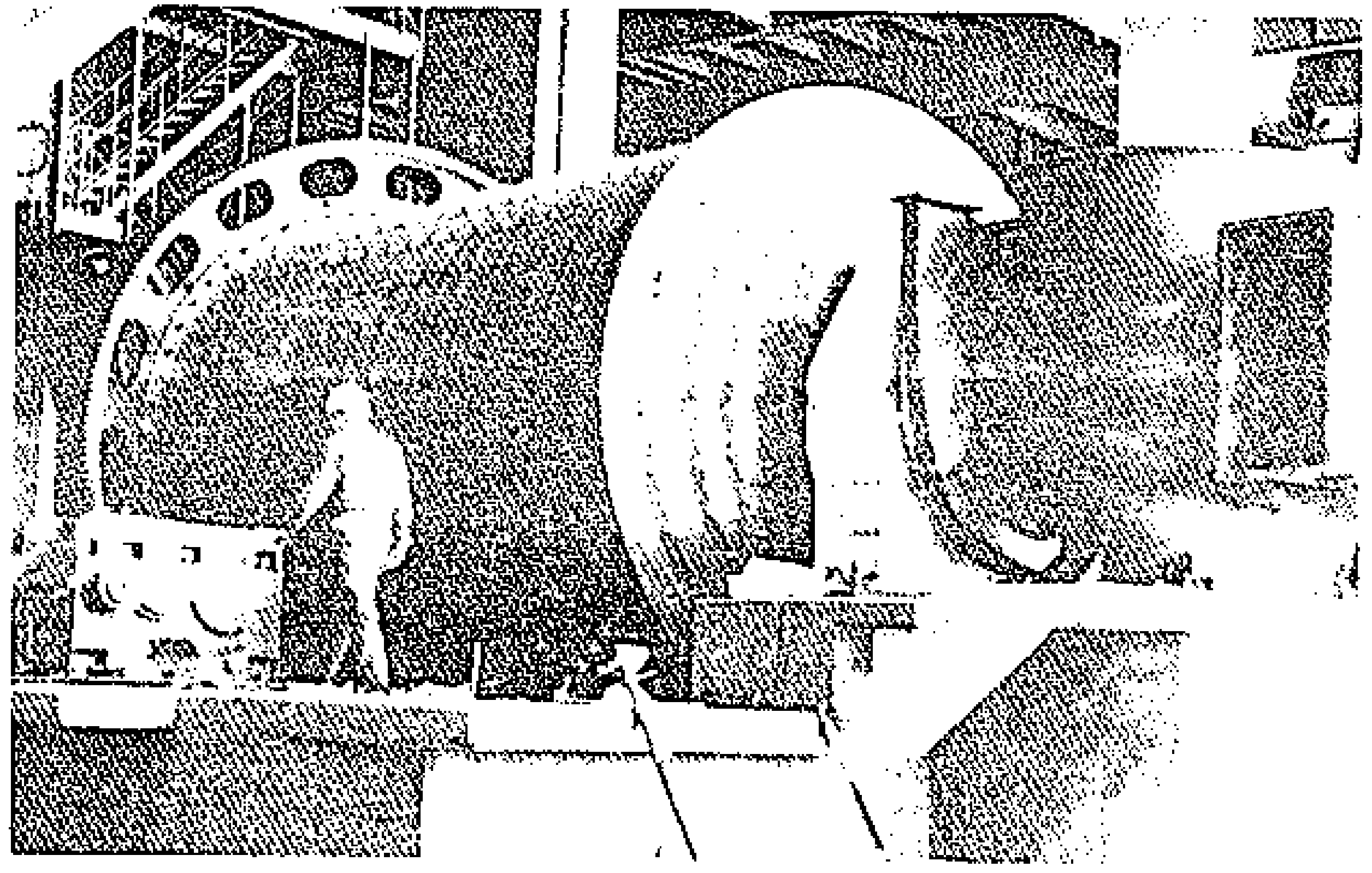

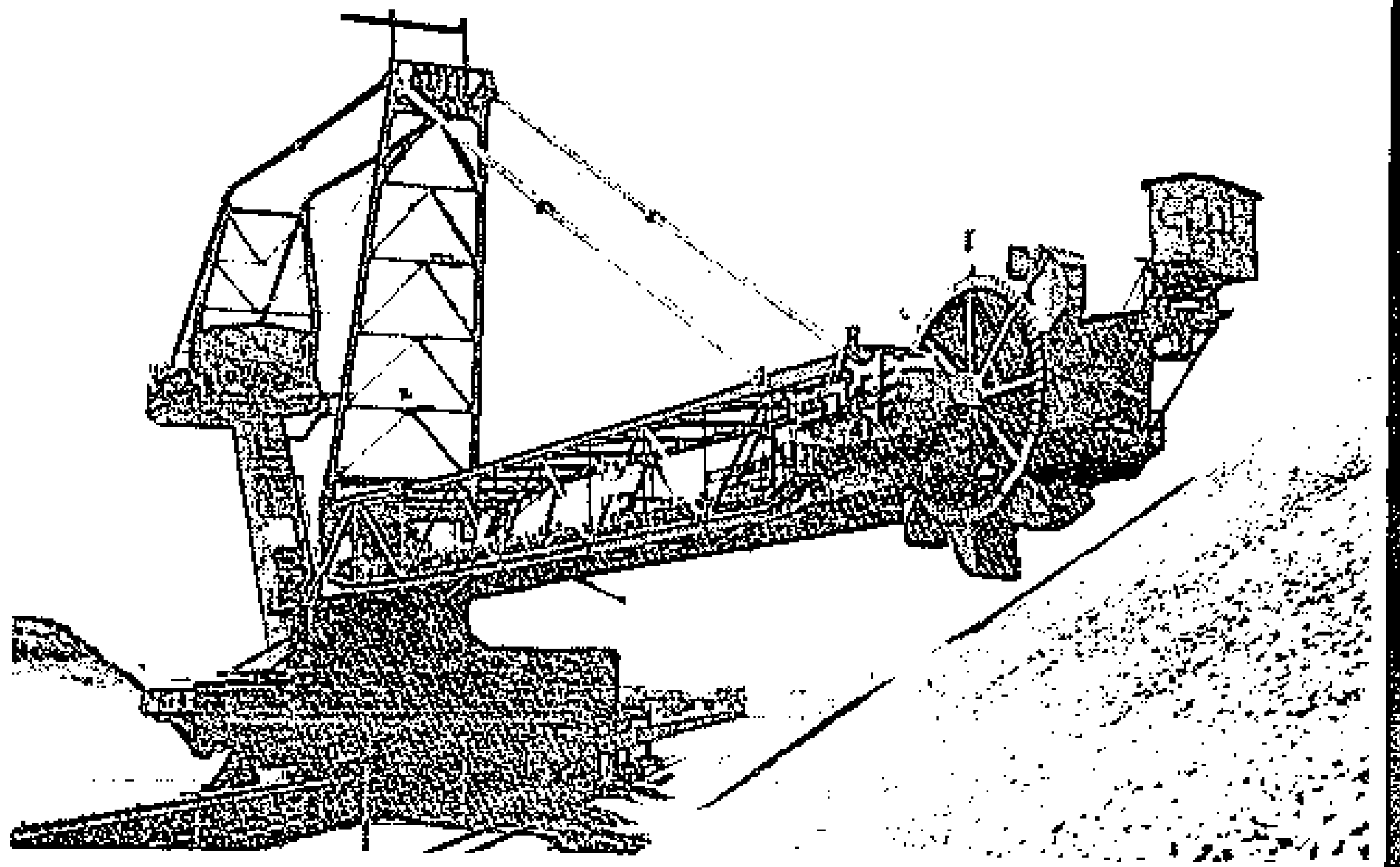

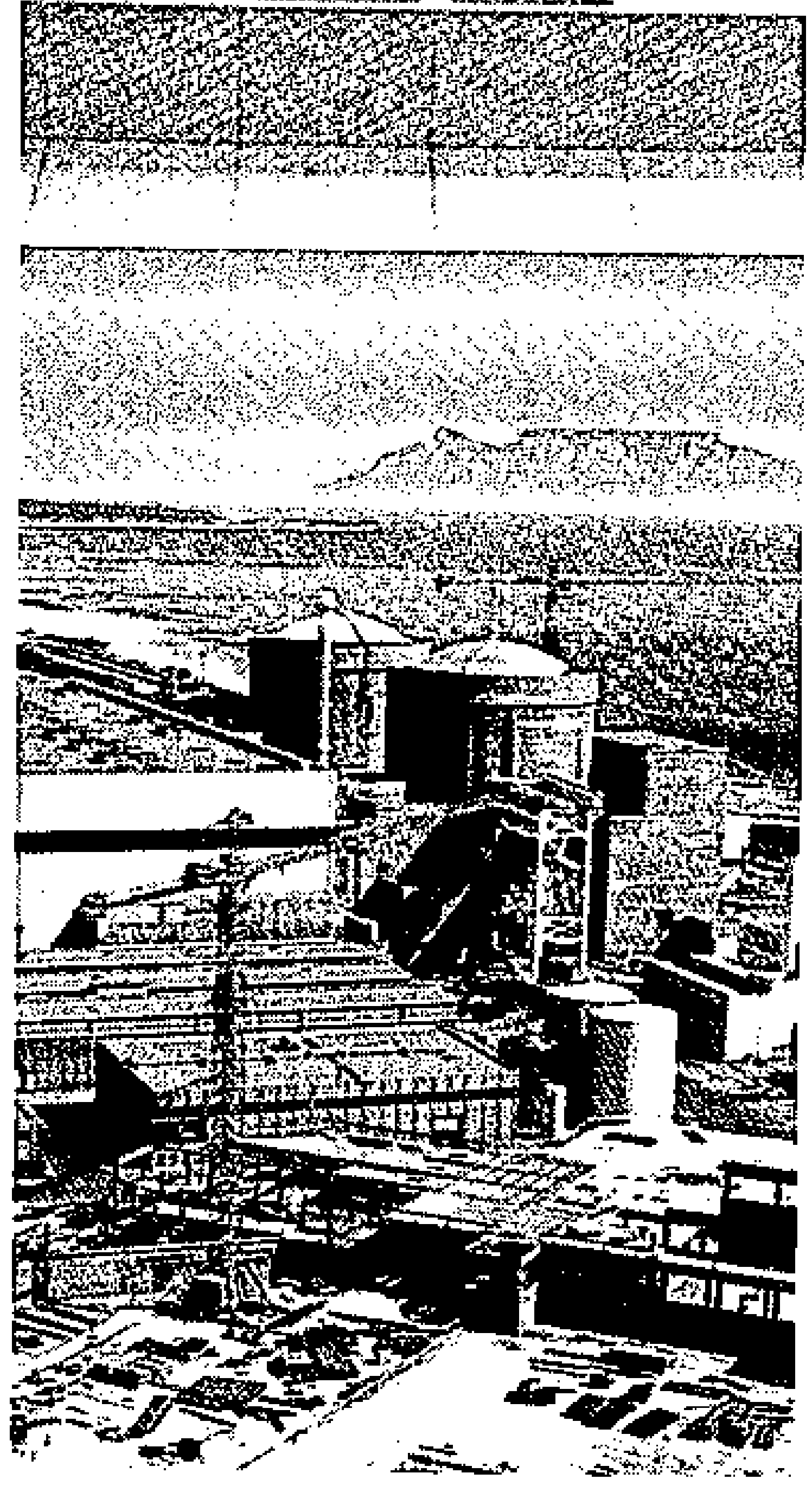

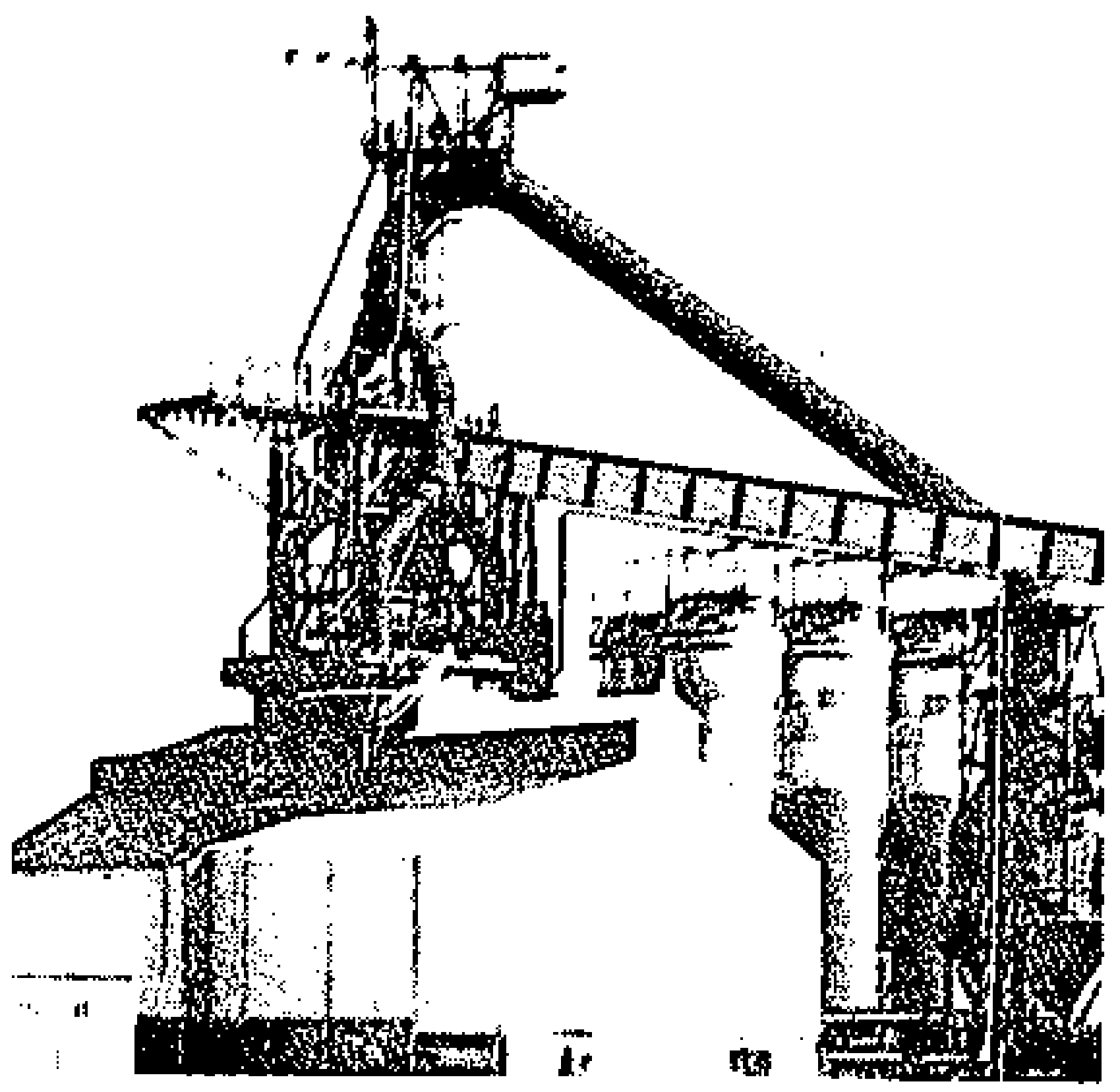

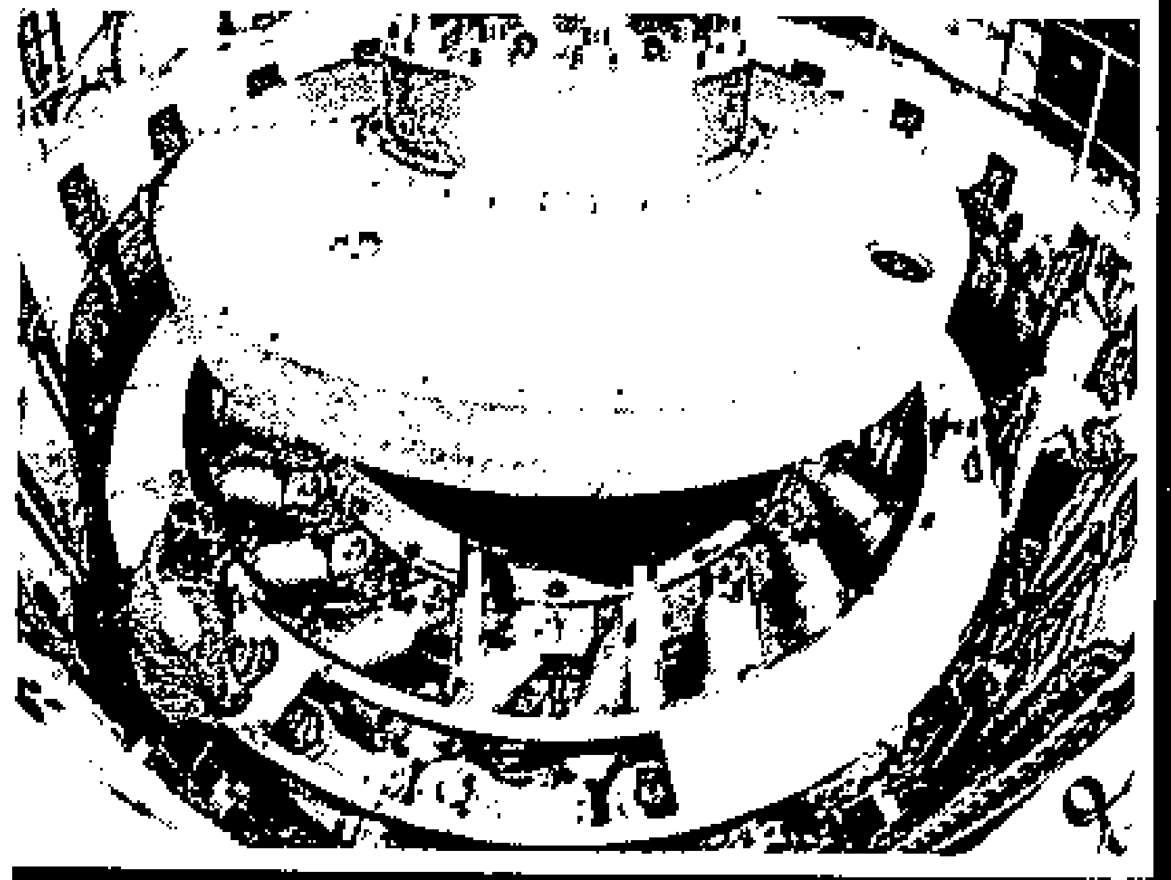

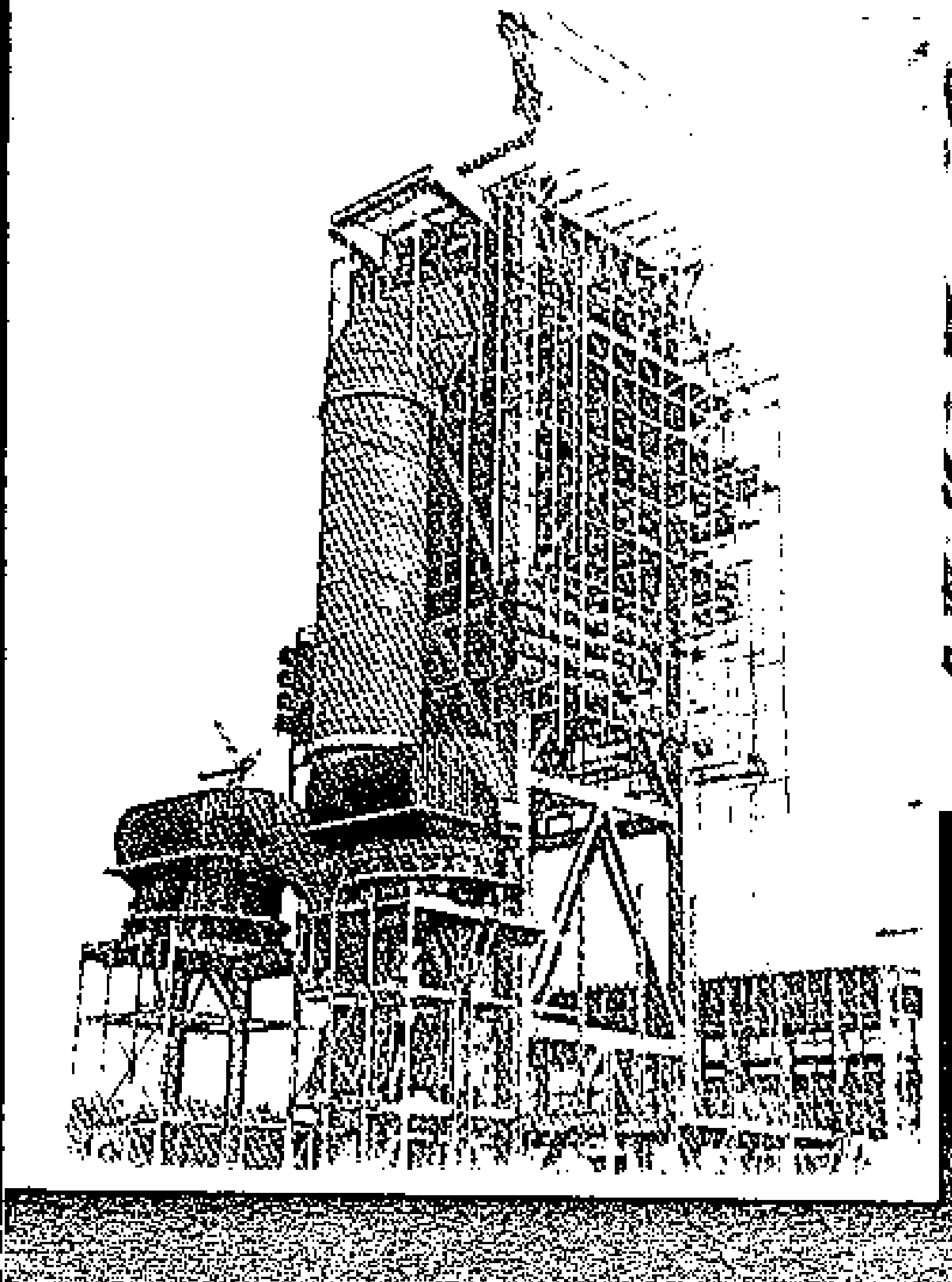

In association with leading international companies, this Division acts either as a representative, providing local services ranging from engineering and consulting to contract handling, sub-contracto follow-up, quality assurance and control, after sales services or as main contractor or consortium partner for small to medium sized contracts.

PRODUCTS

Nuclear and fossil-fired power stations, turbo-generators, industrial gas turbines, steam boilers, milling plants, steam condensors, hydro and pump turbines, iron – and steel making plant, rolling mills and finishing lines, chemical plant equipmen locomotives and rolling stock, mine winding equipment, cranes, material handling plants an electrical equipment.

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Some of the companies represented in the above fields are:

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SMS Schloemann – Siemag
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MAJOR CONTRACTS

This Division has been associated with some of the most important projects in Southern Africa, including Koeberg, Saldanha, Newcastle. We have supplied, together with our Principals, or have order:

33 M.A.N./AA or AA steam turbine generators wi a total installed capacity of approx. 15 200 MW, a Komati, Grootvlei, Matla, Hwange, Koeberg, Lethabo and Matimba Power Stations for ESCO and the ESC.

6 x 560 kg/sec. (665 MW)
SI/EVT//SIEVA boilers for Matimba.

2 x 200 MW Voith pump – turbines for Palmie pumped storage scheme.

26 m x 9 m Alsthom Atlantique vacuum tunne balancing plant for Rosherville.

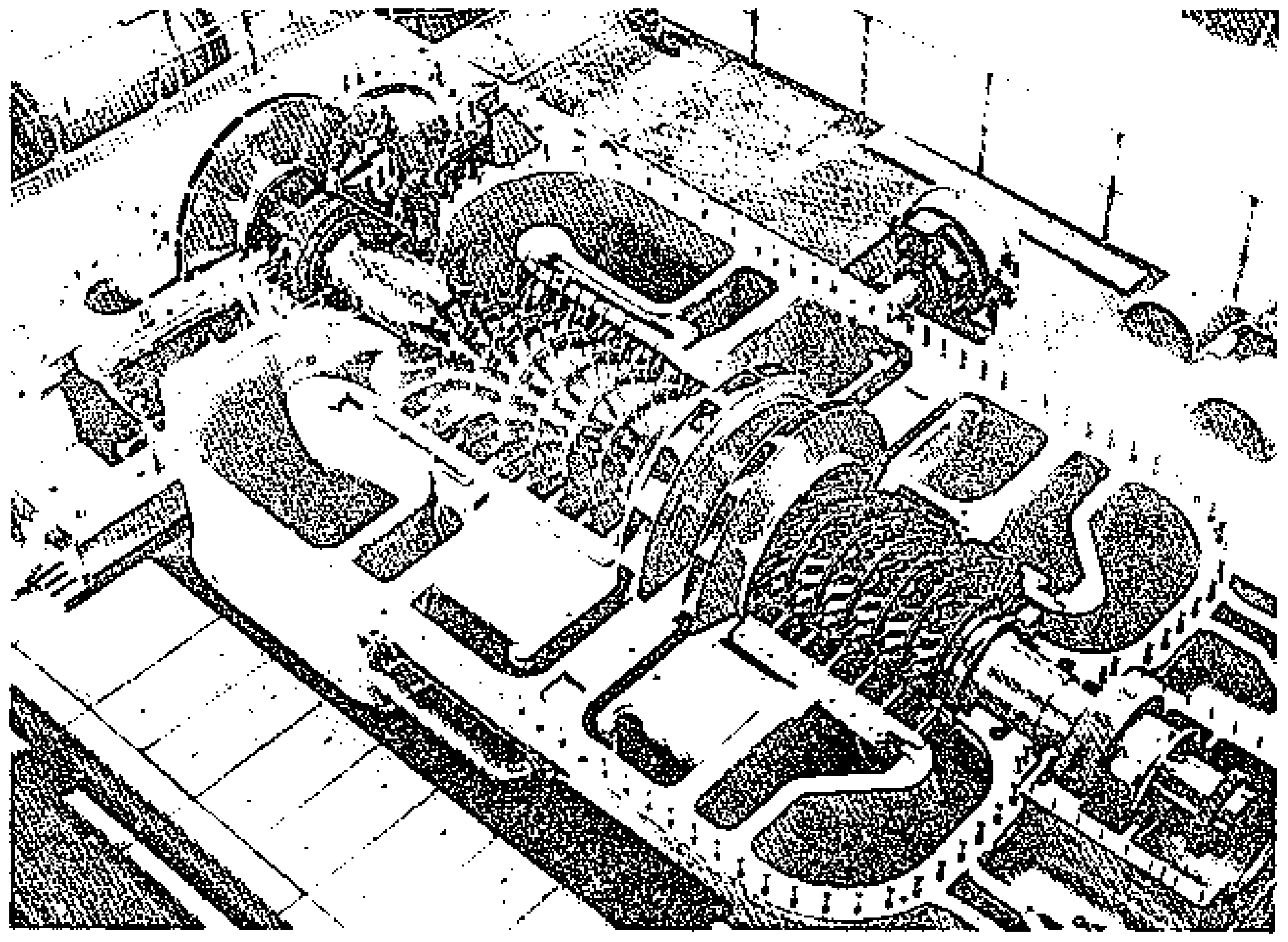
12 stainless steel coaches, prototype suburba train sets with Siemens/M.A.N. for the SATS

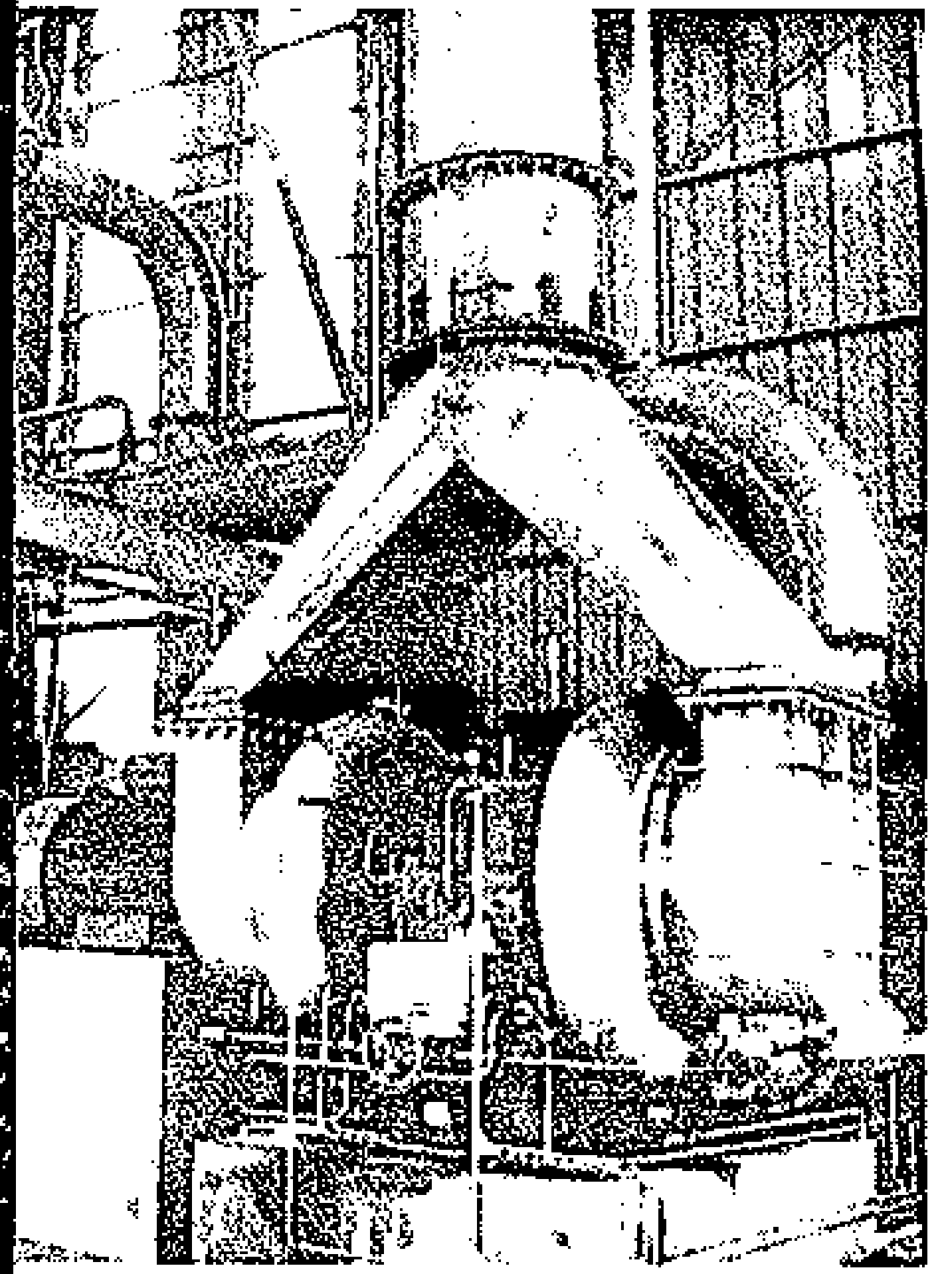
99 Stein Industrie coal mills for Arnot, Tutuka Matimba and Majuba Power Stations.

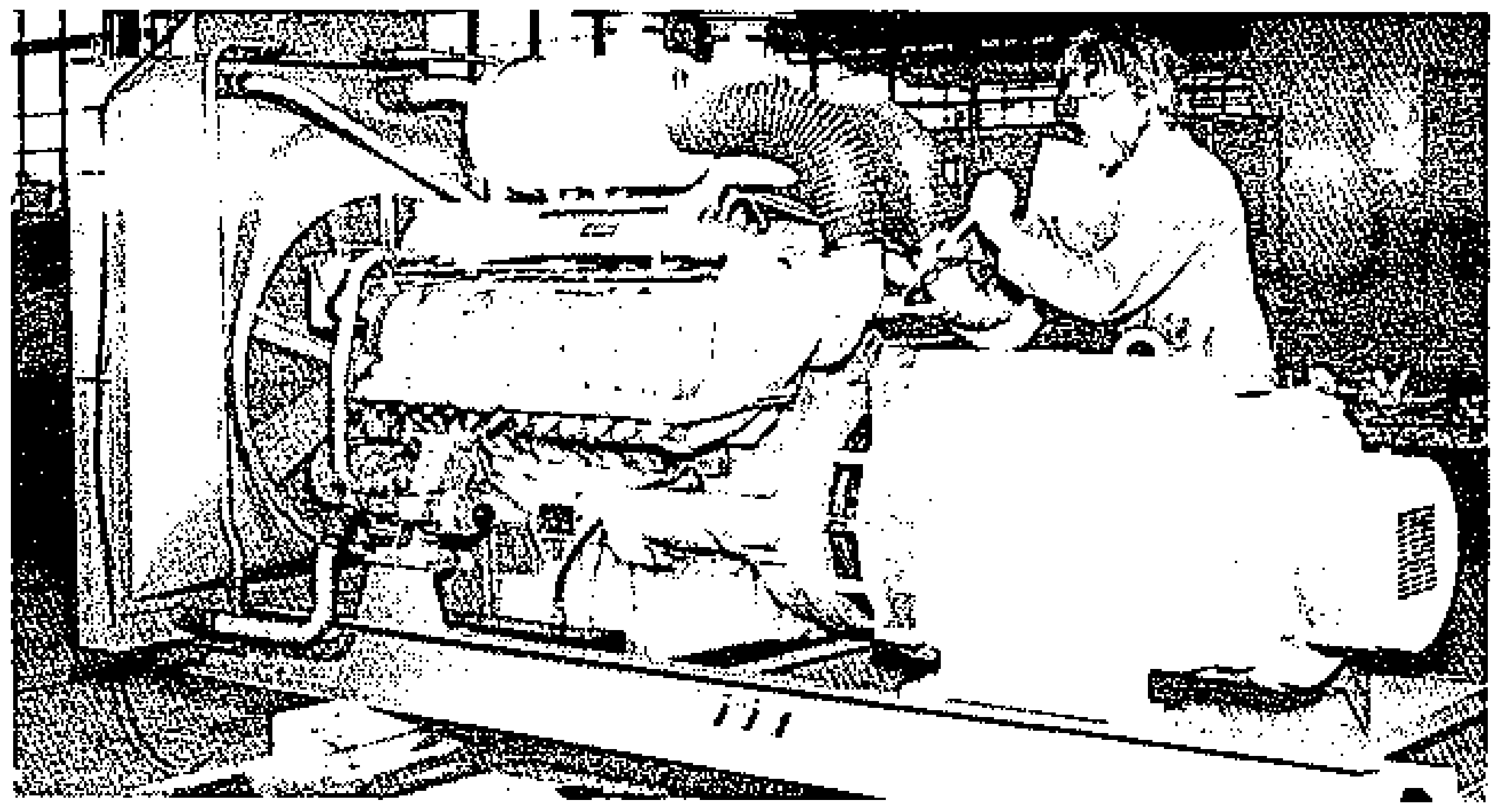
Saldanha iron ore export handling facility wit M.A.N. for ISCOR/SATS.

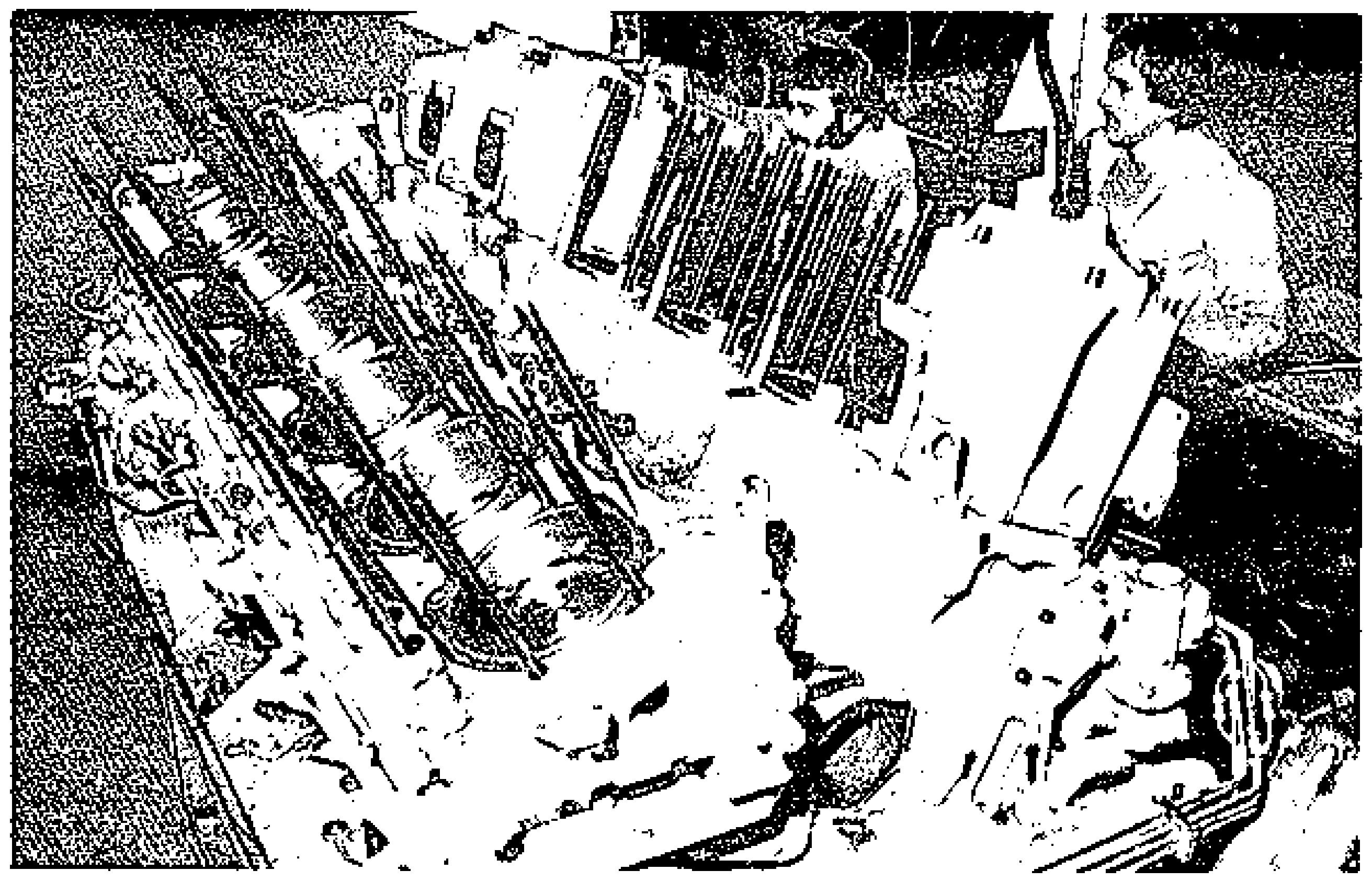
5 x 250 t M.A.N. ladle cranes for ISCOR Newcastle

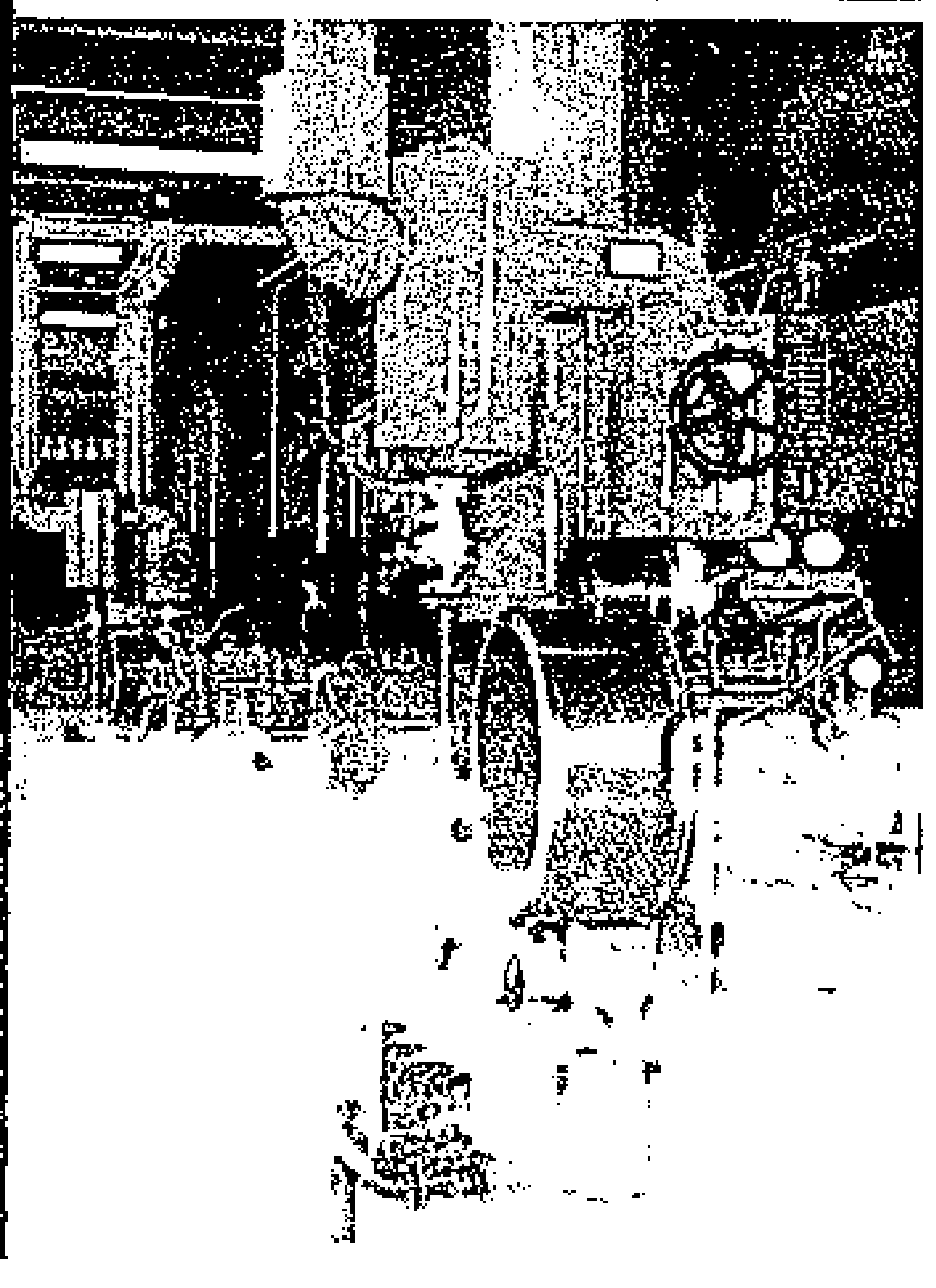
DIVISION 2











Component supplies through to complete turnkey projects with overall responsiblity is undertaken, covering all aspects of mechanical, electrical and civil engineering. Clients' individual requirements receive greatest consideration through local, in-house engineering capability and contracting expertise.

DIESEL ENGINES

From 3 – 42 000 kW for stationary, marine, haul truck and rail traction applications. In addition, for marine propulsion systems, gearboxes, shafts, propellers and steering gear.

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We plan, design and construct complete power plants up to 50 MW for emergency, peak lopping or base load power generation. Diesel engines, gas and steam turbines are employed as prime movers. Our local engineering and manufacturing capabilities offer a high degree of design flexibility.

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Radial and axial flow turbo machinery for the compression or expansion of air and gases in the mining, steel, sugar, fertilizer and chemical industries. Delivery volumes from 500 to 1 million cubic metres/hour and drive rating of up to 100 MW.

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Complete range of single and multi stage steam turbines from 5 kW to 125 MW as prime movers fo pumps, fans, compressors, generators, mills, etc.

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Single and multi stage axial flow fans of large capacities up to 1300 cubic metres/second for the ventilation of mines and for boiler draft plants.

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Screw compressors for gases of any type, with or without injection cooling, up to volumes of 50 000 cubic metres/hour and discharge pressures of 40 bar

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A team of factory trained, specialist Service Engineers operates a countrywide, back-up service

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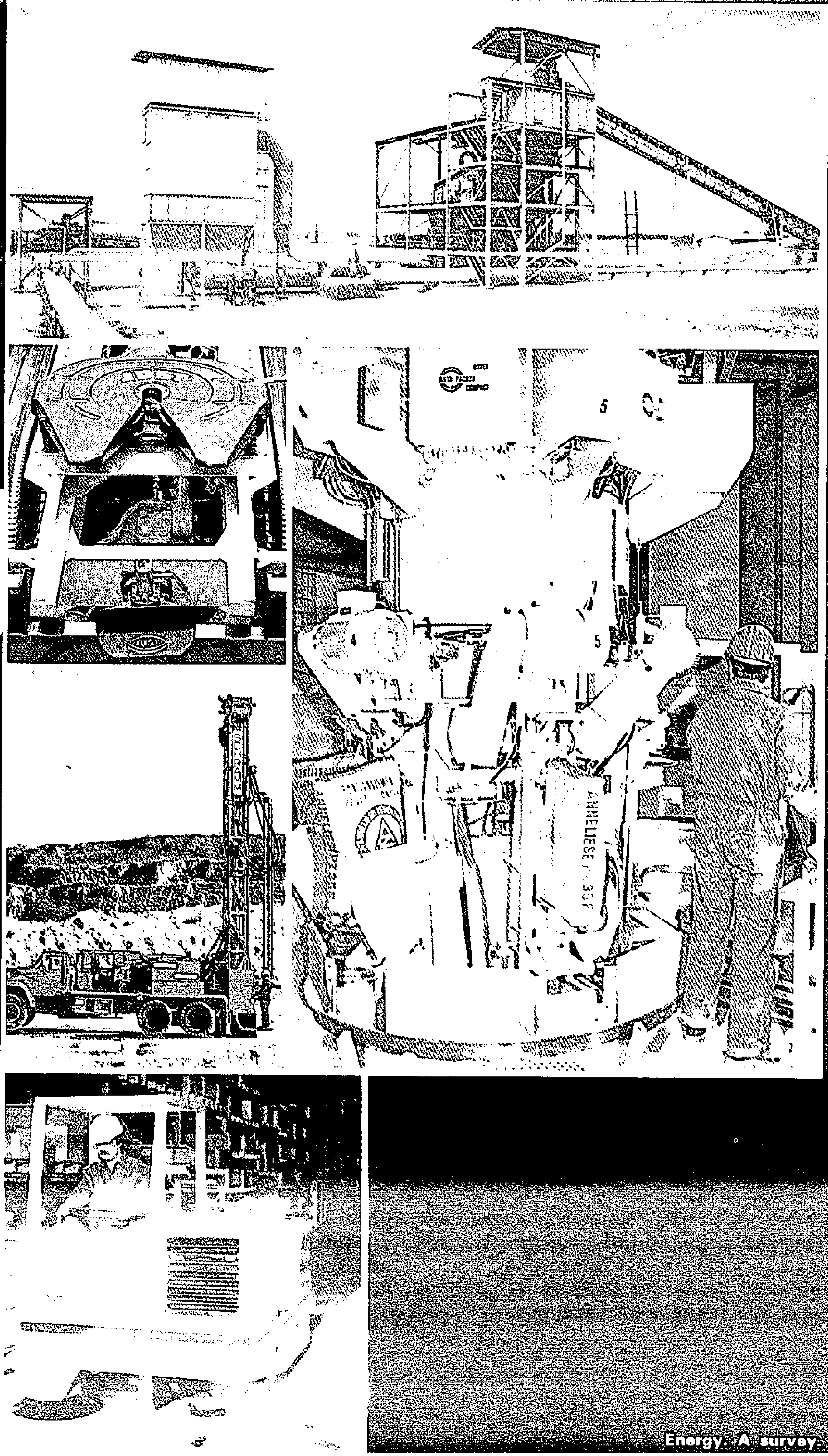
The IMS Alrode Service Centre is specialised fo the service and repair of all types of turbo machine

Large stocks of spare parts are held at ou branches throughout the countr

DIVISION 3



Versatility in the supply of components, equipment and turnkey engineering installations for mining and industrial applications are the main strengths of the Division.

CRUSHING PLANT

IMS supplies either individual units or turnkey installations for crushing, screening conveying, dus extraction, drying, milling, storage for mining, quarrying and chemical sectors.

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Complete engineered turnkey plant and specialised equipment for the handling of all materials, such as bucket elevators, conveyors, bag loading plants, bulk loading systems, palletisers, silos, ship and rail truck loading and unloading.

INDUSTRIAL WEIGHING EQUIPMENT

A sophisticated range of weighing systems for al applications in mining and industry.

POLLUTION CONTROL

Air and gas pollution control components for turnke installations using up to 100 percent local conten

INDUSTRIAL CLEANING EQUIPMENT

A complete range of mobile and stationary vacuu and materials recovery equipment as well as mechanical, industrial and suction road sweepin machinery are available for industrial, mining an municipal applications.

DRILLING EQUIPMENT

Percussion drilling equipment for ground-wate drilling, minerals exploration and blast-hole preparation backed up by integrated workshops and field service facilities.

TRUCK AND TRAILER COMPONENTS

We supply JOST & HYVA products, market leaders in their field. Most of these products are locally manufactured under licence and include fifth whee couplings, landing legs, ball bearing turntables trailer draw-bar couplings, tipper hydraulics and cargo lashing equipment.

One of the more prickly nuclear issues, the disposal of waste, has not been finally resolved. According to Spencer, the low-level waste, from normal generation at the Koeberg plant, is being stored on site at the moment.

The high-level waste, which is primarily on-site fission material, is also being stored at Koeberg, although the ultimate intention is to use the adjoining Klein Springfontein property for disposal.

One of the key questions associated with Koeberg has been the cost of generation. In terms of the Electricity Act, Escom is committed to supplying electricity at cost. This has positive implications for the western Cape which pays the highest electricity rates in the country.

Estimates of electricity costs to western Cape users prepared by Escom indicate that a cost of 4,7c/KW/hour would have applied if a coal-fired power station had been constructed in the area for commissioning this year. The cost of electricity in the Cape from a coal-fired station sited inland (in the Witbank/Middelburg area) and commissioned this year would have been 4,3c/KW/hour, while Koeberg is generating electricity at 5,6c/KW/hour.

Escom chairman Jan Smith holds that, despite this immediate cost disparity, nuclear power remains an economic proposition for the western Cape.

"This cost (5,6c/KW/hour) will tend to remain more stable in the future. There is some uncertainty about the long-term cost of nuclear fuel, and although predictions are difficult, it is possible that the price may rise at a lower rate than that of coal, and the transport costs associated with it."

While the actual cost of power generated by Koeberg will be about 30% higher than that produced by an inland thermal station and transmitted to the coast, users in the western Cape will not be charged the higher rate. In fact, the rate for western Cape users is below the estimated cost of power generated by a new coal-fired power station — 4,4c/KW/hour against 4,7c/KW/hour.

Wherever the next nuclear station is sited, however, it will be at the coast — for the same reasons that Escom chose Koeberg. Also, of course, there is the topical problem of inland water supplies.

And then, unlike their coal-fired counterparts, nuclear power stations cannot simply be switched off when circumstances demand. It is thus critical to have a guaranteed water supply for cooling.

There are few inland sites that could provide such a guarantee and, in any case, demand factors, for the time being, will dictate that the next nuclear station is located by the sea.

While Escom is investigating the feasibility of several sites, including the option of doubling Koeberg's output, the final decision on the next nuclear plant is some time off.

What is certain is that unless, and until, alternative energy sources such as tidal or wind power mature and become commercially viable, nuclear power will remain the first option to eventually replace coal as a supplier of base-load electricity.

Room to spare

Although figures are hard to come by, it appears that SA refinery capacity is under-utilised — temporarily at least

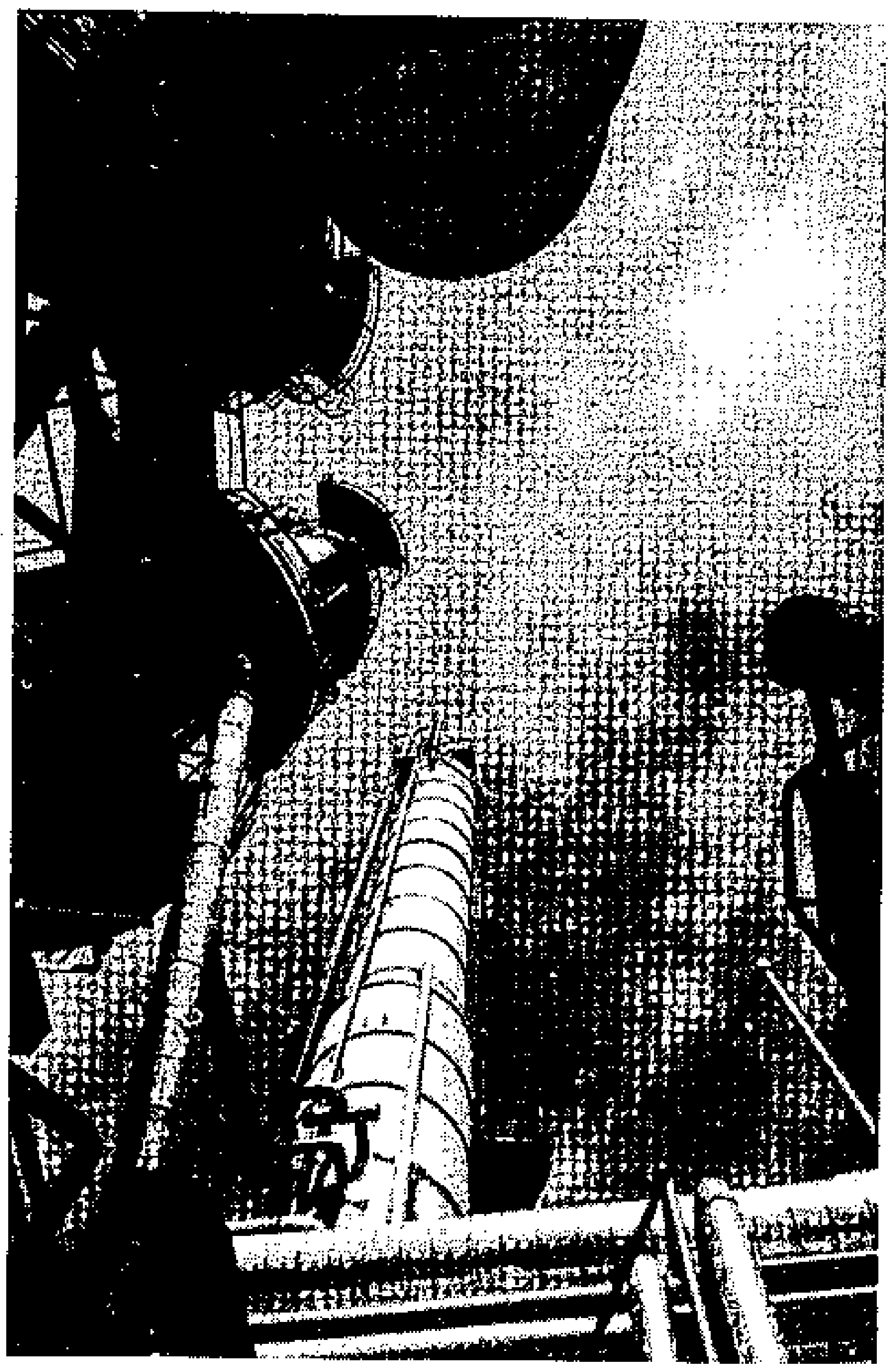
The commissioning of Sasol Three has had an immediate and dramatic effect on one of the country's most secretive and yet most important sectors — the refinery industry.

Details of the country's refinery activities are difficult to establish, and even more difficult to communicate, as publication of facts associated with oil and its supply, production and distribution is narrowly restricted in terms of the Oil Procurement Act.

While industry observers believe that at least one, and probably two, of the refinery operations are superfluous at current demand levels, none of the multinational oil companies will even respond to requests for confirmation.

But that they are suffering from the combination of effective fuel-saving programmes, which have led to the new generation of aerodynamic, fuel-efficient motor vehicles throughout the world, is undoubted.

The degree to which the decline in volumes being processed through the Durban refineries has affected profits is yet another imponderable, as the oil companies operating in SA are for the most part wholly-owned subsidiaries of US or European parents. They are therefore not obliged to disclose financial results.



SA refinery . . . looking for work?

In many respects, SA, as an emerging industrialised nation, is a microcosm of the bigger, industrialised countries and, give or take lags and leads, tends to follow the economic patterns of its major trading partners.

Successive oil crises, accompanied by price hikes, have made the world thrifty in its use of oil, and the results of these conservation programmes are painfully evident to the oil producing countries.

Despite a war that has been raging for more than three years, and which has on several occasions brought to a virtual halt supply lines for crude oil out of the Persian Gulf, storage tanks at the world's major oil trading terminals are full.

The surplus has placed increasing pressure on prices, and many categories of oil are trading at below their official prices.

One of the biggest stockpilers is Saudi Arabia, which has built up enormous stocks of oil outside the Gulf area for fear of disruptions to shipments.

In SA, the drop in demand for petroleum has stemmed primarily from the industrial sector, with the growth in general public consumption continuing unabated.

Apart from the substantially reduced fuel offtake by the agricultural sector, mining industry demand is also static as it waits for a recovery in the world economy. Government and its agencies, such as SA Transport Services (SATS), meanwhile, have drastically trimmed their use of petroleum.

At least some of these factors are linked to the economic cycle or the drought and should correct themselves when circumstances change. But then the high capital cost associated with Sasol's developments will be a seriously inhibiting factor to future expansion.

The world oil glut suggests that the price advantage which Sasol has had over fuel refined from imported crude may be shortlived.

Cost figures for imports of oil to SA are restricted, as are volumes, but it is logical to assume that the price depression that has for some time been affecting the world spot markets, has also benefited this country's oil import programme.

In addition, population growth will ensure that fuel consumption by the public continues to grow, and some observers believe the over-capacity in the refinery industry is a temporary phenomenon.

A return to normal rainfall, as well as a recovery in the Western economies, with an attendant rise in demand for mineral products, should lead to a resuscitation in demand for petroleum products.

But such an eventuality will, presumably, also lead to a recovery in demand for crude oil in the industrialised countries, to be followed by upward pressure on prices. This could spur a fourth Sasol.

Sasol on a hot streak

There's more to Sasol than oil-from-coal. Already a major force in chemicals, it is looking for further opportunities downstream

In a recent speech in Germany, Sasol MD Joe Stegmann equated the way in which Chinese calligraphy depicts the word "crisis" with SA's liquid-fuel situation. The Chinese character, he noted, consists of the components "danger" and "opportunity."

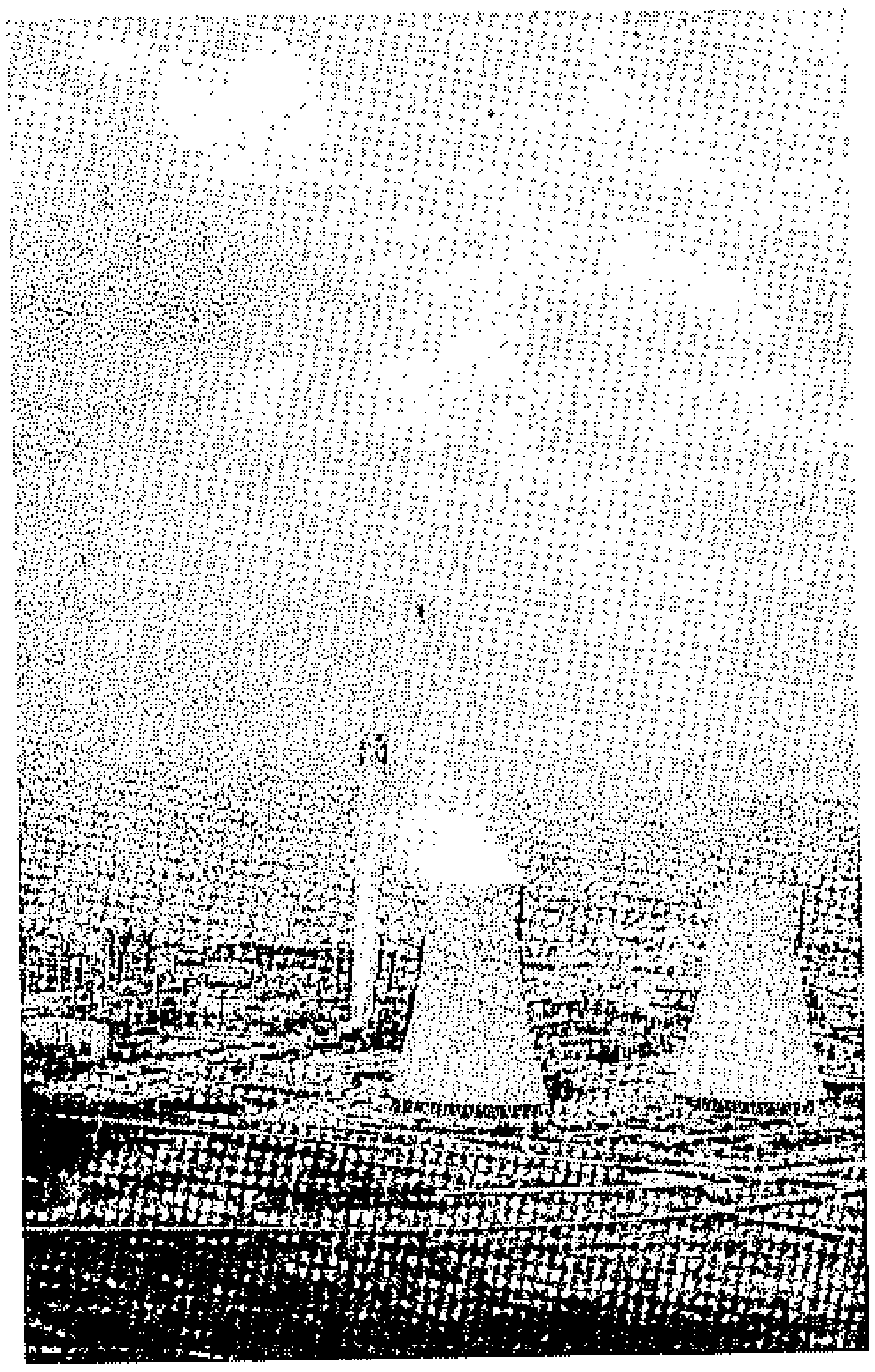
SA's supplies of crude oil were, indeed, endangered during the energy crises of 1973 and 1979, but they presented opportunities which were grasped by Sasol to build the giant synfuel plants at Secunda, which now enable the company to supply more than 40% of SA's liquid fuels.

Sasol is the world's only commercially viable oil-from-coal producer. Originally started with government funding, it has now moved into the private sector, where it already has the highest market capitalisation (about R2 900m) of any industrial company quoted on the Johannesburg Stock Exchange. Last year it made an after-tax profit of R232m on a turnover of R1 500m.

In that year, its coal mines, which provide one of its main raw materials, produced a total of 22,2 Mt, less than half the 63 Mt consumed by Escom and about 24% of the country's total consumption.

Its Secunda mine complex, which supplies the Sasol 2 and 3 plants, is scheduled to produce 29 Mt this year, which makes it one of the world's biggest underground coal mines. Reserves are expected to last more than 70 years. Only four years ago, production was a scant 8,5 Mt.

The other major raw material for the Sasol process is oxygen, which the company produces on site. It is obtained from the atmosphere through a process which reduces air temperature to 190°C below freezing. Sasol's separation facilities at Secunda, which produce 26 000 t/day, are the largest in the world.



Oil-from-coal . . . what chances a Sasol Four?

The retail price of petrol in SA is among the lowest in the world (the US is a notable exception), despite the premium it pays on imported crude oil and the difficulties involved in synthesising coal. The low price has been made possible partly by initial generous government funding for Sasol raised largely from levies on liquid fuel.

Another factor is what Stegmann describes as "SA's unique combination of advantages favouring synfuel production which I have not yet come across in other countries."

Sasol is able to deliver coal to its plants at very competitive prices, mainly owing to geological conditions which permit highly mechanised extraction techniques. Another advantage is that the fields are close to the country's main industrial area and therefore close to the main market for liquid fuels.

Further, the basic infrastructure of road and rail access as well as supplies of water and electricity were already present in the Secunda region when construction of Sasol 2 and 3 was mooted.

Sasol fuels enjoy tariff protection against crude-based fuels of about 13% or $4/barrel of crude oil. Compared with some other industrial sectors, this is moderate.

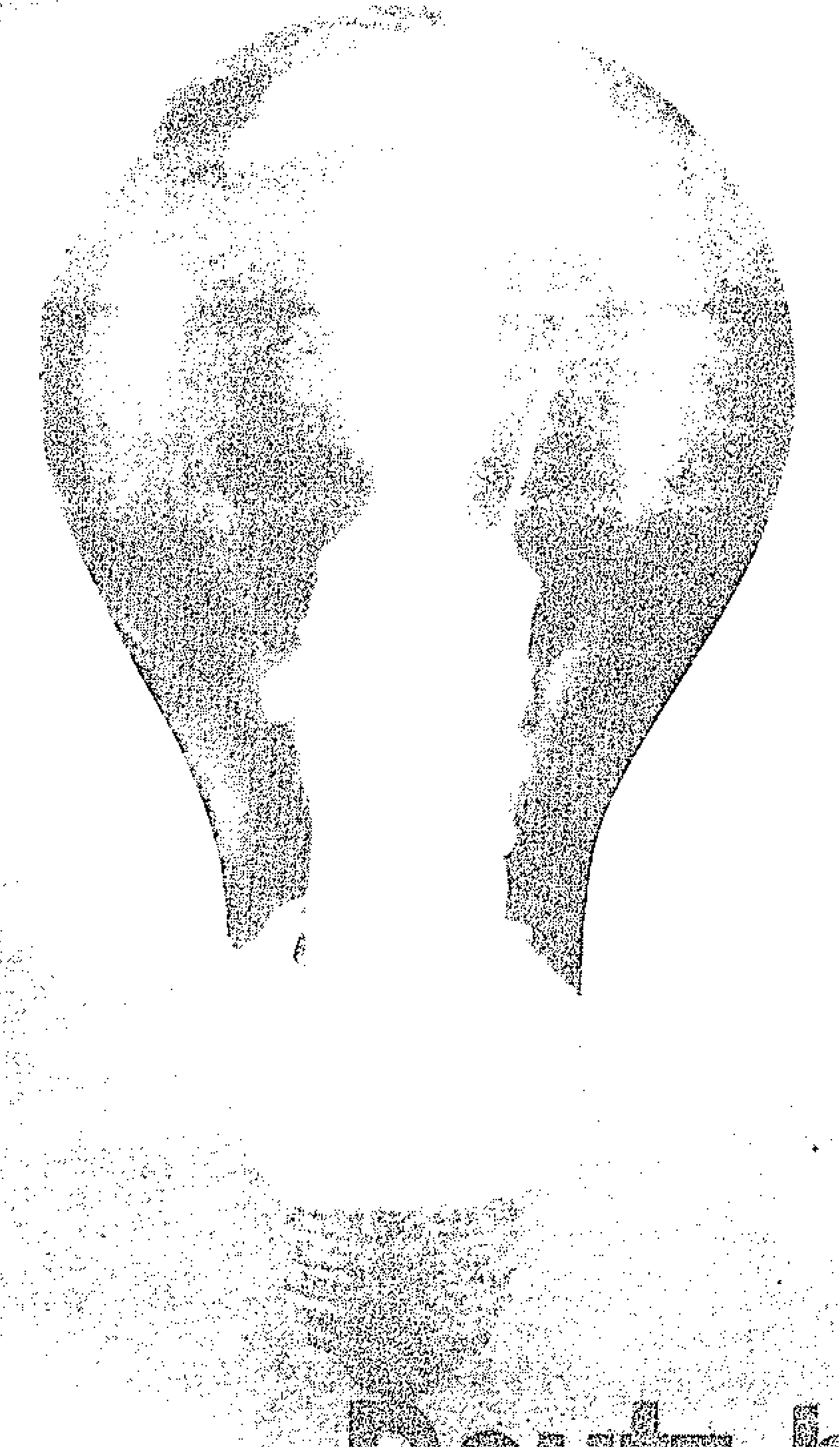
The coal synthesis idea was originally pursued by the Anglovaal group during the Thirties, but activity ceased when it appeared that commercial prospects were not promising.

The Sasol company was formed with State capital in 1950, long before the oil crisis and boycotts against SA began. Sasol's genesis came from legislation in 1947 which provided for the establishment of an oil-from-coal industry.

The first plant was completed in Sasolburg in 1955, and a subsidiary, Gaskor, was formed in 1964 for the distribution of one of its major co-products, methane-rich gas. Gaskor pipelines from Sasol facilities in Sasolburg and Secunda now supply major industrial users in the PWV area.

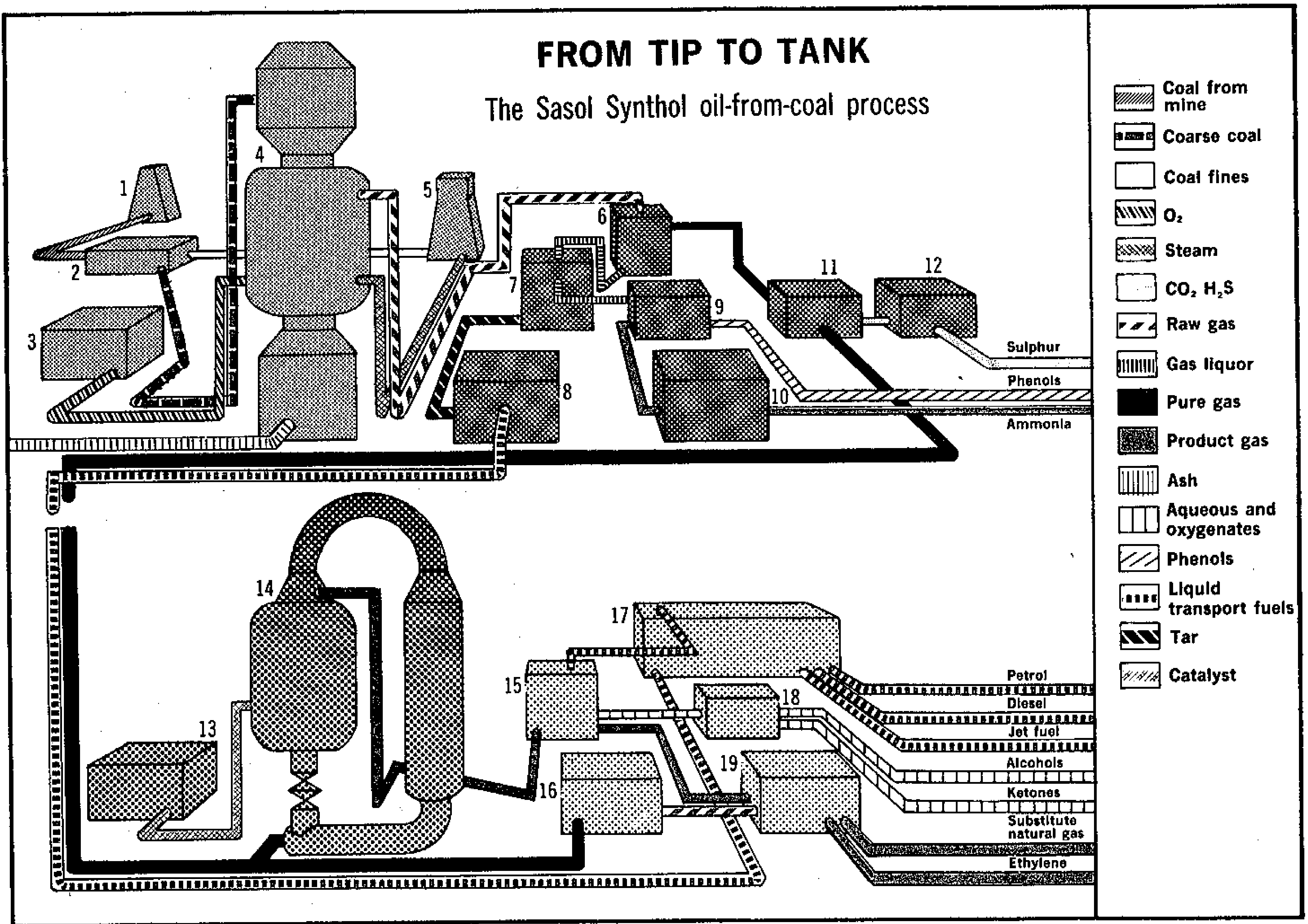
For years, the oil-from-coal project looked like a white elephant, and earnings from Sasol's fuel products were secondary to the earnings from the vast range of chemicals which are also produced by the Sasol process. These include alcohols, ketones, waxes, phenols, ammonium sulphate, ethylene, creosotes, tars and ammonia. And, in 1969, Sasol went into the refining of crude oil with the French Total company and the National Iranian Oil Company with a new conventional oil refinery in Sasolburg.

But when the oil price rose from $1,30 to



FROM TIP TO TANK

The Sasol Synthol oil-from-coal process

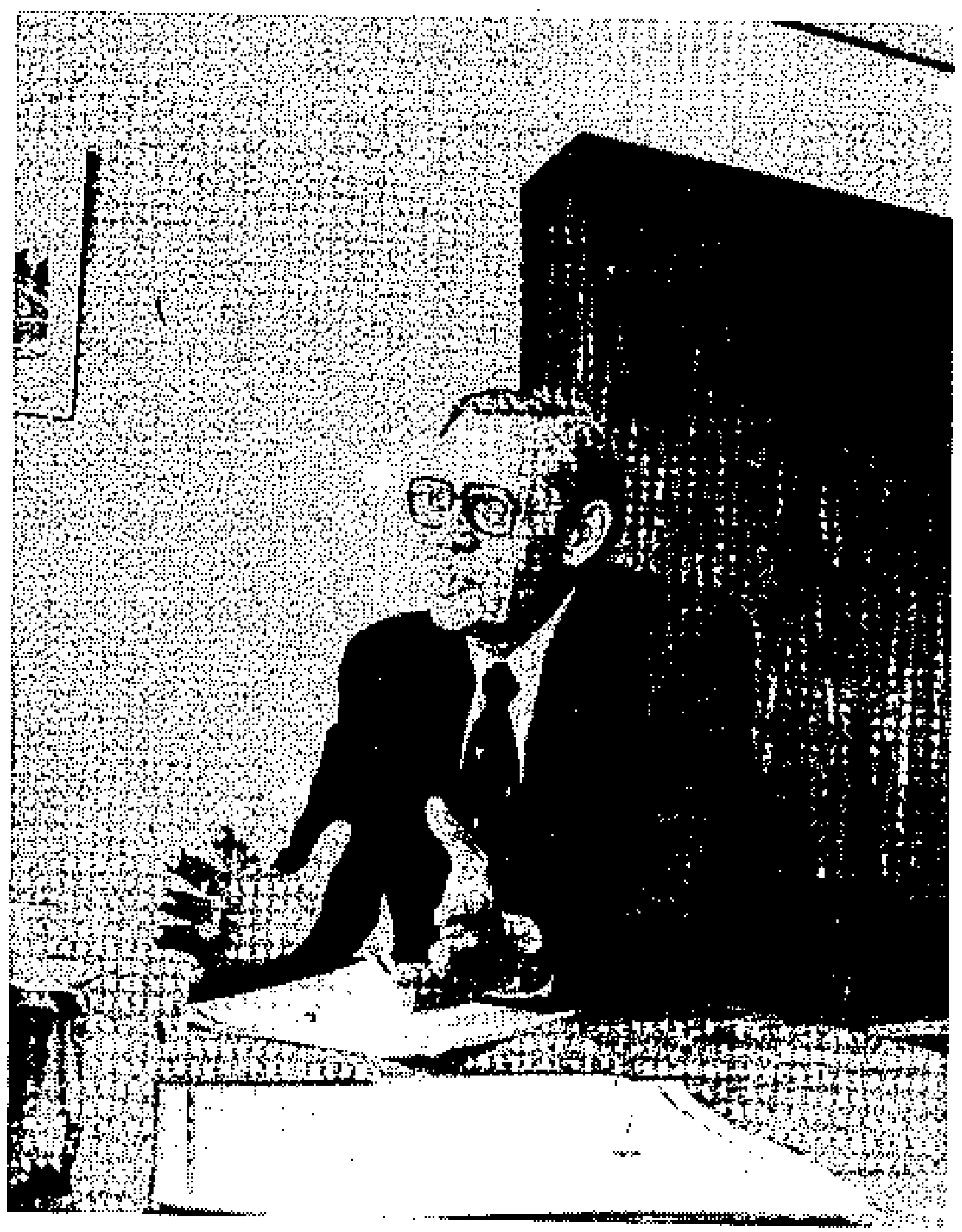


Coal from the mine (1) is sized and screened in the Wet Screening plant (2). Coal fines are used to feed the power plant boilers (5) to supply steam for gasification and other processes and for power generation. Sized coal is fed to Lurgi gasifiers (4) together with steam and oxygen, the latter supplied by an Air Separation plant (3). In the Lurgi Gasification Unit, coal, steam and oxygen react to produce raw gas with an optimum hydrogen/carbon monoxide ratio. The raw gas stream from the gasifier also contains carbon dioxide, methane, nitrogen sulphide, ammonia, oil and tar. It is cooled (6) to condense out an aqueous phase containing water-soluble substances (gas liquor) and crude tar which are subsequently separated in the Tar Separation Unit (7). The cooled gas is then treated in the Rectisol Unit (11) to remove carbon dioxide and hydrogen sulphide by methanol absorption. The sour gas is treated in the Sulphur Recovery Unit (12) to meet environmental standards. The purified synthesis gas is now fed to the Sasol Synthol unit (14) where it is entrained with circulating powdered iron-based catalyst (13) in the Synthol reactors. The exothermic Fischer-Tropsch reations produce a product gas consisting of hydrocarbons and oxygenated chemicals. This stream is cooled (15) to produce gas, liquid hydrocarbons and an aqueous chemical mixture. The hydrocarbon liquid is fed to the Oil Work-up section (17) where conventional refining techniques produce motor fuels. The aqueous solution is treated in the Chemical Work-up facilities (18) for recovery of alcohols and ketones. The uncondensed portion of the Synthol effluent is further separated in the Product Recovery Unit (19). A methane-rich stream is recovered and sold as much or reformed (16) to hydrogen and carbon monoxide to provide additional feed for the Synthol process. Ethane and ethylene may be used to produce pure ethylene or reformed for additional Synthol feed. Crude tar products from the Tar Separation Unit are upgraded (8) to petrol and diesel components. The gas liquor feeds a Phenosolvan Unit (9) where phenols are extracted. Further treatment (10) of the aqueous effluent results in commercially-saleable anhydrous ammonia.

about $11/barrel during the Seventies, a Cabinet committee concluded that oil could be competitively produced from coal. In 1974, the decision to build Sasol 2 was announced.

Government determination to reduce dependence on imported oil during this period is reflected by the fact that the country's liquid-fuel consumption actually fell between 1973 and 1979, despite an average real economic growth of 2,7%/year. This was achieved by a combination of conservation measures and substitution of liquid fuels with electricity, coal and Gaskor gas.

After the overthrow of the Shah in 1979, it was decided to build Sasol 3, almost a carbon copy of Sasol 2. The combined capital cost of both plants came to about R5,8 billion. Repeating the Sasol 2 design and using the same construction infrastructure (the plants are contiguous) saved almost two years in construction time and R500m in capital cost.



Sasol's Stegmann . . . unique advantages

Both plants came on stream ahead of schedule, and Sasol 3 was producing only 3½ years after it was announced. It showed a profit before interest of R117m in its first year of operation.

Modifications to remove production bottlenecks at both plants are now being carried out, and production will be increased.

In 1979, Sasol became a private-sector company, with 70% of the issued share capital taken up by private investors. However, government retained a 50% stake in Sasol 2. In 1983, Sasol acquired the government's remaining share in Sasol 2 for R2 620m. The public still holds 70% of the enlarged group, and it is envisaged that the remaining government investment in Sasol 3 will be taken over by the private sector towards the end of the decade.

With increasing pressure to perform profitably, Sasol has adopted a policy of downstream integration and is now a major force in the chemical industry. Instead of being just a downstream supplier of chemical feedstocks, as it was in the past, it now further processes them into final products.

This year it completed construction of a plant for its new subsidiary, Sasol Fertilisers, which is to produce a complete range of fertilisers using ammonia feedstock, a co-product of the Sasol process.

More recently, it formed Sasol Explosives, which will also use ammonia feedstock and produce a range of ammonium-nitrate-based explosives. And there are other possibilities. Don't be surprised, for example, if Sasol one day produces polyethylene and polypropylene plastics from the ethylene feedstock it currently supplies to the country's plastic polymer producers.

Cleaning up the act

Recognising that pollution and energy go hand in hand, both Escom and Sasol are committed to taking defensive action

Energy is a dirty business. The unpalatable fact is that with most available technologies, the production and utilisation of energy strips the environment of materials needed by Man and pours back that which he could well do without — unless costly steps are taken.

"It is a question of striking the right balance," says Escom's Jaap van Deventer, assistant commercial manager responsible for environmental impact control. "Reducing environmental impact costs money. We therefore try to scale our efforts to conform to the public's value systems. If we are in advance of public opinion and spend too much on pollution control, we are accused of incurring unnecessary costs. If we spend too little we are criticised for polluting the environment."

Beliefs on pollution standards also tend to fluctuate with the economic cycle. Both at home and abroad the demand for control is stronger in times of prosperity than in leaner times when there is pressure to cut costs.

Escom's current measures to save the environment add about 4% to its electricity tariffs. Last year this meant about R132m. Van Deventer says further pollution control measures, which would add another 11% to tariffs, could be implemented if even more stringent controls were demanded.

Pollution decisions often involve more than just money. They must also take account of a combination of environmental impacts. As part of its effort to stretch coal reserves, for example, Escom has decided to use low grade coal with a relatively high ash content of about 25%. But it costs about 4% of the capital cost of a power station to prevent this ash from spewing into the air after it has been burnt in the boilers.

If higher grade coal was used, the cost of keeping the air clean would be lower, but the country's coal reserves would not last as long.

Escom's new 3 600 MW stations are now equipped with electrostatic precipitators which trap 99,5% of solid pollutants in smoke. They prevent about 2,4 Mt of ash from entering the atmosphere each year at each station. Equipment in older stations traps 98% of solids but consideration is being given to upgrading performance to the 99,5% level.

Pollution fight . . . on top of old smoky?

Sasol has similar problems. Its two newer plants in Secunda were designed with ash collectors while the old Sasol One was fitted with this equipment in 1975.

Sasol has a problem with hydrogen sulphide, the evil-smelling gas which was pushed over the Witwatersrand from the eastern Transvaal this year by unusual cyclonic conditions. It might not all have come from Sasol but the company hopes to contain its hydrogen sulphide emission with a R150m plant, the first of its kind in the world. It will be tested later in the year.

But even if it works perfectly, there is no guarantee that Johannesburgers will forever be free of hydrogen sulphide because it is a fairly common pollutant and could come from a number of other industrial undertakings.

Most coal contains sulphur and Escom tries to avoid siting its coal-fired stations in areas where levels of sulphur dioxide in the atmosphere could become excessive and create so-called "acid rain." It has had to pay up to 10% more for coal in relatively less polluted areas to ensure that this policy is maintained.

Van Deventer says levels of sulphur dioxide at ground level around Escom plants are still well below the US government-allowed maximum of 30 parts per billion. These standards have also been adopted by the SA Department of Health.

Nonetheless, with a number of new power stations going up in the Transvaal, the situation will be carefully monitored to ensure that all coal-burning processes in the area do not collectively produce unacceptable levels of sulphur dioxide.

Their operating licences forbid both Escom and Sasol's Secunda plants from discharging effluent into the country's rivers. They consequently treat and recycle effluent, which is a costly process but saves some money which would otherwise have been spent on buying new water. This is one happy instance where pollution control is not entirely without direct cost benefits.

Escom spends up to 15% more than necessary, according to its own technical standards, to re-route power lines in cases where they would be a particular eye-sore or interfere with farming and industrial operations.

Another of its big expenses in looking after the environment is the rehabilitation of the ground used for the vast open cast mines which supply its power stations. The objective here is to leave the land in at least as good a condition as it was before mining commenced. Crops and grazing land which now abound on many such sites testify to the success of these efforts which account for 2% of total open-cast mining costs or about R22 000/ha.

As far as radioactivity is concerned, Escom regards prevention of damage to the environment as a safety rather than a pollution problem. "As far as we are concerned, if our own personnel are safe, then the areas around our nuclear plant will be safe," says Van Deventer. Numerous extra safety measures costing millions have been added to the Koeberg nuclear power station since it was first designed.

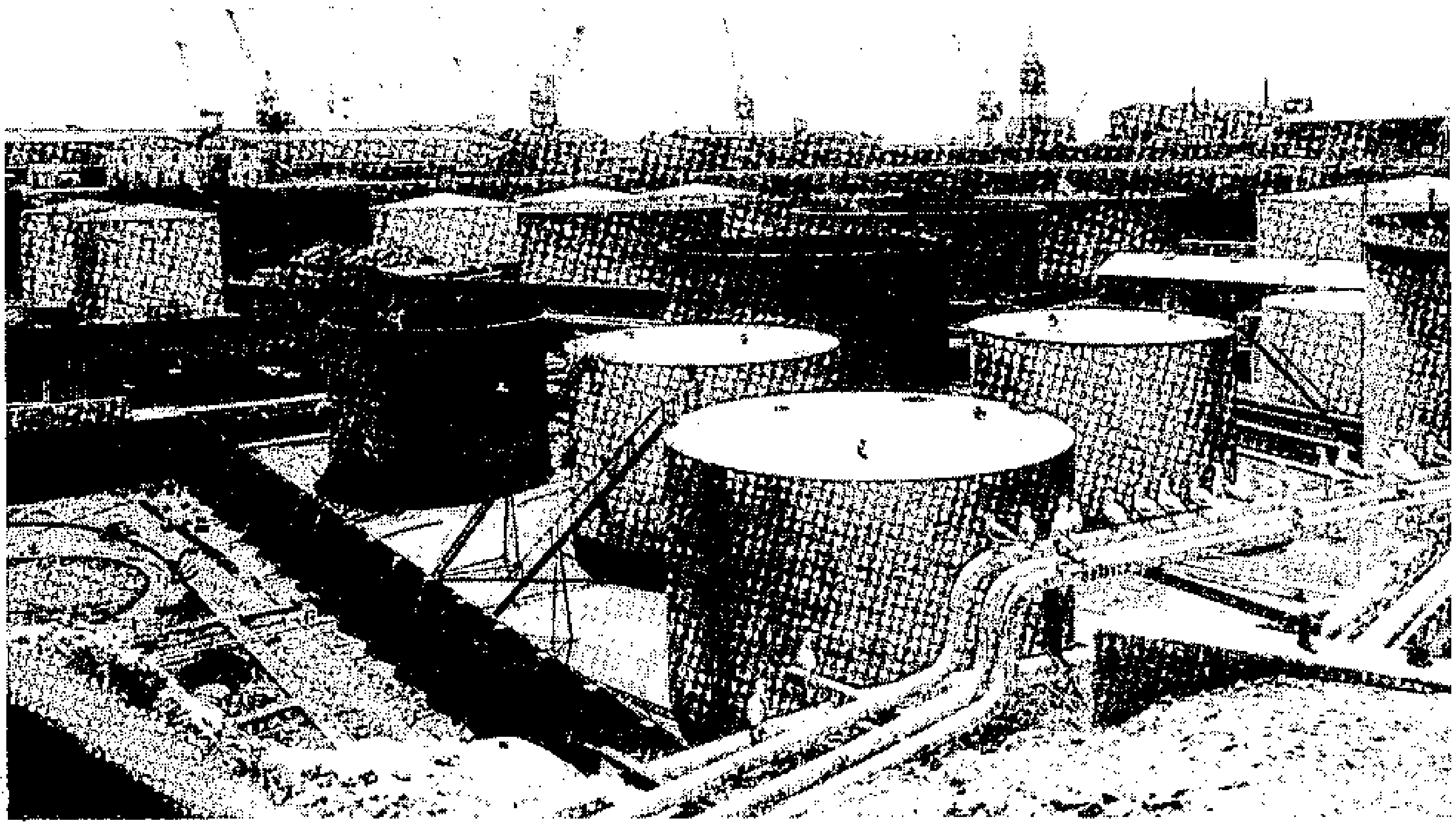
In the longer term, both organisations may have to combat pollution of the air by carbon dioxide which is produced by the burning of any fossil fuels, including petrol in motor cars. Too high a concentration of carbon dioxide in the atmosphere could create a "greenhouse" effect and trap the sun's heat. Ultimately, scientists says, this could produce drastic weather changes which could melt the polar ice caps.

But for the moment, the problem is theoretical rather than real. If it becomes serious, the burden of solving it will have to be shared by the entire community. Nonetheless, Escom is already researching the matter.

Says Van Deventer: "I would not like my children to tell me in my old age: 'You knew there might be a problem, but you did nothing about it.' "

They seek it here, they...

SA's oil search has been in progress for nearly 20 years now, but at last there are signs that fields are there for the exploiting



Tank farm ... now for local input?

After a search of almost 20 years which has cost more than R430m, the State-run oil exploration company, Soekor, has found a field of exploitable offshore gas and light oil.

The field, about 100 km off the southern Cape coastal town of Mossel Bay, has sufficient oil to meet 8% of SA's light oil requirements, and the gas is convertible to petrol.

Current thinking is that a refinery industry will be developed in the Mossel Bay area, but first will have to come detailed feasibility studies on the most economic exploitation route and means of transporting the gas and oil to shore.

Soekor chairman Dr Nico Stutterheim has said that it will take years before fuel is produced from the Mossel Bay field.

Decisions on the methods of exploiting the reserves will be taken at highest government level — the Energy Priority Committee, whose activities are covered by the Official Secrets Act.

Soekor decided to seek offshore oil in 1966. Thereafter, it was announced in 1968 that, after analysis of seismic tests, the search would be concentrated in the Mossel Bay and Plettenberg Bay areas.

The first reports of a show of gas were reported in 1969 by the Glomar Sirte, a drilling ship owned by Superior Oil.

This encouraging sign came less than three years after the decision to go looking offshore and after R27m had been spent on the search. Throughout the Seventies the search continued and, in 1982, the GM of Soekor, Dr Piet van Zijl, described 1981 as the most promising year in the exploration programme to date.

By that stage SA's gas reserves totalled 400 000 Mft^3, only 20% of the reserves needed to justify an offshore gas and oil industry.

In October 1982, after a disappointing start to the year, when the exploration budget was cut by R10m, the Sedco K drill rig struck oil off Mossel Bay.

It was described as the biggest strike yet in the area, with good quality oil. However, the reserve was too small, at only 900 billion/day.

The hunt for additional reserves continued, and the target of one trillion cubic feet of gas, yielding the equivalent of 20 000 barrels of liquid fuel a day, will soon be reached.

The final decision on whether to go ahead with a scheme to exploit the offshore gas and oil field will have to be taken with the prospect of yet another Sasol plant in mind. At this stage, the relatively cheaper offshore option seems likely to get the nod.

A decision to go ahead with an exploitation programme at Mossel Bay could be the signal for an accelerated exploration programme, involving private sector companies as well as multinationals and Soekor. It is also possible that the Namibian gas fields will be re-assessed in the light of developments off the southern Cape coast.

New hand at the helm

As new director general of Mineral and Energy Affairs, Louw Alberts will have a pivotal role to play in the immediate development of SA energy. The upcoming national energy plan is a case in point

For all his 60 years, new director general of Mineral and Energy Affairs Louw Alberts swept into office in July like a breath of fresh air.

Speaking to the *FM* only four days after his appointment he gives the impression that his department may in future lose some of its secretive image. His frank responses in the question and answer session on energy policy elsewhere in these pages are further evidence of the change.

"We should not adopt a policy of keeping information from the public on the basis that grand-daddy knows best," he says. "We should tell them as much as possible in broad outline about energy without embarrassing our overseas partners and friends. I sense a growing sympathy for this attitude in government circles."

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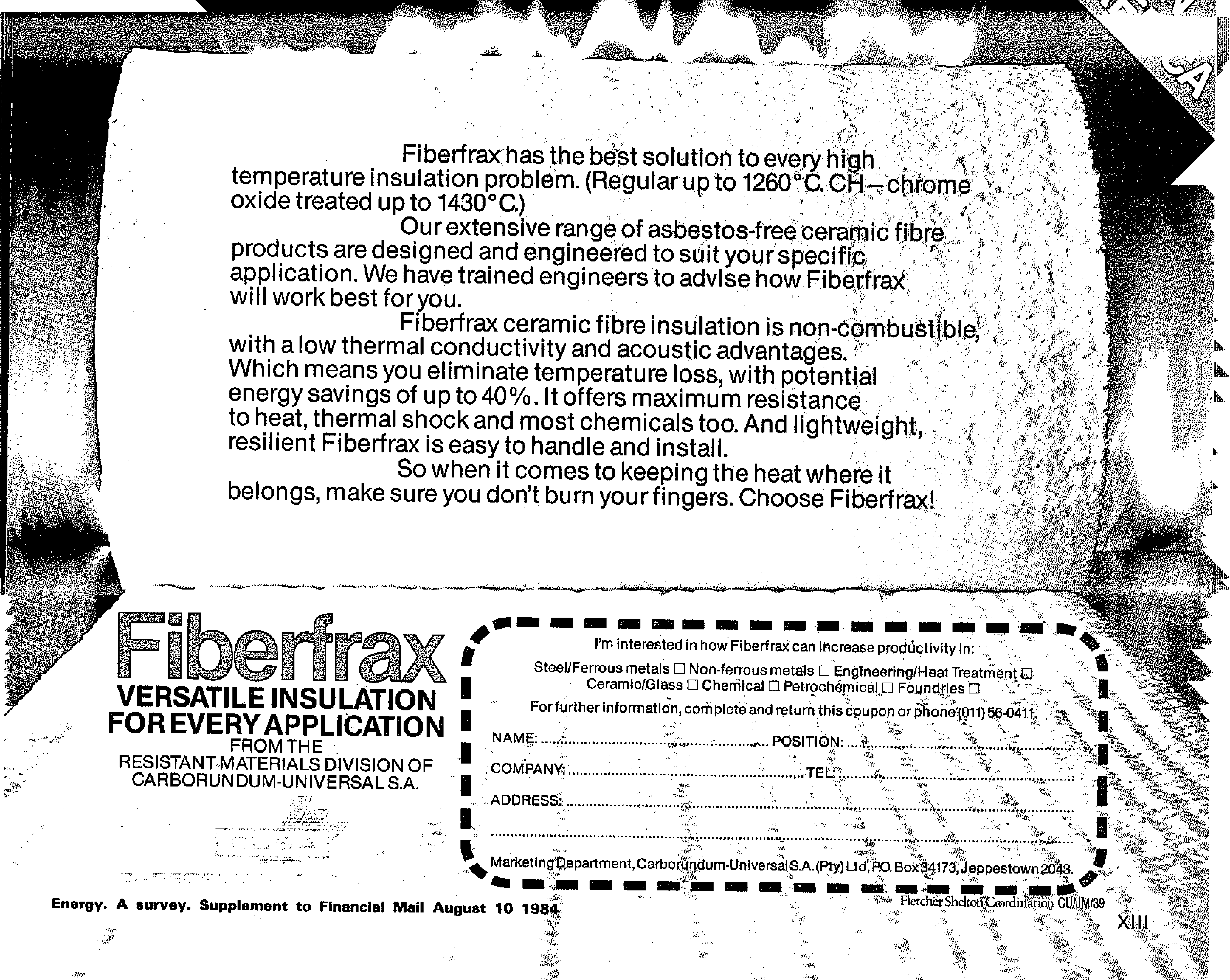

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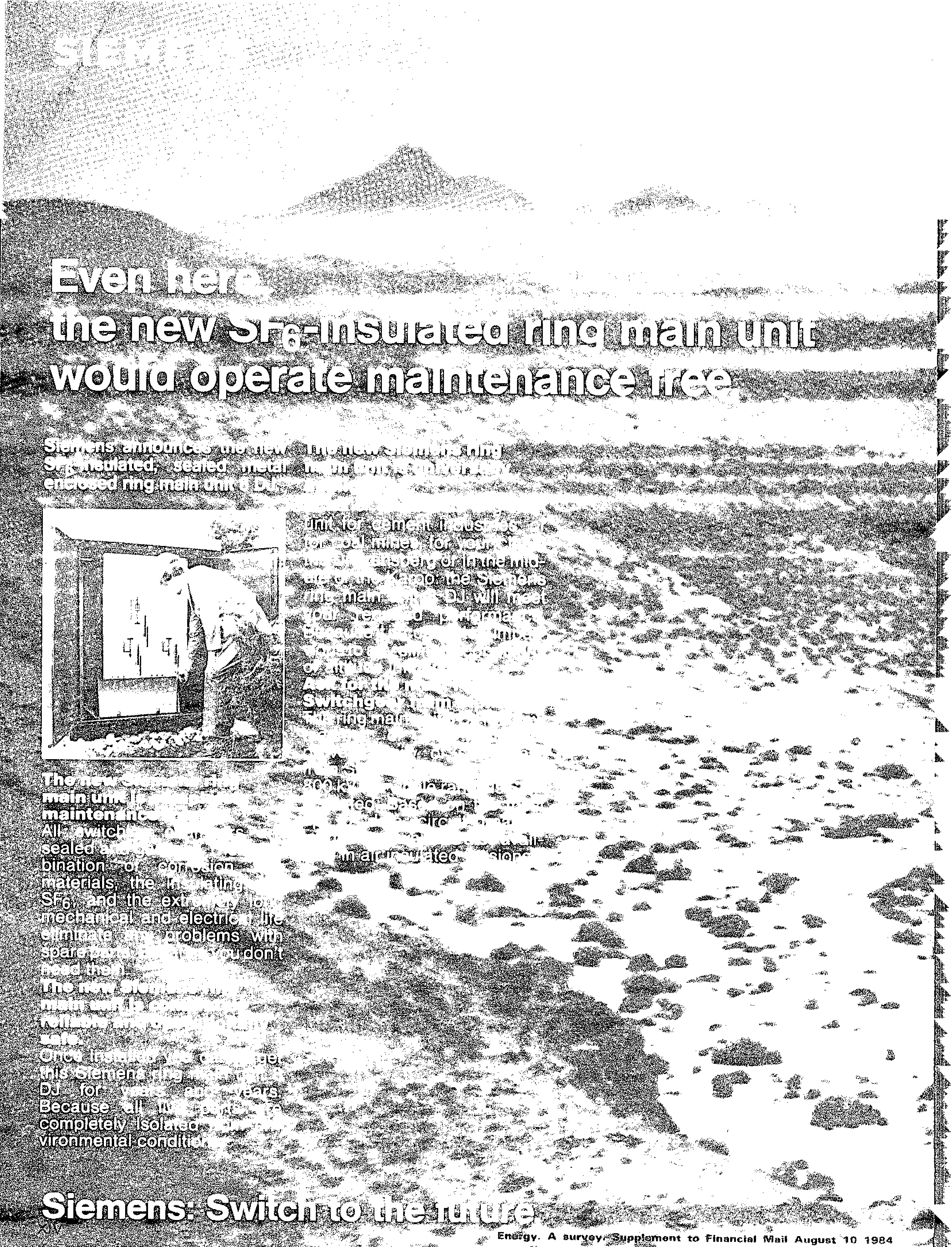

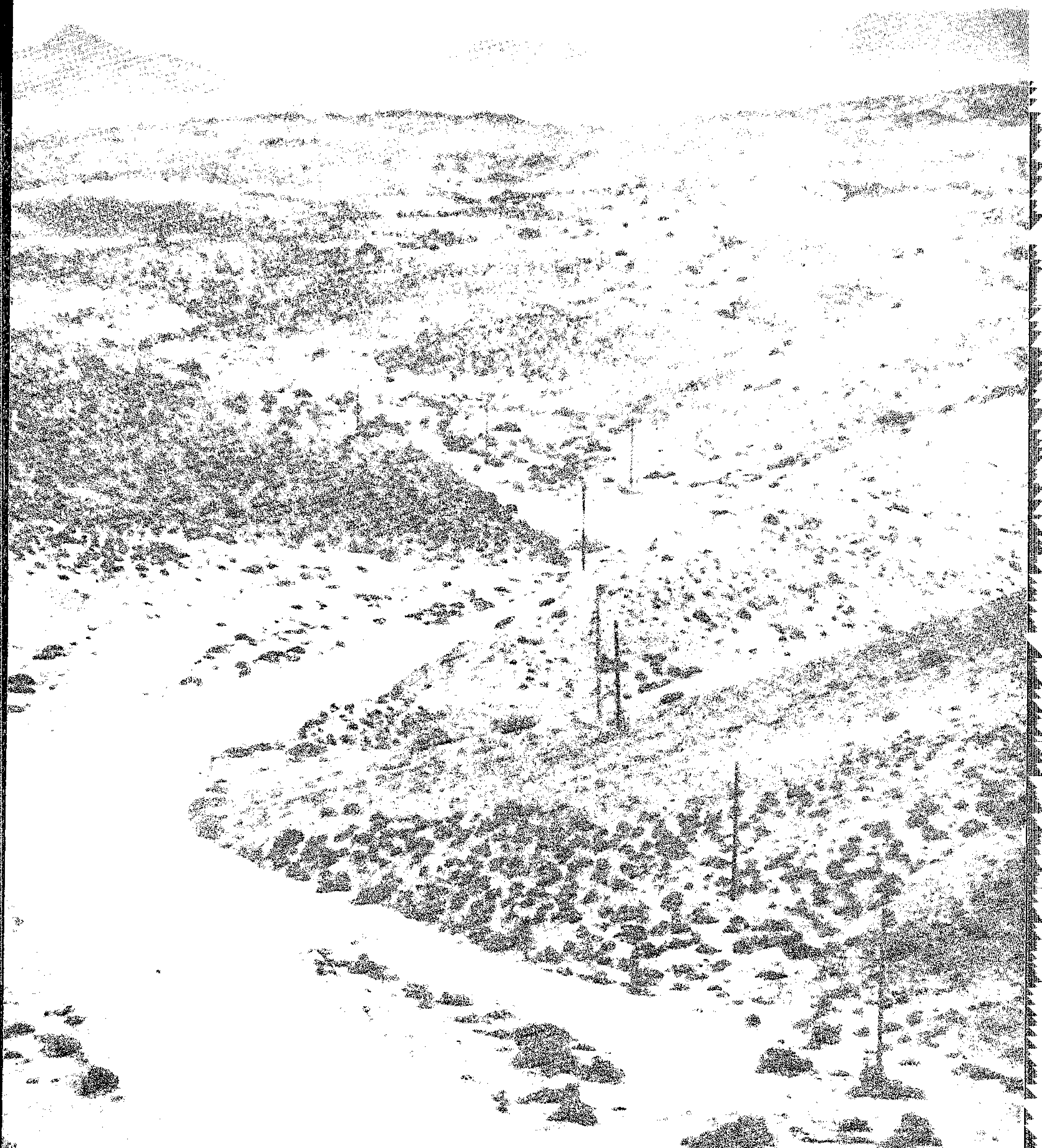

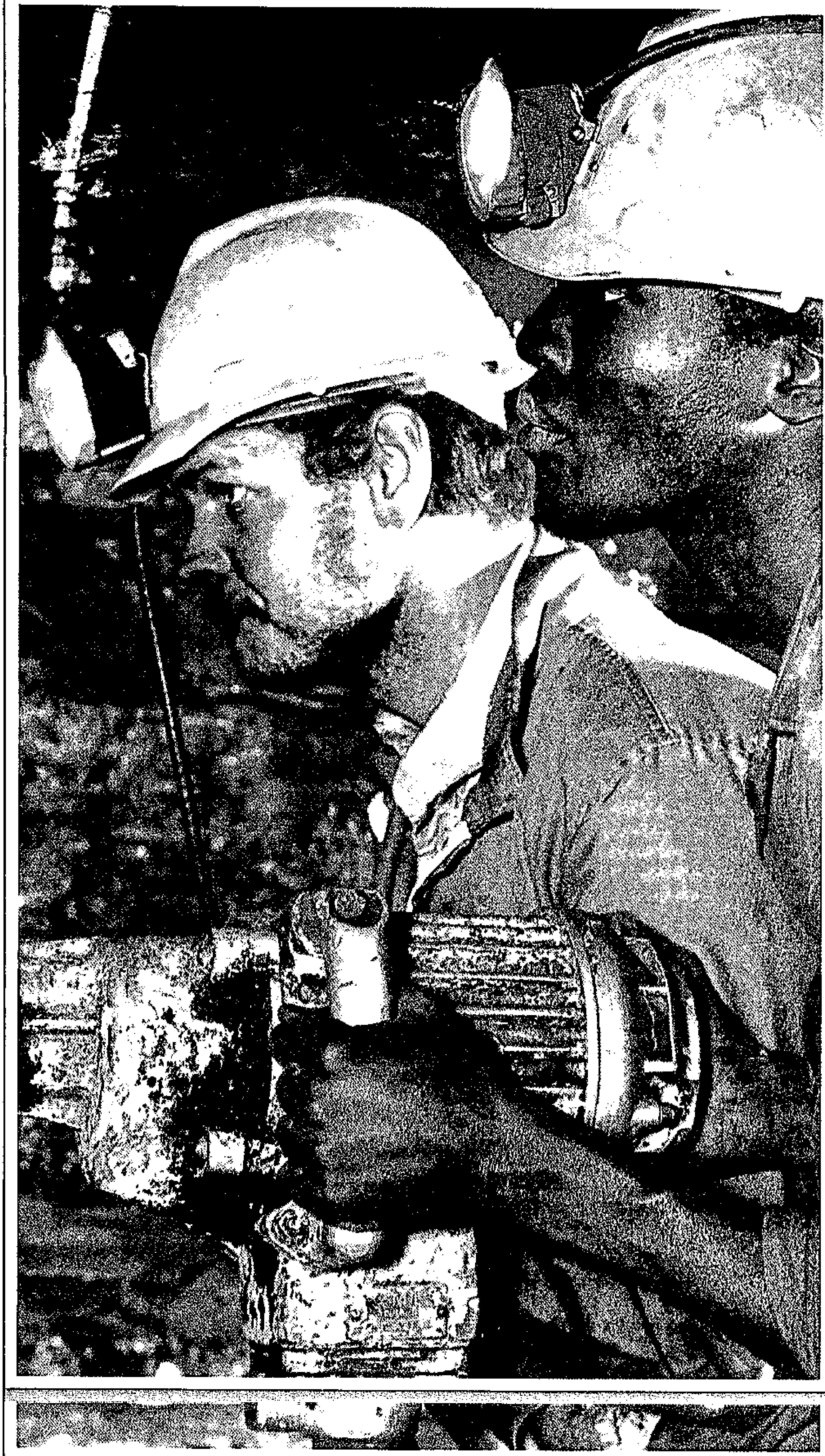

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shrewd PR, but Alberts is one of SA's most eminent scientists. He has published numerous works on solid state physics and minerals as well as the philosophy of science and science policy.

While doing post-graduate work on scholarship at the University of Sheffield in the UK, he made discoveries relating to magnetostriction in rare earth metals. As a lecturer and physics professor at the University of the OFS and RAU, he trained some of the country's leading physicists between 1946 and 1970.

From 1971-1977 he was vice-president of the Atomic Energy Board. Before his present job he was director general and, later, president of the Council for Mineral Technology (Mintek).

He has addressed numerous international science conferences and was invited to Quebec to advise the Canadian government on mineral research.

He is a member of the British Institute of Physics and sits on the Prime Minister's Scientific Advisory Council.

Alberts does not see his new role as exclusively administrative, but rather to "make judgments on technical and industrial matters." In fact, one of his most important current preoccupations is to complete the White Paper containing the national energy plan which is due to be tabled fairly soon.

"Optimising our energy resources involves the finding of a number of sensitive balance points," he says. "To what extent do we balance the use of our coal with our nuclear resources? To what extent do we become independent of imported oil?

"It is clear we need some self-sufficiency for strategic reasons, but too much could be more than we can really afford. Further, these balances are dynamic as they are determined by international monetary and political factors as well as advances in technology."

In joining the civil service after years of relative autonomy in Mintek, he concedes: "Bureaucracy can hit you in the teeth, but is unavoidable in any big organisation and, more often than not, justified.

"Any big organisation, whether it is government or private, has to live by rules and regulations which should be accepted with humour and understanding. But one must be savagely interested in updating these rules when necessary."

Alberts has been involved in Christian youth activities for 33 years. He is a cofounder of Action Moral Standards and has been involved in the Gideon movement. He has also served on Dutch Reformed Church Councils from time to time and has written numerous articles on theology and science and the Bible.

He is married with three sons and a daughter, all of whom were, or are, at university.

One of his pastimes is hunting on a friend's farm in the Free State. Otherwise, he retreats to a remote valley on the Wilge River in the eastern Transvaal where the family has a plot with about two km of river frontage.

"My retirement age is a maximum of 65 years so I am treating this appointment as a last lap job," he says. "Nonetheless, I am working twice as hard as in my previous job.

"Why did I take it? The work itself is stimulating but, more important, knowing that it has to be done gives me satisfaction. It is the relevance of the job which makes one happy."

View from the top

Dr Louw Alberts, the new director general of the Department of Mineral and Energy Affairs (DMEA), answers questions on strategy and the state of the SA energy sector

***FM*: How would you define the role of your department in SA's energy affairs?**

Alberts: The department is the executive government agency charged with the formulation and execution of the national energy policy. All of the energy and mineral related functions and responsibilities of government are seated in the department. This places it in a key resource policymaking position considering that coal, our main energy carrier, is at the same time also a mineral of particular importance. It is second only to gold in earnings of foreign exchange.

Future energy policy decision making will henceforth be done on the basis of a National Energy Plan which will have a short- medium- long-term planning horizon. The energy branch of department is compiling individual energy plans concerning, *inter alia*, coal, uranium, natural oil and gas, electricity, synthetic fuels, renewable energy sources, conservation, enviromental aspects and energy research and development.

DMEA's Alberts . . . coal goal

Although the procedure for review and implementation has not been decided on, it is quite possible that a National Energy Plan could be tabled for Parliamentary approval on a bi-annual basis.

In a nutshell, DMEA has to formulate the policies and, where necessary, set up the mechanisms that will enable the private sector and the state corporations to provide the country with the best and cheapest forms of energy.

Total government funding for research and development on coal technology was only about R9m last year, among the lowest in the world in terms of expenditure per unit of consumption. In view of our special need to optimise coal use, will government be spending more in future?

The expenditure on research on coal technology must be seen in its proper perspective. Firstly, the expenditure you have referred to does not include, for example, research expenditure by Sasol. Although Sasol is no longer government-financed, the expenditure should be seen as a result of earlier government-funded activities.

It is a question of how such funds are utilised, in terms of the needs and the more specific objectives of the R & D programmes, with due consideration of the general shortage of skilled research workers in SA. Government energy research expenditure has been given a significant boost in the past few years.

As far as deciding on priorities for coal research is concerned, the department is advised by the Energy Policy Committee, chaired by myself, and the National Committee for Energy Research under the chairmanship of the President of the CSIR. The private sector is represented on both.

The introduction of a Coal Plan, which to a large extent will form the basis of the envisaged National Energy Plan, will further enhance our capability to set research objectives.

There was once talk that SA would be building at least one new major fuel-from-coal plant, but in view of the current oil glut, it is clear that no investment in such facilities would be worthwhile without substantial government assistance. Is government still prepared to offer such assistance? Do you believe real crude oil prices will continue to decline until the end of the century?

In view of the relatively low price of crude oil at present, new synthetic fuels plants are not economically viable without government assistance. Indeed this is true for plants anywhere in the world. SA is involved in synthetic liquid fuels primarily because of strategic considerations necessitated by concern over the stability of crude oil supplies to the country. The government is thus prepared in principle to offer financial assistance to new ventures. It views this as an insurance against disruption of the economy in the case of crude oil shortages.

What real crude oil prices will do in the medium to long term is difficult to say. There appears to be consensus among international oil experts that oil prices will tend to remain soft for the next three to four years. Thereafter, a slow increase in real terms could be expected. The underlying assumption in this forecast is that no major disruption of oil supplies from the Middle East will take place. This aspect, of course, is of great concern to the Western world.

The unpredictability of oil prices is illustrated by the fact that over many years there has been a roughly fixed empirical relationship between the price of oil and the price of gold and you know how uncertain the latter is.

Growth in diesel sales has sometimes necessitated the production of more petrol than the country needs. Does this potential for imbalance still exist? Which of the following measures are best able to rectify it, retail price adjustments on petrol and diesel, the use of methanol in diesel engines, the lifting of speed limits or advances in refining techniques?

The potential petrol/diesel imbalance is still of concern. To place this problem into perspective, it is necessary to note that, historically, the diesel growth rate has been substantially higher than that of petrol. For instance, in 1950 diesel sales amounted to only 15% of petrol sales, whereas this figure increased to 90% in 1980. Since 1980 the position has improved somewhat, but this is considered to be mainly because of the decreased demand for diesel as a result of the recession and the drought.

All the measures you mention could be used to alleviate a potential imbalance, although some would be more effective than others. The negative aspects of some of the measures should also be considered. For instance, a substantial increase in the diesel price relative to that of petrol could impact negatively on the economy, and on the agricultural sector in particular.

As I see it, government would probably have to use a combination of measures to increase the supply of diesel relative to petrol, and curb the demand for diesel by substituting petrol for diesel in certain applications.

The country's need for imported crude oil must have declined over the last few years as Sasols Two and Three approached their full production capacities. Are imports of crude declining accordingly? Or is stockpiling still taking place?

Imports of crude oil have naturally declined with the increasing production of Sasol Two and Sasol Three. This reduction of crude oil imports, however, is less than the quantity of crude oil replaced by the Sasol production of fuels because of growth in market demand.

Stockpiling is a strategic matter and you will appreciate that I cannot comment on it.

It is believed by some that SA could increase foreign exchange earnings by greater beneficiation of some of its minerals exports. But beneficiation is electricity-intensive and some exporters say escalating tariffs could put them out of business. Further, some minerals exporters are already receiving massive electricity subsidies from government which would probably not be countenanced by the GATT. What are the plans to cope with this problem?

This matter is presently receiving attention by the Department of Industries and Commerce and my department is not directly involved in the issue.

I wish to add that higher beneficiation is usually more easily talked about than accomplished. It is not only the added energy component that has to be considered but the considerable capital intensive nature of such plants and particularly the involvement of highly skilled manpower, of which SA has a perennial shortage.

What are the latest actual and projected figures of SA's coal exports? How do they compare with the figures given in the original coal export programme and how do prices compare with original estimates?

South Africa was the largest exporter of steam coal to world markets during 1983. SA coal exports amounted to an all-time high of 25,75 Mt (29,95 Mt in total, including lean coal and anthracite), representing some 29% of the international steam coal trade. But foreign exchange earnings, because of the depressed market situation, decreased to R955,97m, some 12,5% down on 1982.

As for coal exports for the first quarter of 1984, exports of bituminous coal increased by 38% (7,5 Mt) over that of last year, but the average unit price was 2,6% down at R38,84/t. Anthracite exports for the first quarter amounted to 322 736 t, a 26% increase over the previous year with the average unit price increasing by 5,5% to R39,83/t. Projected total coal exports for 1984 are believed to be in the 34 Mt-35 Mt range, that is some 16%-17% higher than last year.

No definitive view was taken on future coal prices in the original announcement of the Phase III coal export programme in the sense that a particular price level should be attained at any particular time. Government's decision to increase coal levels, was based on resource adequacy to maintain such a programme for at least 30 years. It is for the coal industry itself, indeed for each individual company, to find a market at the appropriate time and at a market-related price.

The 44 Mt/year ceiling of Phase III was announced in the late Seventies, but will be based only on present forecasts by industry. This could be achieved by 1987. Exporters holding provisional Phase IV allocations are presently engaged in their marketing exercises and estimates appear to differ widely on when this coal will be placed on the market. None of the Phase IV provisional allocations have been confirmed to date, and it goes without saying that should any company not be able to find a market, the provisional allocation may be turned down. There is not, and never has been, any pressure from government's side to export coal. The provisional allocation represents only an opportunity to do so at the discretion of the exporter.

Have there been any recent changes in estimates of SA's exploitable coal reserves? If so what are they?

Since the publication of Bulletin number 74 of the Geological Survey, entitled *Coal Reserves of the Republic of South Africa — An Evaluation at the end of 1982*, which was published during May 1984, there has been no change in the estimates of both the *in situ* mineable and the economically recoverable coal reserves.

Therefore, the latest estimates remain at 113 329 Mt bituminous and 2 201 Mt anthracitic coal, giving a total of 115 530 Mt of in situ mineable coal. The estimated economically recoverable reserves in terms of present day costs and prices are 57 541 Mt bituminous and 863 Mt anthracitic coal, giving a total of 58 404 Mt.

SA is a net exporter of energy. How has this balance changed over the last few years and how is it expected to change in future?

SA is an important world net exporter of energy. Should thermal coal exports, less electricity and oil imports, be considered, then a fourfold increase in net exports of energy was realised during the period 1980-83.

However, this is not a true reflection of the total situation since the export of energy in the form of uranium should also be taken into consideration. The export of uranium has increased by approximately 30% over the last four years; and last year, the thermal energy value of the exported natural uranium was almost three times that of the coal exported.

Continued growth of net exports of energy is envisaged although a slower growth is expected for uranium exports than in the past. On a thermal basis, exports are expected to double by the end of this decade.

Apart from direct energy exports such as coal and uranium, a significant additional amount of indirect energy is exported in the form of beneficiated mineral and metal products such as ferroalloys, silicon and manganese metals. SA is the largest exporter in the world of some of these. Gold may be regarded as the country's most energy-intensive metal export.

SA has made a large investment in facilities for the enrichment of uranium. Are there any plans to export it? If not, how do we justify the costs in view of the fact that we have only one nuclear power station and, possibly, will have two by the turn of the century? Are there any plans to produce reactor fuel elements or intermediate products capable of being processed into fuel elements?

These questions all refer to aspects of the nuclear fuel cycle and are dependent on the future role of nuclear power generation in SA. This is one of the subjects under investigation by the Commission of Inquiry into the supply of electricity under the chairmanship of Dr Wim de Villiers. Studies by parties such as the Atomic Energy Corporation and Escom are being prepared for submission to the commission on the subject.

Under the circumstances, it would be premature to comment until the commission has released its report.

For many years, growth of SA electricity consumption has outpaced growth in gdp by about two percentage points. Do you expect this pattern to persist in future?

The fact that electricity consumption has outpaced the gdp in the last few decades is understandable because electricity increased its market share of the total national energy consumption. During this period the growth rate of the economy, measured against the gdp, was also comparable with the growth rate of total energy consumption.

However, the margin between the growth rates of the economy and electricity may be expected to diminish in time and may even vanish because of several factors. Firstly, the bigger market share gained by electricity may reach a saturation point because of decreased substitution of other energy forms by electricity. Secondly, given a measure of economic activity, a smaller measure of energy may be required because of energy conservation. Future growth in the economy may not necessarily require as substantial a growth in electricity as in the past. Thirdly, growth in the economy must be defined in terms of its sectoral growth to identify electricity's contribution.

There is a worldwide tendency for a bigger growth in service sectors than energy-intensive sectors, particularly in the more advanced societies, which may cause a slower rate in the growth for electricity demand.

Petrol on the Reef costs about 6,5c/l more than petrol in Durban, ostensibly because of the cost of conveying it from Durban through the SATS pipeline system. But it is well known that most petrol sold in the Transvaal and the northern Free State is supplied by Sasol plants in Secunda and Sasolburg. Why are these pipeline charges still levied? And when can motorists on the Highveld expect them to be scrapped?

As is the case with oil refineries, the economic viability of the inland synfuel plants was based on the established principle of having to compete with imported products. For the OFS and Transvaal, it is clear that landed costs include inland transport costs as is the case with products refined in crude oil refineries.

In evaluating the optimum geographic location of any industrial venture, transport costs of competing products to the target markets has a vital bearing on the viability of the venture. These considerations are basic to our economic framework and any deviation would not only imply a serious interference with market forces, but disrupt the optimal industrial structure.

This would then have serious consequences for the investment climate.

Any other sector of manufacturing industry would be similarly disrupted by such interference in the normal market structure of transport costs.

Finding the secrets

For a country with abundant energy potential, SA is woefully short on commitment to research

Energy research in SA is not yet a major national priority. Indeed, the record is a dismal one. For example, although it is one of the largest users and exporters of coal in the world, only Italy spends less on coal research.

However, the so-called energy crisis of the early Seventies and the growing awareness of SA's strategic vulnerability are two important factors that have helped overcome both government and industry inertia.

"The situation is improving," says Professor Richard Dutkiewicz, head of the Energy Research Institute and of Mechanical Engineering at the University of Cape Town, "but we still have a long, long way to go."

Today the ERI is the country's major energy research organisation and receives the lion's share — some 40% — of the CSIR's budget for research in this field. It is the only organisation in the country which tries to cover the energy scene in its broad sense.

"We try to do some work in as many areas as possible. Thus, if someone comes to us and says that manure is the answer to our energy problems, we can at least answer them sensibly," says Dutkiewicz.

The ERI looks in depth mainly at energy aspects that are of financial interest to government and industry. It receives no financial help from the university and relies exclusively on outside funds. Of the outside funding, 70% comes from the CSIR in the form of sponsored projects, and the rest from the private sector.

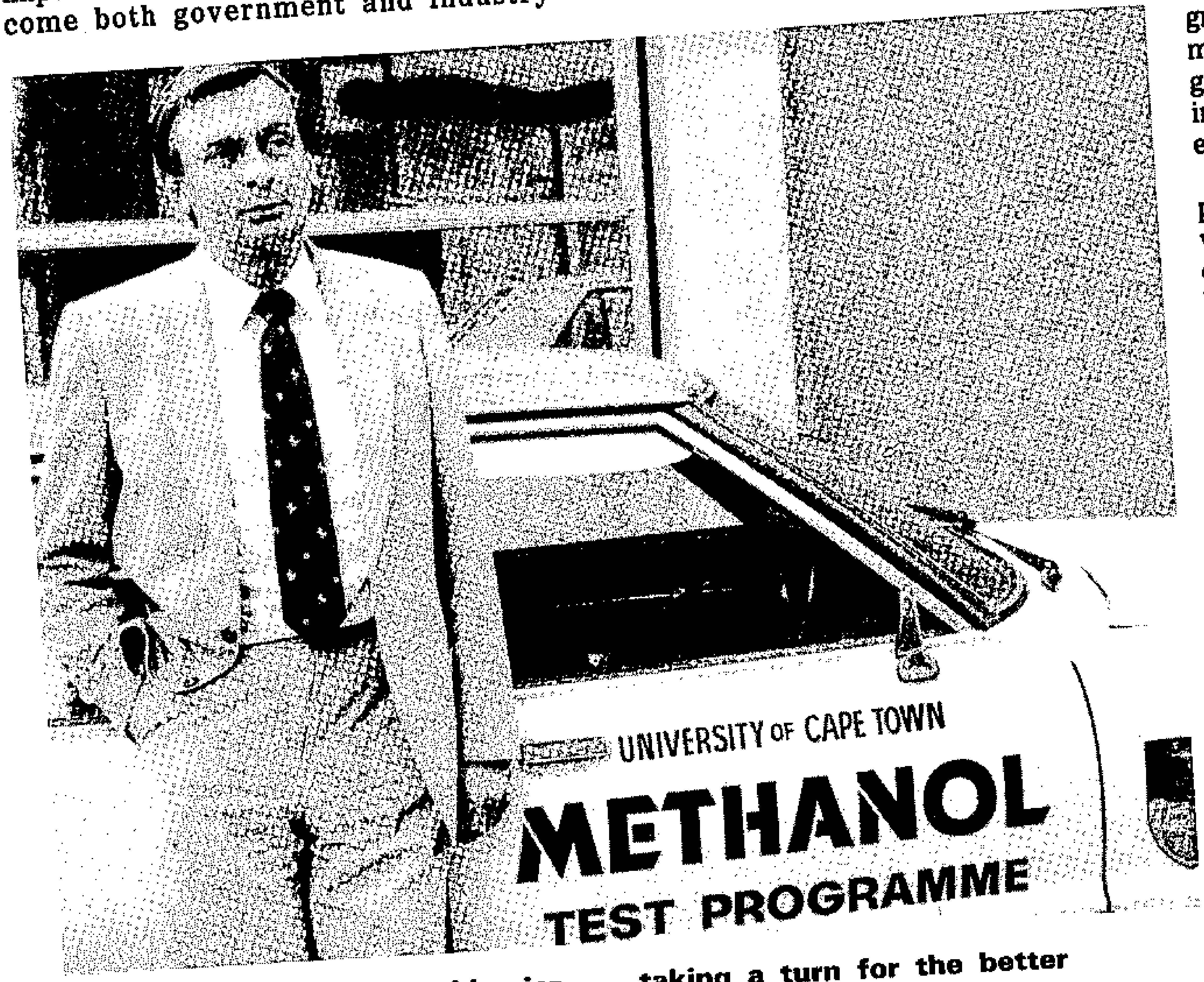
"We grow as the demand for our services grows," Dutkiewicz explains. "Since all our money comes from the outside, we can grow only according to what funding comes in. We operate on a commercial basis rather than in an academic environment."

In practice, this means the ERI approaches industry or industry comes forward with proposals for specific research orientated towards its particular needs. Work for the CSIR, on the other hand, tends towards the national need.

"Everything we do must have a purpose behind it," says Dutkiewicz. "We can't do nice academic research because we don't get paid for that."

The one exception is the funding the ERI receives from its 25 industrial members. These include Sasol, AECI, Anglo, oil companies and mining companies who pay annual subscriptions of between R2 500 and R6 000. Part of this pays for research that is of no immediate commercial interest. Often this work finds a sponsor. One example is the Escom-backed probe into wear problems in coal-grinding mills.

Dutkiewicz says these industrial members do not quite control the activities of the ERI but they do advise it on which areas of research it should be doing. These vary from year to year as priorities



Researcher Dutkiewicz ... taking a turn for the better

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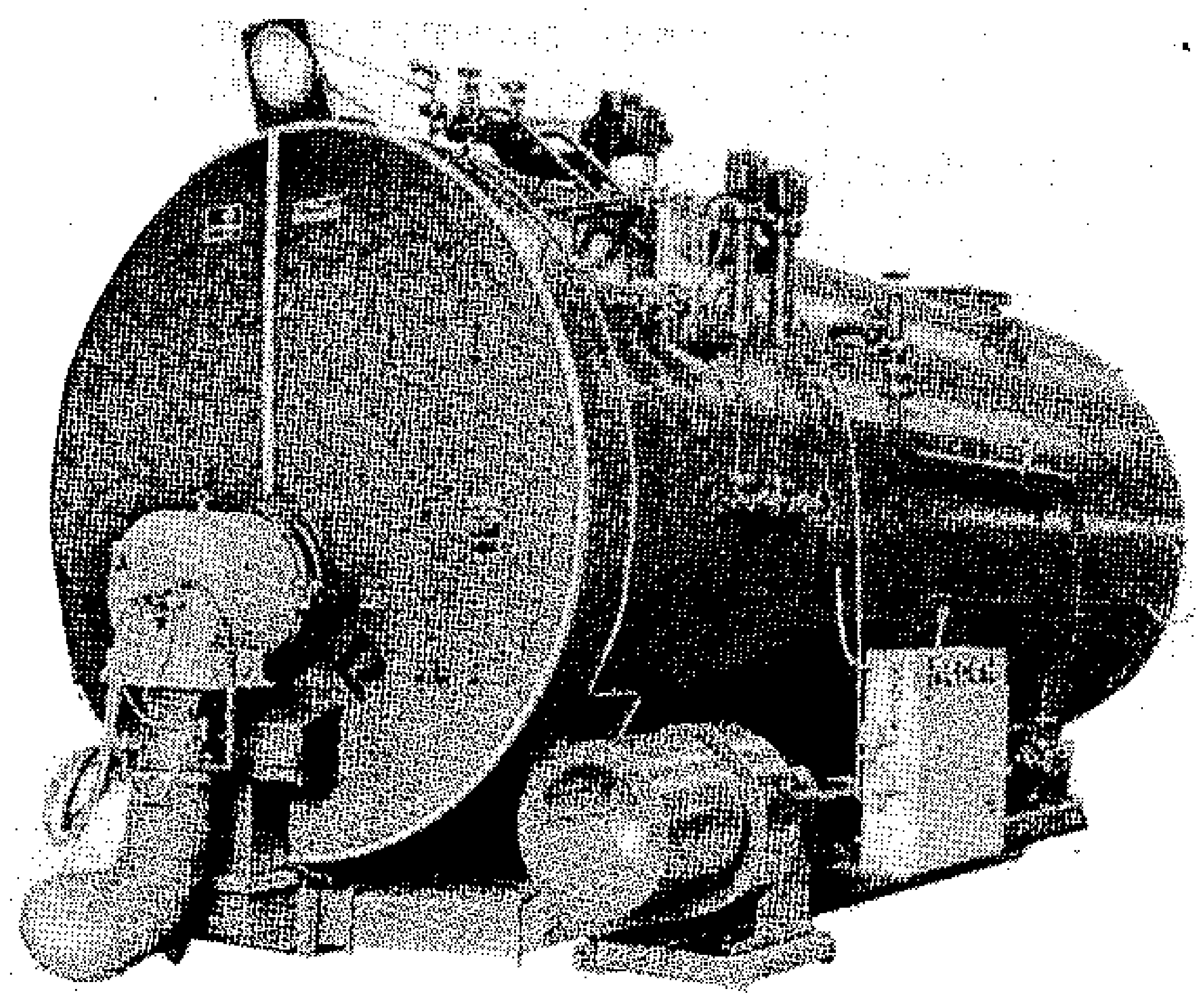

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change, but the three main subjects are alternate fuels, coal and appropriate energy technology.

The ERI initiated SA research on methanol as a potential fuel. Consequently, it is justified in claiming to be the technological leader in alternate fuels and the internal combustion engine, and in the combustion of fuels.

Research includes looking at ways of improving alternate fuels, problems relating to these fuels and ways of making the manufacturing process cheaper. Says Dutkiewicz: "Our work is concentrated on the engine side. We do not deal with the chemistry. That we leave to others."

Experimentation with methanol and ethanol has been going on for nearly 10 years. The ERI has been running a fleet of five cars and five trucks on these fuels for several years. One of these cars has now done over 150 000 km on pure methanol.

Research into methanol and ethanol is a continuing process and Dutkiewicz says that the stage has been reached where methanol could be introduced to the transport fleet fairly readily.

"But there are always improvements, always better engines that can be made and other areas where methanol could be introduced. For instance, methanol could be introduced to an ordinary spark-ignitioned car quite easily. However, we are now trying to find ways of introducing methanol into diesel engines, which is a far more complicated process."

Assembly-line problems excepted, Dutkiewicz maintains that motor manufacturers could start producing methanol-powered cars for commercial sale within two years

Sasol fuels are also regarded as alternate fuels by the ERI. "In spite of what anyone says, it is not petrol or diesel. Sasol fuel is something that looks and behaves similarly, but it is not exactly the same."

The ERI should know. It examines Sasol fuel regularly and suggests improvements from the engine point of view.

Other work carried out by the ERI on alternate fuels includes looking at the introduction of methanol into spark-ignitioned engines as a matter of wider economics. It is also studying new ways of making diesel from methanol.

"We try to find new routes rather than time scales," Dutkiewicz says. "What becomes the preferred route depends very much on politics, strategy and infrastructure costs."

The institute's work on the other high-technology area — coal — is concentrated on fluidised bed combustion (FBC) boilers for discarded coal. The process involves a boiler on a bed of sand. Air is blown through the sand to make it behave like a fluid. A small amount of coal is introduced and ignited and the sand particles then burn quite easily. The method can be used to ignite many coals that are otherwise difficult, or even impossible, to burn.

The ERI is looking very carefully at this method because the coal can be substituted with very high ash discard coal. The boiler cannot tell the difference.

Dutkiewicz explains that the need to come up with a solution is urgent because, for every ton of coal exported, a ton of rubbish containing as much as 60% ash and 13% sulphur remains.

As such poor quality coal cannot be burned at present, it is simply dumped in the eastern Transvaal. Apart from the waste, such dumps are causing environmental pollution because many ignite spontaneously, giving off hydrogen sulphide.

Work on fluidised bed combustion boilers is quite advanced and Dutkiewicz believes they will become both technically and environmentally feasible on a commercial basis.

An area of research which has just got off the ground with a hefty injection of funds from the CSIR is, appropriately enough, energy technology. This, Dutkiewicz says, is aimed at addressing "the most serious energy problem in the country." That problem, simply, is that 75% of the people of SA do not have enough energy to heat their food.

"It is impossible to talk to them about nuclear power or electricity when they haven't got enough energy available to cook a meal. So we are looking at the problems of the under-developed rural areas to see what can be done for people who, because of factors like deforestation, spend up to nine hours a week simply collecting firewood."

With firewood becoming a diminishing resource, people in these areas are now burning manure which, in turn, is depriving the land of nutrients.

"We've started with a survey to try and ascertain the magnitude of the problem — to find out what their energy needs are and what the state of deforestation is. We then hope to come up with solutions."

Another area that the ERI has looked at as part of its broad energy research programme is renewable energy. This includes various aspects of solar energy, biomass as an energy source, and the economics of wind and wave energy.

While he sees limited potential for wind and wave, especially in the short term, Dutkiewicz says that work continues, albeit on a limited scale. "Even when things are not immediately attractive, we must carry on with our research because there may be some special application that has possibilities."

He is far more enthusiastic about solar energy because he can see definite economic possibilities — specifically in hot water for the domestic sector in places far from the coal fields like Cape Town, Port Elizabeth, East London and Kimberley.

Energy conservation is another area tackled by the ERI. "We run courses on conservation," says Dutkiewicz, "but they have a mixed reception. If the price of oil goes up by a factor of two, we have about 100 people attending a course. Last year we had six."

He says people are not really interested in energy conservation as they believe they have other, far more pressing, problems to deal with, like labour and inflation. Wrongly so, he believes, because with just a little good housekeeping, he can guarantee a 10% saving in energy costs — and even more with a bit of capital investment thrown in.

So, despite the public outcry over the cost of energy, it is still too low to get most people conscious of the need to do something about it.

For its members, the ERI publishes a bimonthly information kit that includes an analysis of energy costs. It also does confidential consulting work for its members and some outside consulting work as well as overseas contract work. One such project was the conversion of a diesel engine to methanol for Daimler Benz.

Funds for research, or rather the lack of them, is a major bone of contention with the ERI. Suggests Dutkiewicz: "We must do as the Japanese did and make a concerted effort to do our own research, even if, to begin with, it is more expensive and more difficult. Unless we develop our own expertise, we will always be hanging on to someone else's skirts."

He believes that both government and private-sector attitudes are changing. He says the private sector is taking longer to change, however, because many companies still believe that they can get their research done better by their overseas parents. Government, he argues, has a better understanding of the country's strategic vulnerability.

He believes strongly that the beneficiary of a commodity like energy should be the one to pay for it. There is already a precedent for this principle, he argues, in the Water Research Commission, which lays down that part of the price of water must go to water research.

Also, as a result of a recent amendment to the State Oil Fund Act, money has become available that formerly went to Sasol. And, further, there is an accumulated levy on coal collected in terms of the old Fuel Research Institute.

"The mechanisms are there," Dutkiewicz sums up. "There are ways of getting money for energy research, but it needs a commitment."

Rural firepower

If the wasteful use of wood in the rural areas is to be checked, alternative energy sources will have to be developed

It is estimated that the underdeveloped rural areas account for 10% of SA's net energy consumption, and the bulk of this requirement is derived from woodfuel.

Anton Eberhardt, of the Energy Research Institute at the University of Cape Town, says the question of resources in rural areas is the real energy crisis facing SA.

"Energy cannot be separated from development," says Eberhardt. "The energy requirement is a product of development policy which, in turn, is limited by energy constraints."

Escom supplies 60% of Africa's electricity, and 94% of SA's power. It holds a 23% share of the country's total energy requirement, and this is expected to rise to 40% by the end of the century.

But the national electricity grid bypasses many rural areas and, in any case, it is an option that is too expensive for much of the rural population. Eberhardt estimates that 15,6m blacks living in the homelands and in SA's "white" rural areas consume an average of 12 gigajoules of energy derived from woodfuel every year.

Says Eberhardt: "Growing populations restricted to underdeveloped homeland areas are exhausting the natural resource base and are being denied access to new forms of energy which would relieve pressures on the natural environment and allow positive development activity."

There are three ways of alleviating rural energy shortages, according to Eberhardt. These are producing more firewood, using it more efficiently and adopting other forms of energy.

While alternative sources could have important applications in specific situations, Eberhardt believes they will not have a great impact on the overall rural energy equation.

A concentrated firewood production strategy will have to be the main course, says Eberhardt, although this will not be a solution in itself. "It would require 1m ha of plantation to provide for SA's firewood requirement on a sustained yield basis.

"The extent of a non-commercial firewood plantation is less than 2% of this, and over half of it is in Transkei. Another problem is that most of this plantation is degraded and neglected, and is not producing anything like its potential."

Dried dung and maize cobs are widely

Candles . . . lighting the homelands

used in rural areas as a substitute for wood, and their use can be directly correlated to wood shortages. The use of commercial fuel, and paraffin in particular, is related to the closeness of a community to the modern sector, both geographically and in the amount of contact individuals in a community have had with the modern sector.

The average paraffin consumption in South African rural communities seems to vary between 2*l* and 6*l* per household a month, although data on the subject is scarce.

While electricity is widely used in rural areas, its contribution in energy terms is negligible, according to Eberhardt. The main source is dry cell batteries for torches and radios.

There are isolated examples of homes using 12 V power provided by lead plate or home generators, while other commercial fuels used in rural areas include wax (in candles), and, rarely, coal, charcoal and gas.

Several fundamental considerations form the basis for the need to explore alternative energy systems, says Eberhardt. Among them:

☐ Centralised power stations have generally not met rural energy requirements;
☐ Rural electrification based on centralised systems has tended to be inequitable in the distribution of power;
☐ Rural electrification through the extension of central grids is highly capital intensive;
☐ Rural populations are widely dispersed, resulting in increased transmission losses and costs;
☐ Renewable energy resources are diffusely distributed and are appropriately collected and exploited in decentralised systems;
☐ Electricity is only one form of energy required for rural purposes.

Eberhardt says greater emphasis must be placed on the maximum use of solar, wind, water and biomass energy technologies.

"None of these technologies is very cheap and investigations into alternative energy sources have unfortunately resulted in generalised conclusions that no renewable energies are economical."

In many cases these conclusions are based on experience with centralised power systems, where any one renewable energy source is evaluated in terms of its potential to supply the electricity grid.

"But renewable energy technologies need to be matched to particular rural energy requirements," says Eberhardt. "There are many examples of appropriate alternative energy technologies. Some examples are anaerobic fermentation for the production of biogas, hydraulic energy for the production of electrical and mechanical energy, wind energy for the production of electrical and mechanical energy and solar energy for use as direct heat or for the production of electricity."

Other possibilities include hybrid wind/diesel generating sets, which are already cost-competitive in remote rural areas, and photovoltaic technology, new advances in which have resulted in substantial cost decreases.

There is no single solution to the rural energy problem, and what is needed, says Eberhardt, is an energy mix which matches the most appropriate energy supply with particular energy requirements.

Oiling the wheels

Between them, Sats and private road hauliers consume half of SA's petroleum fuels . . . but now, more than ever, saving is the name of the game

As far as liquid fuels go, transport is considered SA's Achilles' heel. Between them, Sats and the private road hauliers are said to consume some 50% of the country's petroleum fuels.

At the World Energy Conference in SA last year, several interesting statistics emerged relating to transport's energy needs — many of them the result of research by the director of the Energy Planning Department of Mineral Affairs, Dr Robert Scott. Detailed figures on energy consumption by the transport sector are not publishable in terms of the Petroleum Products Act.

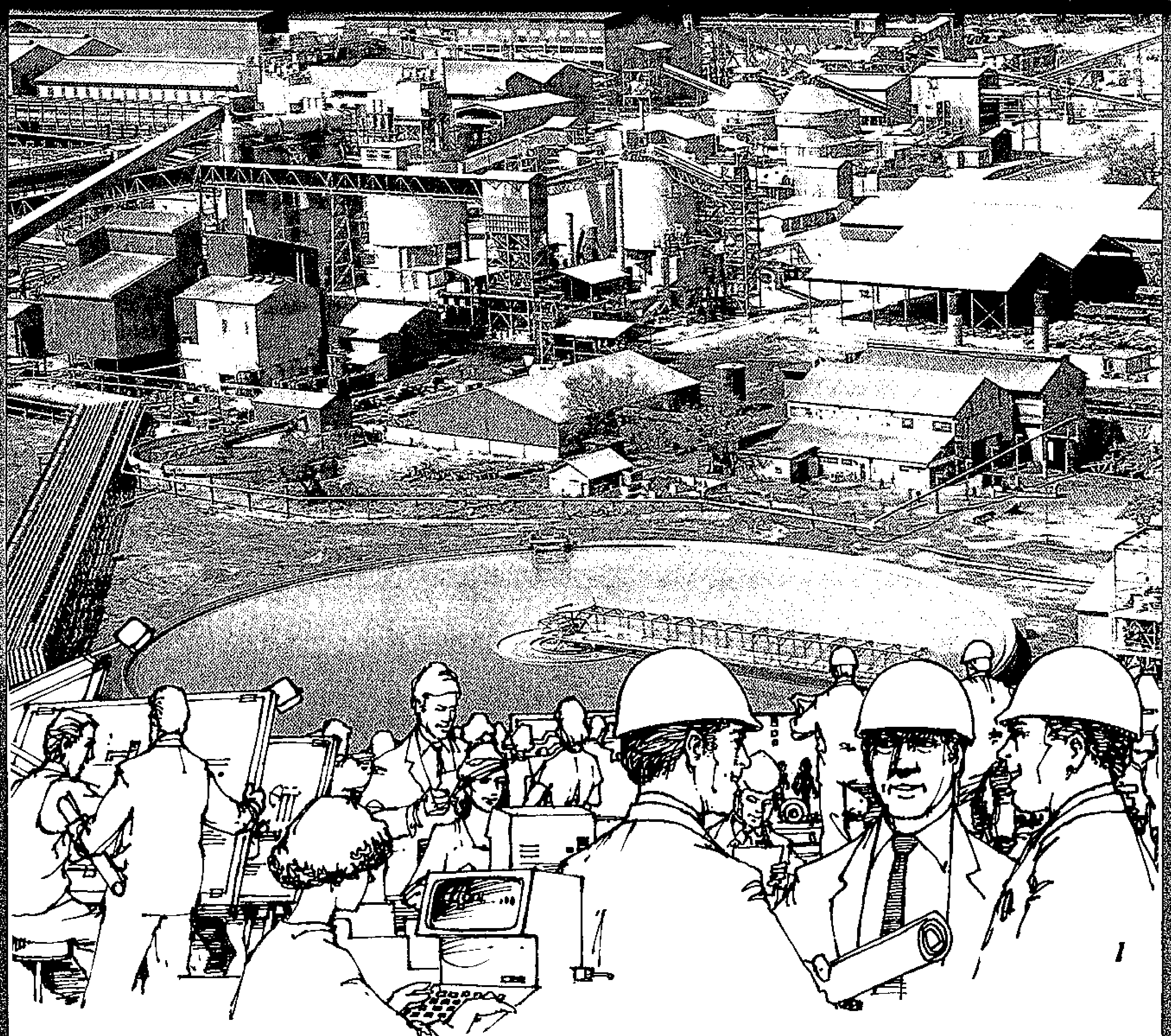
But, by sub-sector, the following general picture emerges:

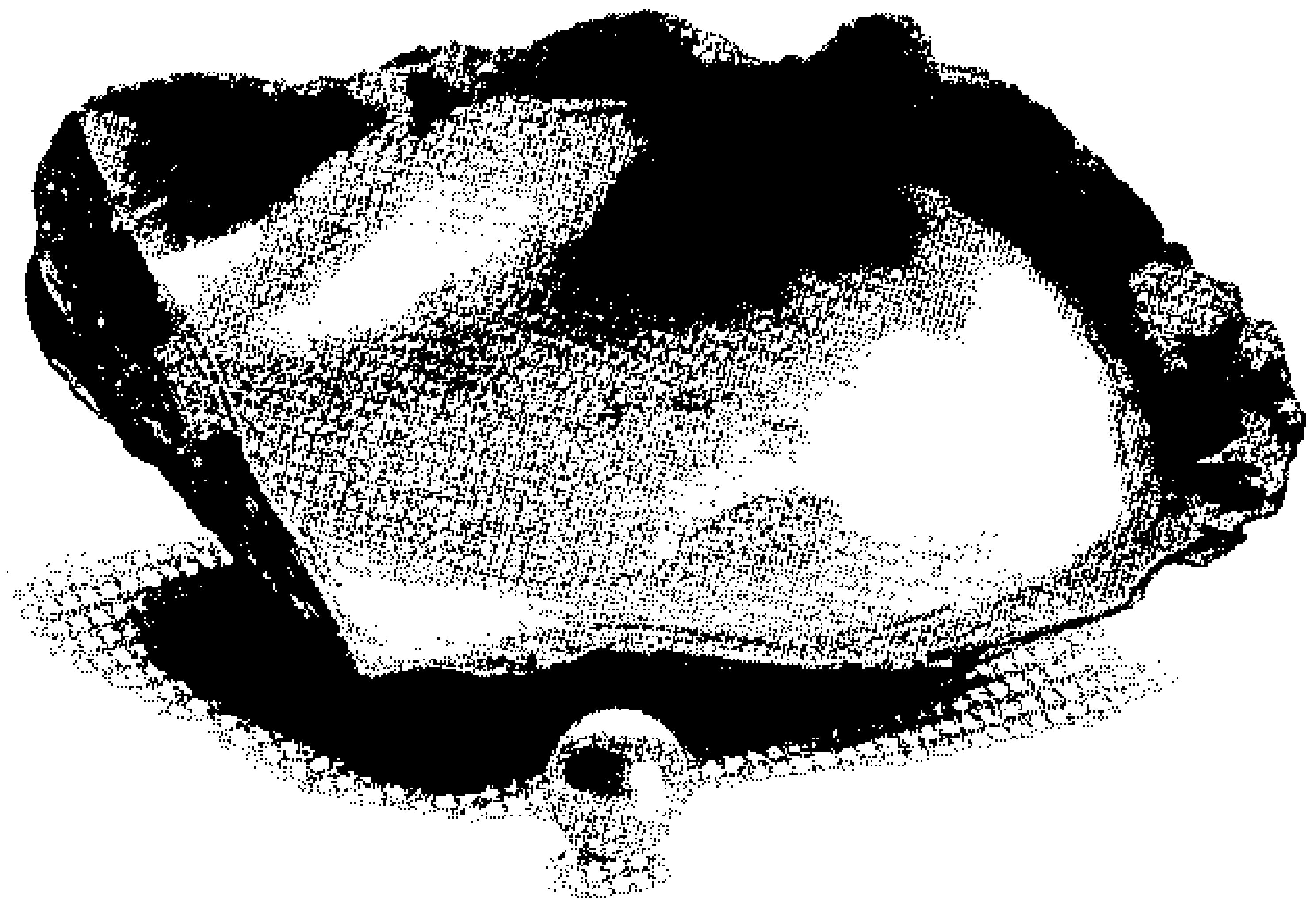
RAIL

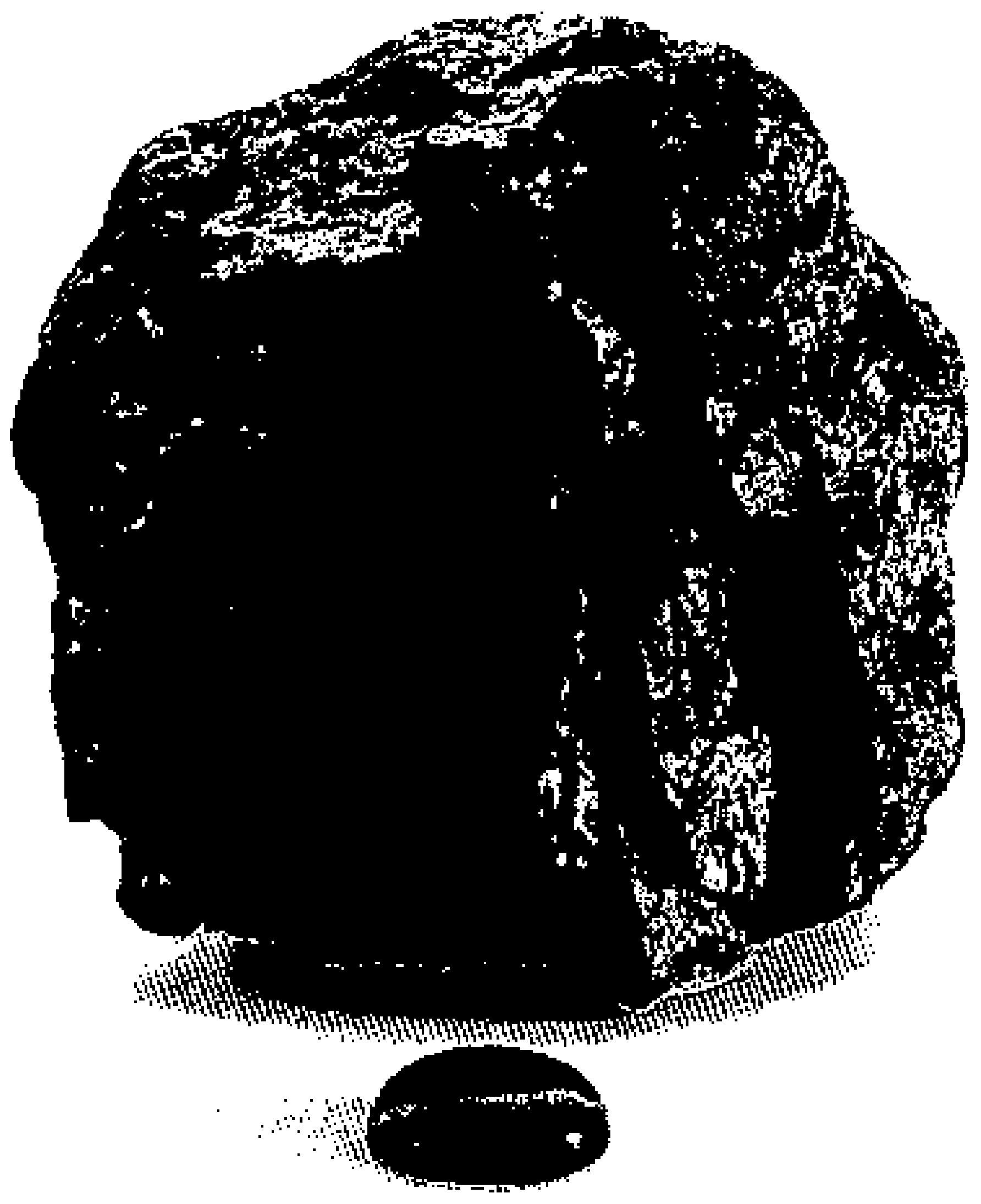
The most energy-efficient inland transport mode, rail demands a relatively minor share of petroleum-based energy. The electrification programme has certainly helped, although part of the overall modernisation process has also involved the conversion of steam traction to diesel.

As energy sources, both have been shown to be more economical than steam. Generally, it can be said that diesel is cheaper at lower traffic densities and electricity cheaper at higher traffic densities. But, because of rising diesel prices since the Seventies, Sats decided it was economically justifiable to retain steam locomotives on certain lines that were previously scheduled for dieselisation.

By 1983, 75% of the rail network, in terms of tons/kilometre, was electrified, and electricity now accounts for 53% of the total energy utilisation by the Railways. In







MINES DIG SAVINGS

In view of their importance to the SA economy, mining and mineral processing could be expected to make a big hole in the SA energy pool. They do.

Dr Arnold Granville, of the Minerals Bureau, for instance, reckons it could be around 40% of the energy employed after conversion losses, which are substantial.

But, like the rest of commerce and industry, mining has taken stock of the position since the oil scare in the Seventies and has turned increasingly to elecricity for its primary source of power.

A 1981 estimate gave electricity a 69% share of the mining sector's energy consumption — and today mining is the most electrified sector of SA's economy.

One problem, however, is that electricity is an expensive energy form — and energy is a major cost input in the selling price of minerals. For example, it was responsible for up to 25% of the selling price of copper in 1981.

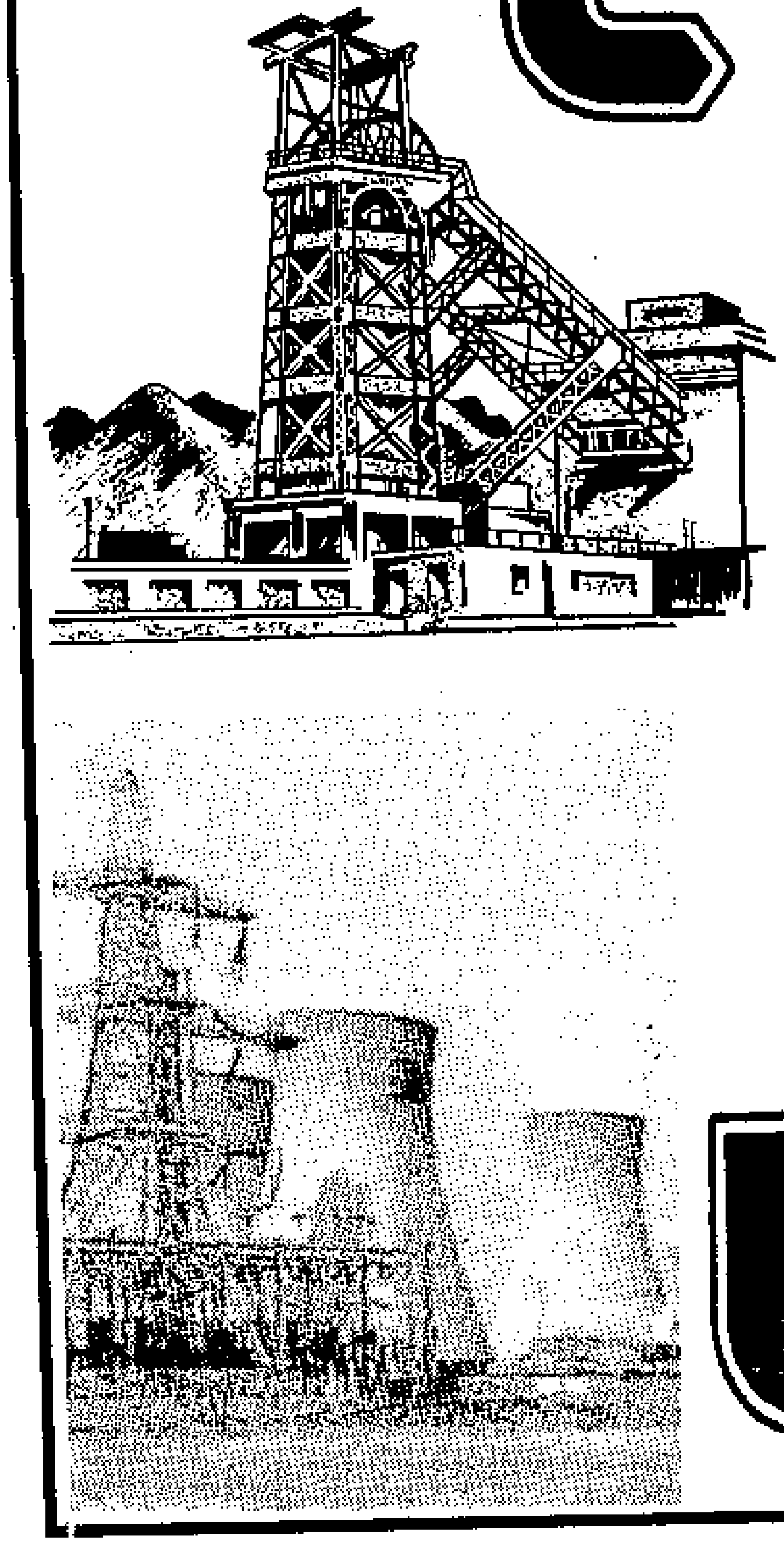
Overall, energy costs represent 8% of the total value of mining production. The next step, therefore, has been to rationalise electricity usage. Reduction in consumption has been the logical first step.

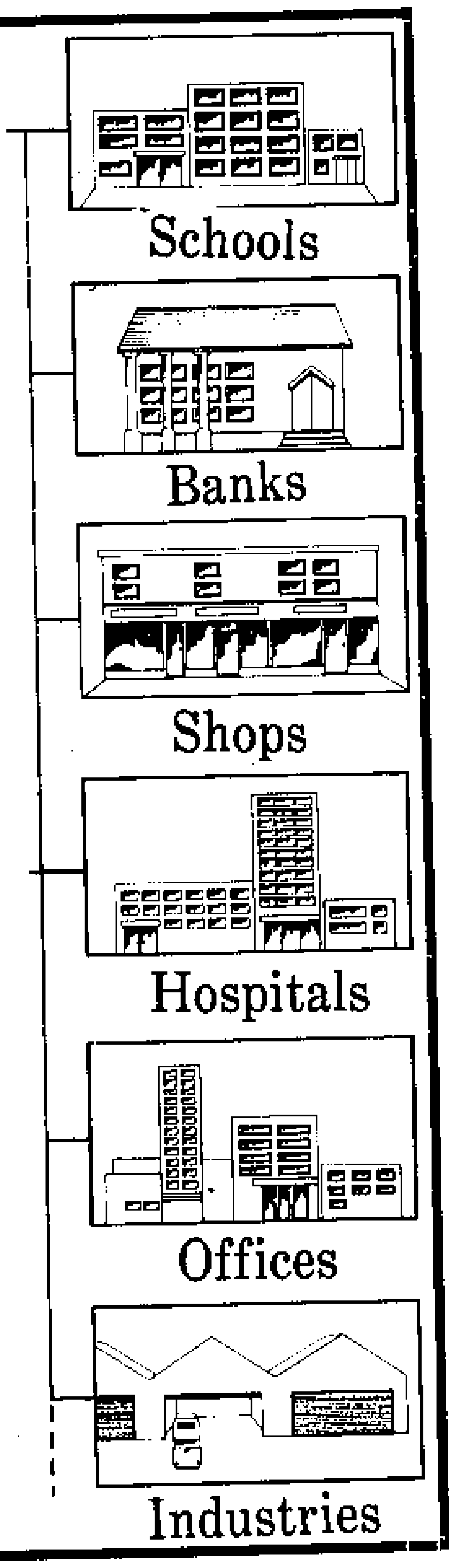
Victor Steed, research engineer at the Department of Mechanical Engineering at Wits University, has been looking more specifically at possible savings on the gold mines. This has clearly been the place to start because gold, with its uranium spin-off, accounts for 65% of the coal and 71% of the electricity employed by the mining industry.

This applies only to the mining operation. The subsequent beneficiation needs a further huge energy input. All told, mining and the processing of minerals is said to account for 61% of energy consumption by industry as a whole.

This adds up to about 40% of SA's input energy, which is defined in this case as excluding conversion losses.

Understandably, the conservation measures taken by the mining industry so far are primarily designed to cut costs rather than contribute to any national savings campaign. But, as Steed says, the benefits of any saving must inevitably seep through to the economy in general with advantages for the whole country.




Schools
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Industries

1981, the breakdown of primary energy utilised for rail haulage (as distinct from "tractive energy") was: Coal — 3%-5%; diesel — 30%; and electricity — 60%-plus.

AIR

Fuel bills represent a third of an airline's operating cost. Conservation is thus vital in the airlines' battle to remain viable. Although fuel consumption by aircraft is relatively low compared with road transport, the industry's demands for fuel have increased rapidly in line with air transport growth. In the past two decades, air traffic has increased tenfold.

By far the largest percentage of the energy consumed is in the form of jet fuel and aviation turbine fuel (Avtur). Aviation gasoline (Avgas) for piston-engined aircraft constitutes only a small and decreasing percentage of the total required. Estimates suggest that only 2,5% of all air transport will be undertaken by small aircraft in the year 2000. And, even then, it is likely that a number of these will be jet-powered or turbo-prop-powered.

While it is predicted that SAA will quadruple its service by the turn of the century, fuel energy requirements are likely to only double, owing to improvements in operating efficiency. Air travel is the most energy-intensive form of mass transit in terms of tons/kilometre.

ROAD

The major energy sources for road trans-

GOODBYE GUZZLERS

Over the past decade, the fuel efficiency of passenger cars has improved by more than 20%, notes Denzyl Vermooten, economic affairs executive of the AA.

"Three or four years ago," he says, "we were probably burning as much fuel as in 1973, but this was largely due to the vehicle population growth. Without the more efficient engines, we would have been using a good deal more.

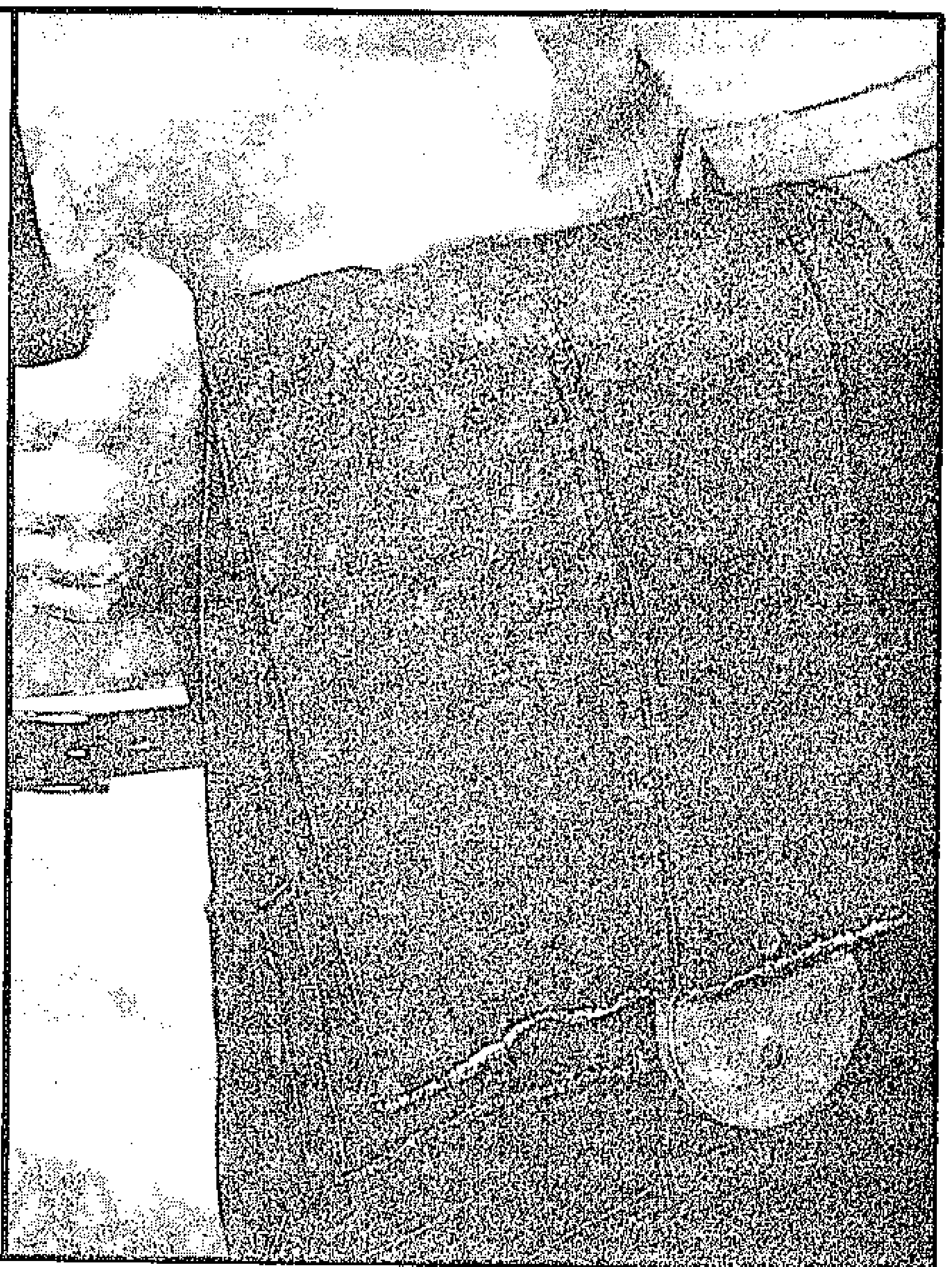
"Now, for the first time, we have on the market cars giving 4,5l/100 km — a major advance."

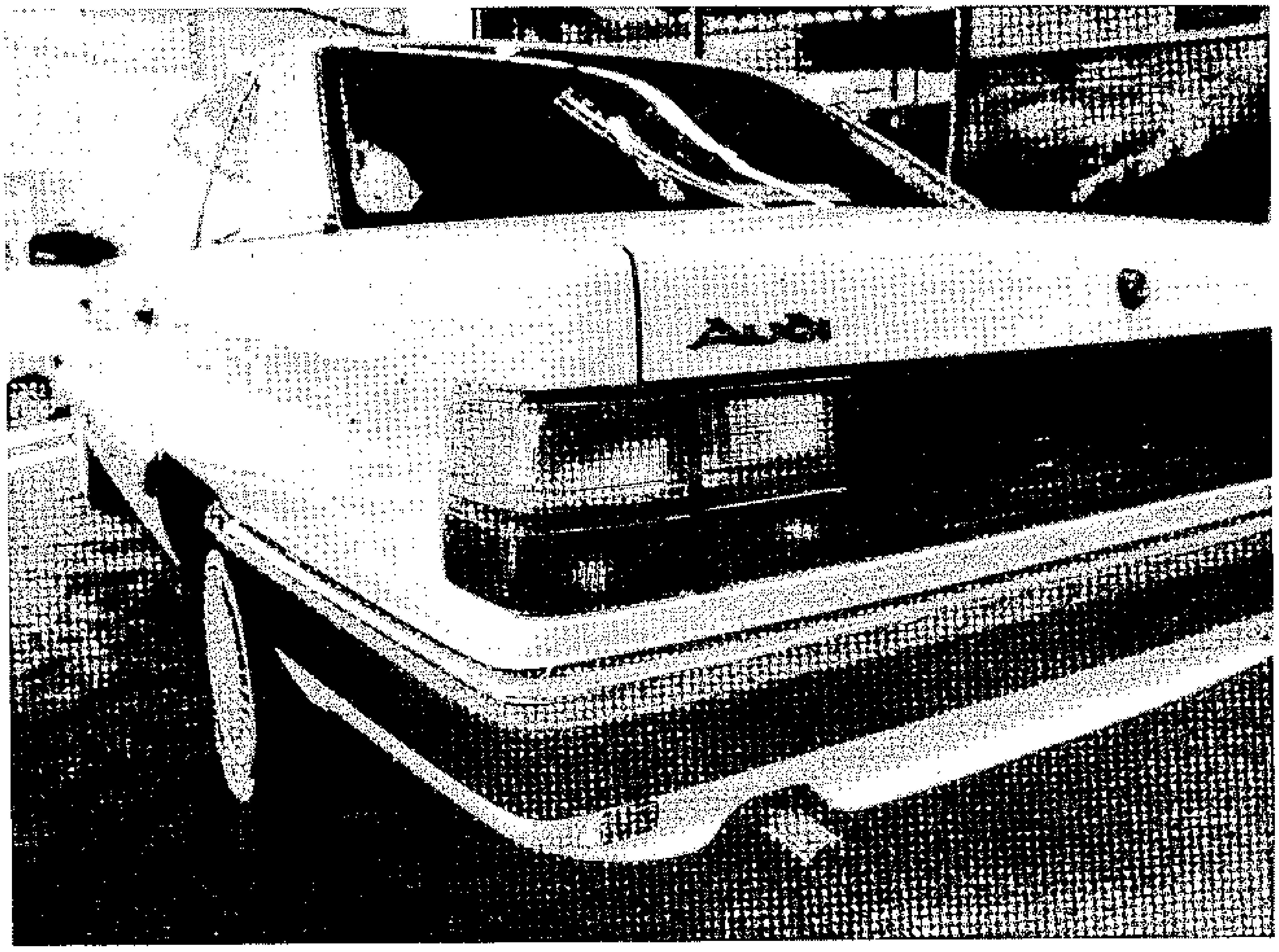
Fuel-pricing policies have increased motorists' awareness of the greater efficiency of the diesel engine. From 1978 to 1979, the number of diesel cars on the road increased by 81%, Vermooten says.

The number switching from petrol-driven to diesel-driven cars, however, has since declined because of the higher diesel price and the greater efficiency of petrol engines. In 1979-1980 the number of diesel-powered cars increased only 29%, but this was up the following year to 32,7%.

The original sales surge, however, came from a very low base. In 1981, only 24 312 private cars were diesel-powered, while 1,7m were petrol-driven.

Vermooten says 80% of private car travel takes place in urban areas, and traffic congestion is a major contributor to fuel consumption. And although speed affects consumption, "speed restrictions play a minor role in fuel conservation. I have never seen such restrictions and reduced fuel-sales hours as effective fuel-conservation measures."





Modern motoring . . . not so thirsty

portation are petrol and diesel, with diesel largely confined to heavy road transport (road hauliers).

In 1983, Scott estimated that, of the total diesel demand, about 55% came from heavy road vehicles. This sector, like agriculture, is almost totally dependent on diesel.

One estimate has it that the restrictions on speed and petrol-selling hours in the Seventies reduced petroleum consumption by about 25%.

But, since then, the figure is thought to have risen again.

Sats's own conservation programme for road transport is twofold. In the first place, it has introduced new operating rules — departure times are scheduled outside peak traffic hours; carrying capacity has been increased to the legal maximum; in-house speed limits have been implemented, and so on.

The second leg involves replacement of import-based fuels, and research into conservation through optimising fuel mixtures is now going on.

SHIPPING

Shipping's role in the SA energy problem is small. The main fuel used in national and international marine transport is furnace oil (marine fuel oil), while diesel is predominantly employed by SA fisheries and foreign trawlers.

In 1978, Sats compiled a list of 57 ways in which fuel could be saved under the general heading of "Harbours." The measures included reducing diesel consumption 25%-30% by running the main engines of Voith Schneider tugs at reduced speeds when not engaged in actual operations. Among other conservation measures was the rescheduling of container traffic to ensure against "empty" return trips.

Tariff tangles

A SA company which offers to show clients the financial route to energy cost savings reaps rich rewards on the way

In the jungle of electricity tariffs and oil supply contracts, too many SA businessmen automatically assume they are being given the lowest possible rate. It is an expensive misconception that leads organisations and institutions to pay happily millions of rand a year to suppliers when the cash could, just as easily, have ended up on the profit line of the balance sheet.

Another automatic assumption by many industrialists is that an energy saving programme will call for high initial capital spending to convert to an alternative fuel or to upgrade the efficiency of plant, says George Rahr, MD of Johannesburg-based NUS. That need not be the case, he says, and backs his claim with the R16m which his company is said to have saved local organisations in its 10 years in SA.

NUS is the local subsidiary of National Utility Service Inc, set up in the US 51 years ago by Theodore E Maynard. Maynard told his clients: "You're dealing with a monopoly when you are dealing with a utility. The utilities know that if you don't like what they're charging, you can't go to a competitor. I think that getting a customer out of the wrong rate beats his running around turning out the lights."

And this is still the basis of the group's success internationally. Rahr (43) says: "We don't claim to have the only solution to escalating energy costs, and we don't promise to provide savings in every case. But we do say that our service should be considered."

Initially, NUS conducts an exhaustive study of a new clients' bills for electricity, coal, petroleum products and water over the previous year. The results are cross-checked and compared with the encyclopaedic data on tariffs throughout SA stored at the head office. Specially-trained analysts, armed with a knowledge of group operations in many parts of the world, seek grounds to back a case for an appeal for a lower rate to be applied, and then they prepare the case.

"Basically, we are selling our accumulated experience," says Rahr. "That is our stock in trade." Experience in other parts of the world can often be related to SA cases, particularly now that the country is coming more into line with world trends in the energy field.

The company's experience with more than 2 000 corporate clients in SA has shown that there is fertile ground for savings, and cash benefits are obtained for more than 80% of clients. NUS also advises on negotiations for the contract supply of coal and oil products, it will advise on energy costs for clients' new projects and it advises on the cheapest form of energy.

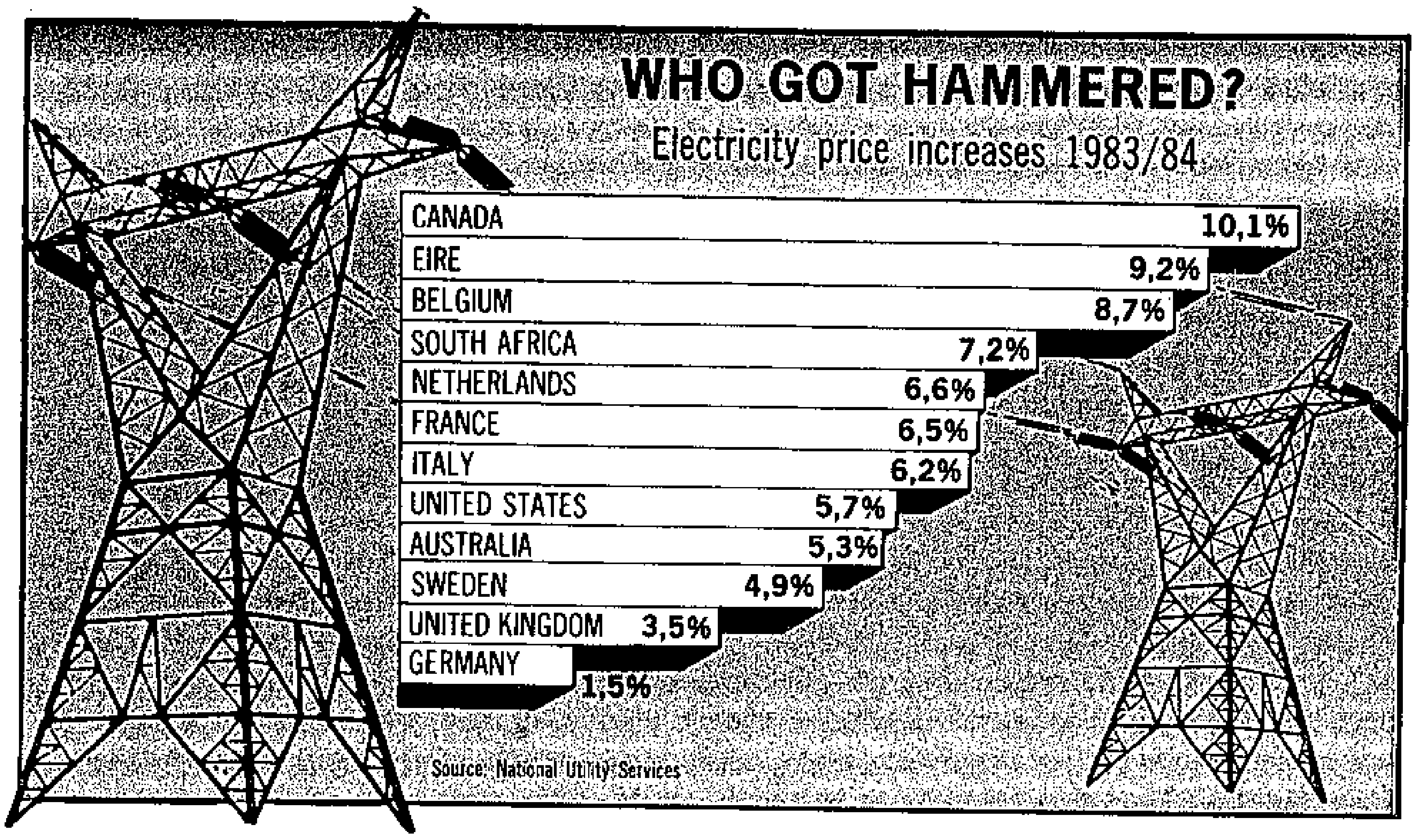
The savings can be considerable, says Rahr. NUS's biggest single success was a saving of R200 000 a year for a major SA motor company. A manufacturer received a one-off refund of R36 000 on its electricity bill, a large retail stores chain is saving R100 000 a year, and a Cape engineering firm is saving R890 a month. As NUS' fees are largely based on the proved cost saving, this is also good business for the company.

"The assumption that suppliers of energy are offering the most favourable rate can be very expensive," says Rahr. "The fact is that suppliers are not compelled to give customers the lowest rate. For example, electricity suppliers throughout SA state that the selection of tariff is the sole responsibility of the consumer.

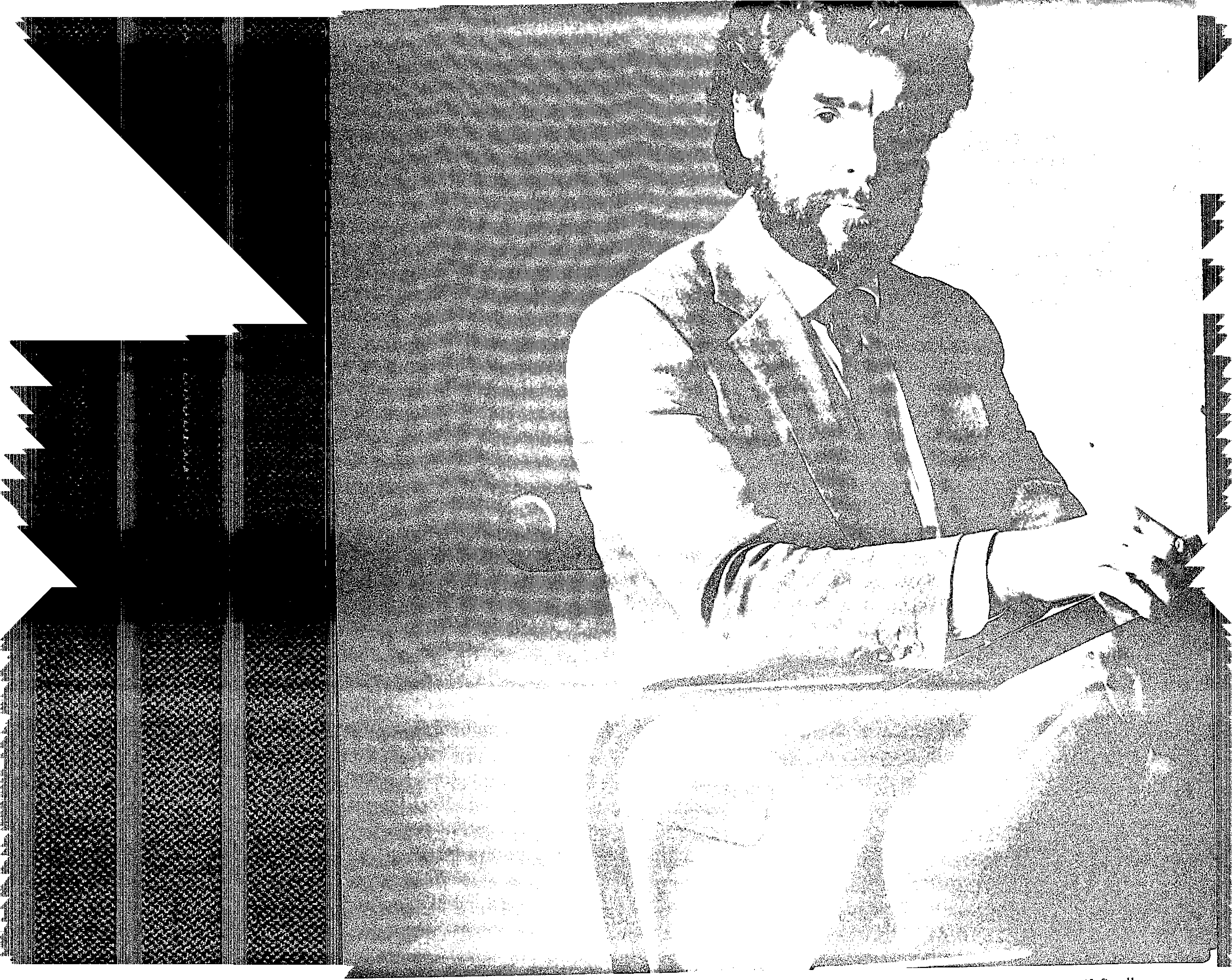
"Complicating the issue is the considerable latitude which exists in the interpretation and the application of tariffs. And, finally, suppliers generally have licence to fix their own retail tariffs in their own areas."

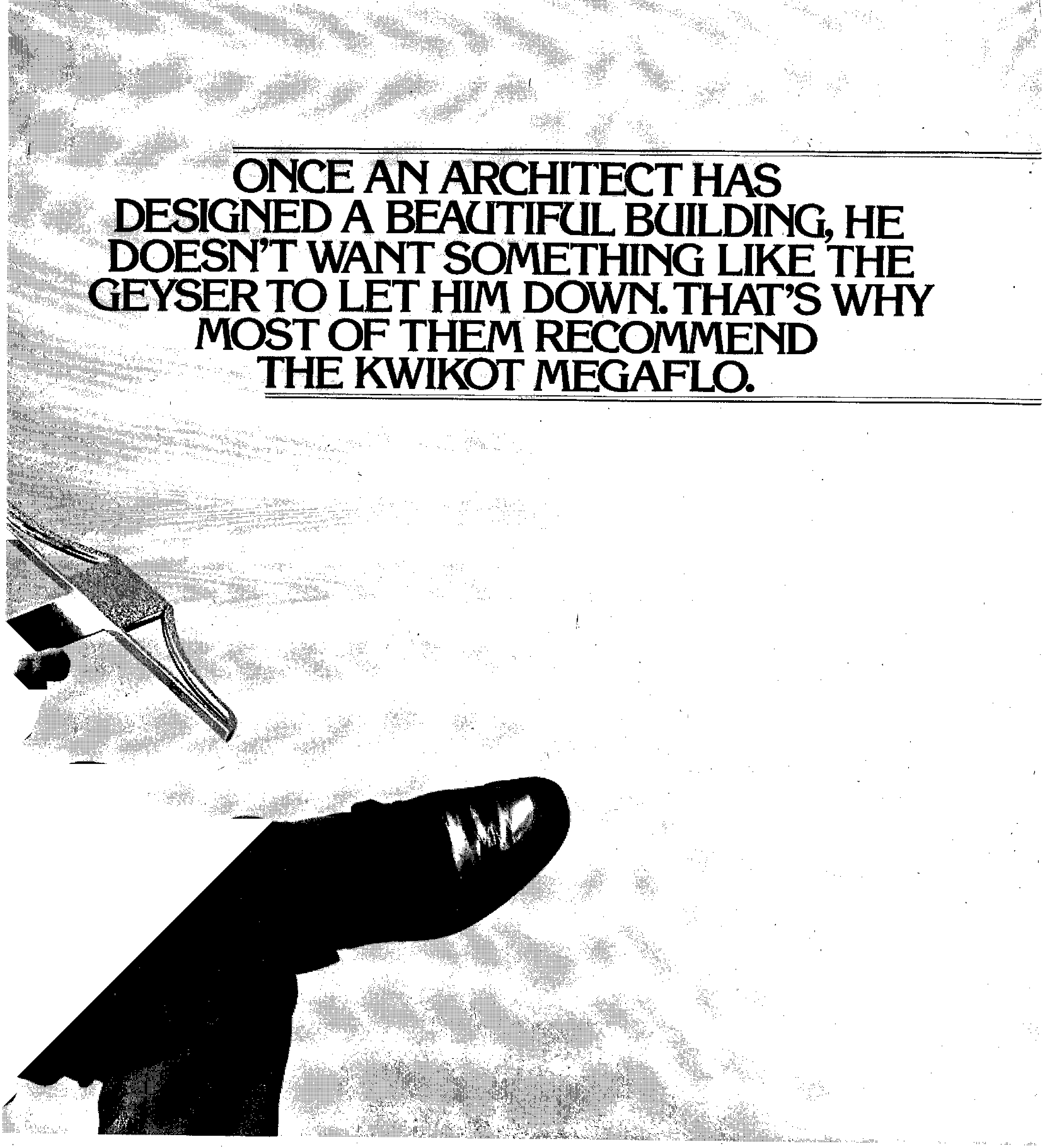
He says that at present about 75% of the savings by NUS for SA companies has been on electricity supply, with most of the balance on oil products. There is a surge in inquiries about the company's services and its recent growth has been "very good."

The allegation is that SA industrialists have not shown sufficient interest in energy



NUS record centre . . . info for Africa





ONCE AN ARCHITECT HAS DESIGNED A BEAUTIFUL BUILDING, HE DOESN'T WANT SOMETHING LIKE THE GEYSER TO LET HIM DOWN. THAT'S WHY MOST OF THEM RECOMMEND THE KWIKOT MEGAFLO.

lining, a process which involves firing the geyser at 870°C.)

In fact, the process used in the manufacture of the Megaflo is similar to that used for over 90% of the 55 million geysers in use throughout the western world. In South Africa, the Megaflo has passed the most stringent tests with flying colours, and also carries the SABS mark of approval. Give yourself peace of mind. Don't install or specify anything other than the hottest name in water heating.

Kwikot. The most dependable technology in geysers in the world.

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THE HOTTEST NAME IN WATER HEATING FOR 75 YEARS.

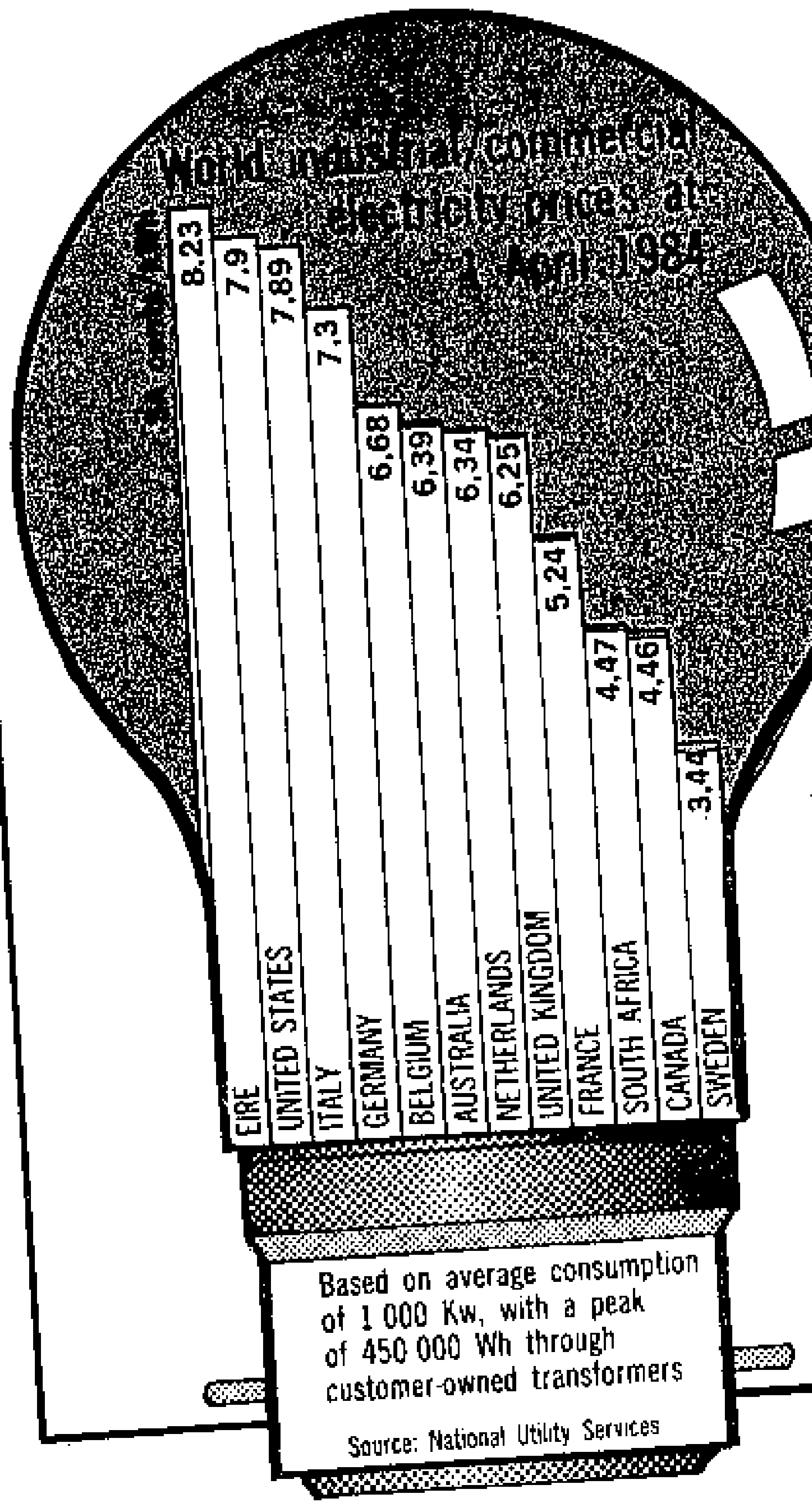
conservation. The blame for that, says Rahr, belongs to the country's comparatively low electricity costs. "Local industrialists have been protected from the worst of the chill winds which blew through high energy-consuming industries in the developed nations in recent years. But they are now showing that they are becoming more conscious of energy costs."

Executives are making more determined efforts to monitor their energy costs, and an increasing number of large companies are appointing energy managers.

Rahr says he is often asked by executives why their own staff should not perform NUS's function. "My answer is that it is unreasonable to expect any staff member to find his way unaided through the tangle of special agreements, published and unpublished tariffs, and to be an expert on the wide range of special allowances and rates which exist for every industry.

"We are specialists in our subject and can draw on years of experience in every country and in each field of industrial and commercial activity. We are aware of special allowances which have been made in the past, and this knowledge is used on behalf of our clients.

PAYING FOR POWER



Based on average consumption of 1 000 Kw, with a peak of 450 000 Wh through customer-owned transformers

Source: National Utility Services

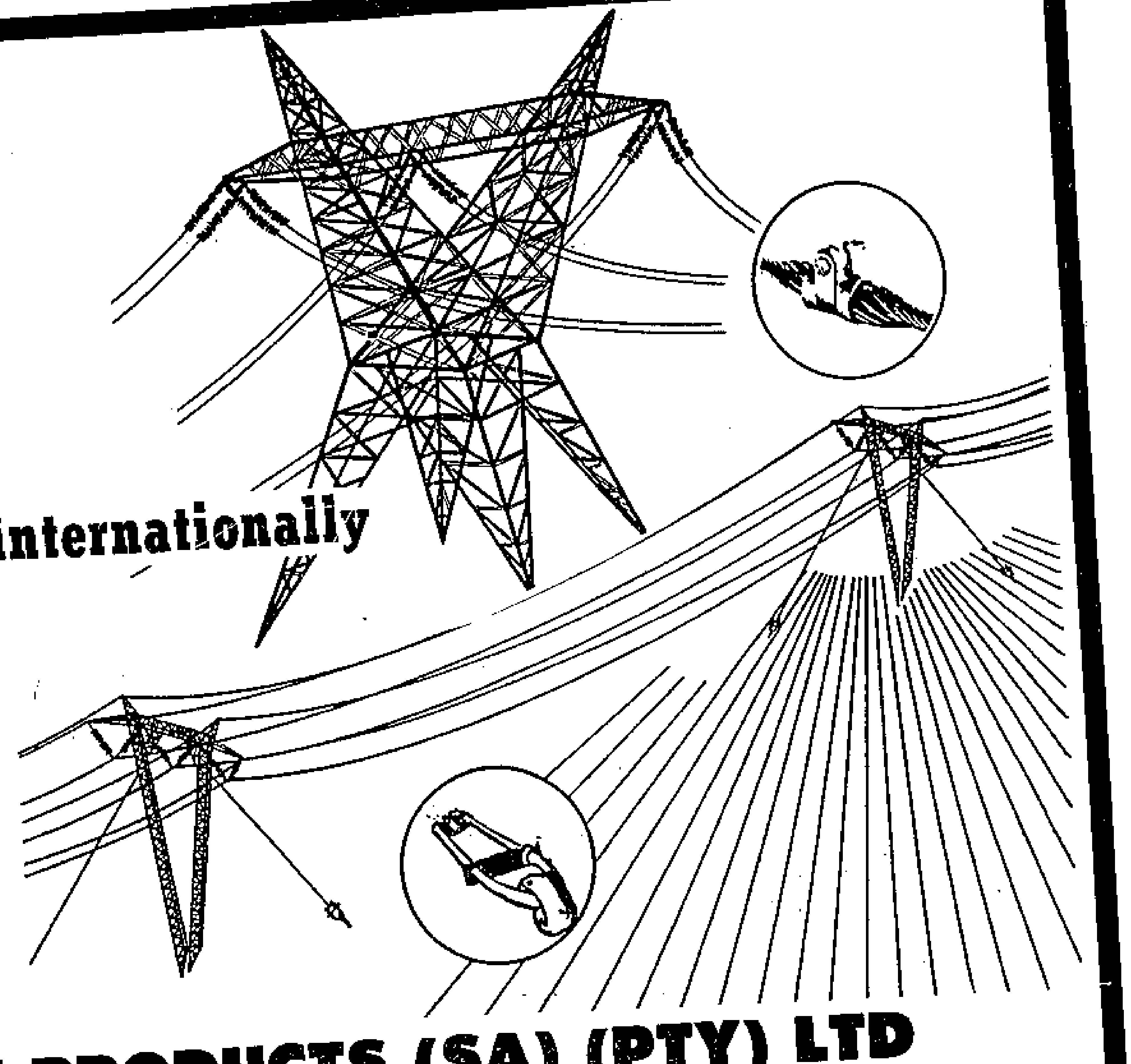
"Companies call in specialist advice on legal, tax, labour and insurance problems as a matter of course. It's entirely reasonable that they should call in experts in energy costs."

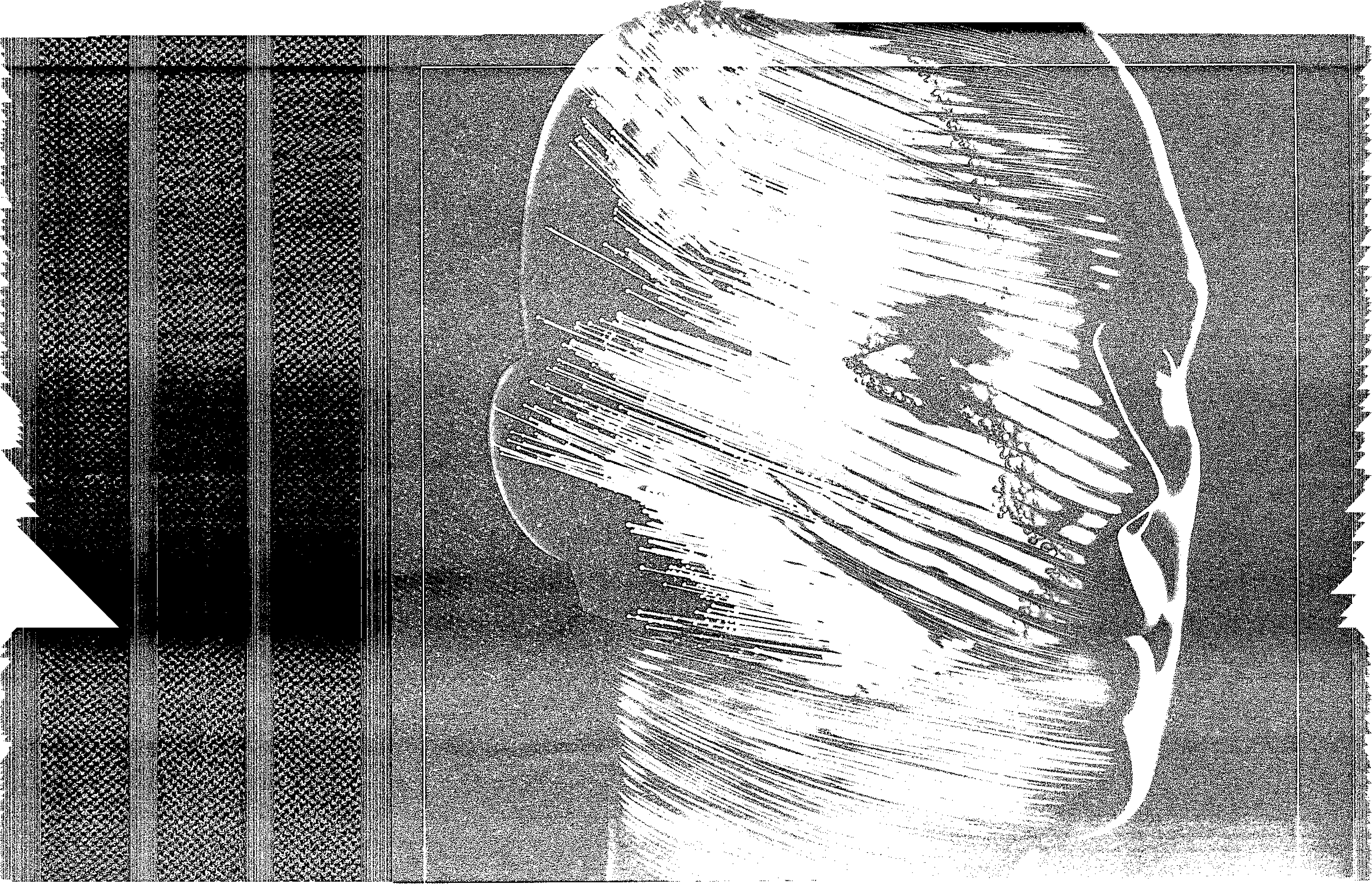
NUS charges clients a nominal retainer fee, which is then recovered from first savings and refunds before the client is invoiced for a proportion of the proved cost savings over five years.

Monthly bills for electricty and fuel are analysed and compared with other similar users' costs. Recommendations designed to secure price reductions and to claim any refunds which are due are made throughout the contract period.

Although NUS has operated mainly in the commercial and industrial field, it has turned its attention more recently to agriculture, where fuel and energy are responsible for an increasing share of operating costs. "We recently came across a Transvaal farm which was paying more than R2m a year for fuel and electricity, and many farmers are paying more than R100 000 a year," says Rahr.

"The days when fuel and energy costs were a fixed item in the annual budget are gone. SA executives are going to have to come to grips with a totally new discipline, he says.





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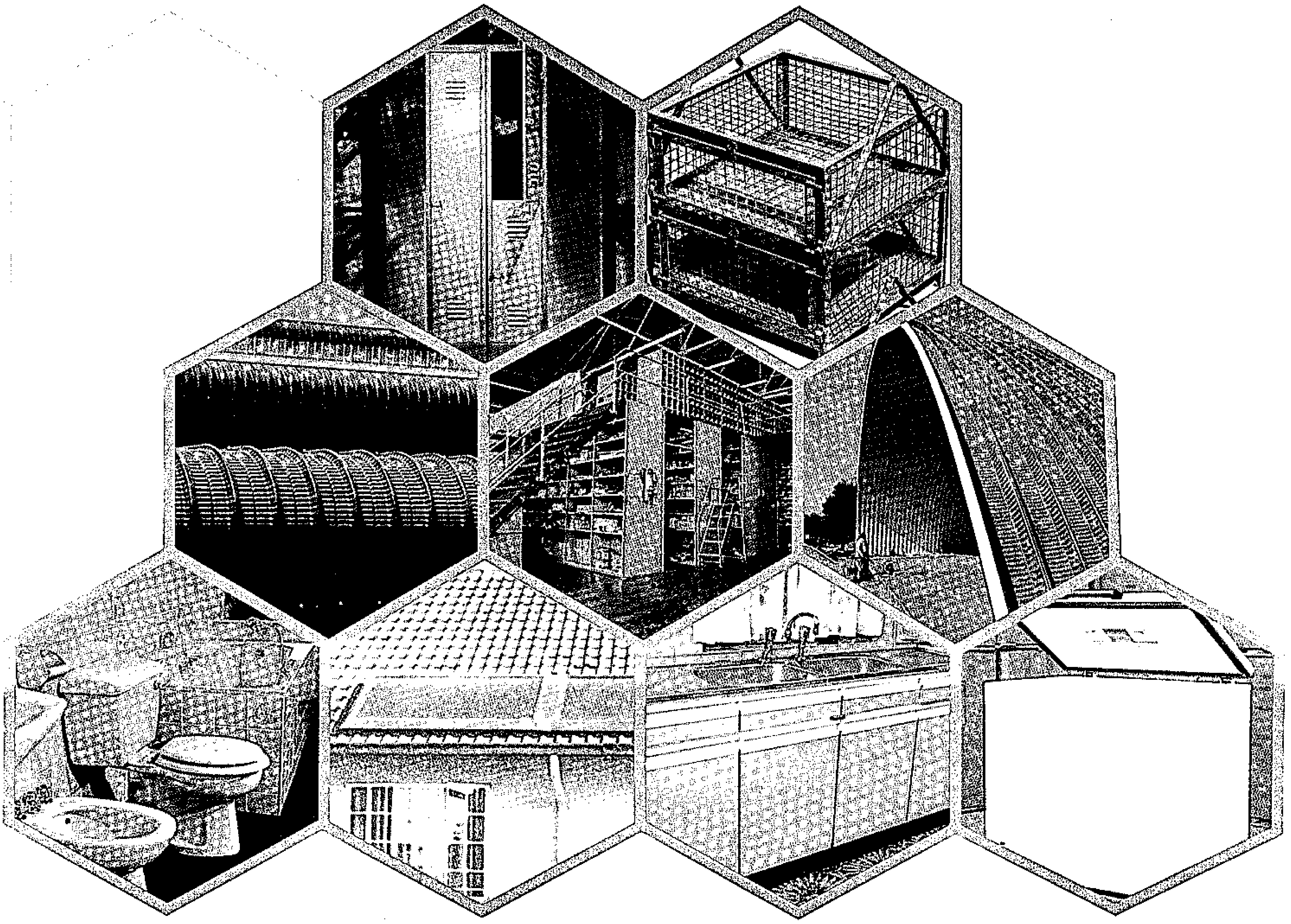

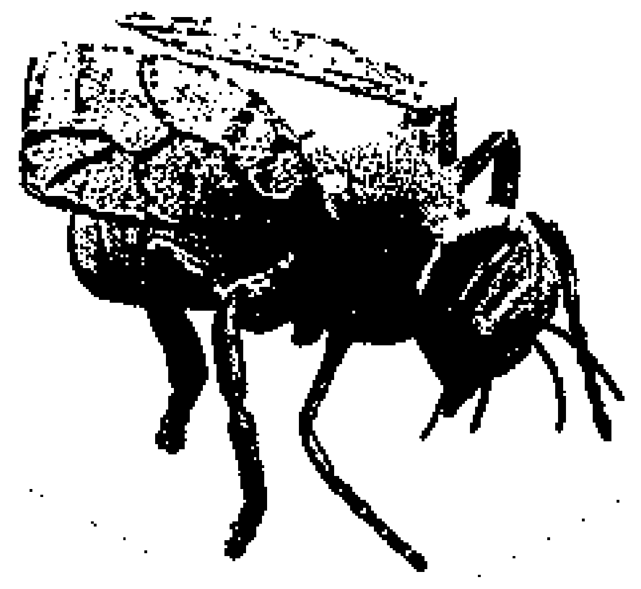

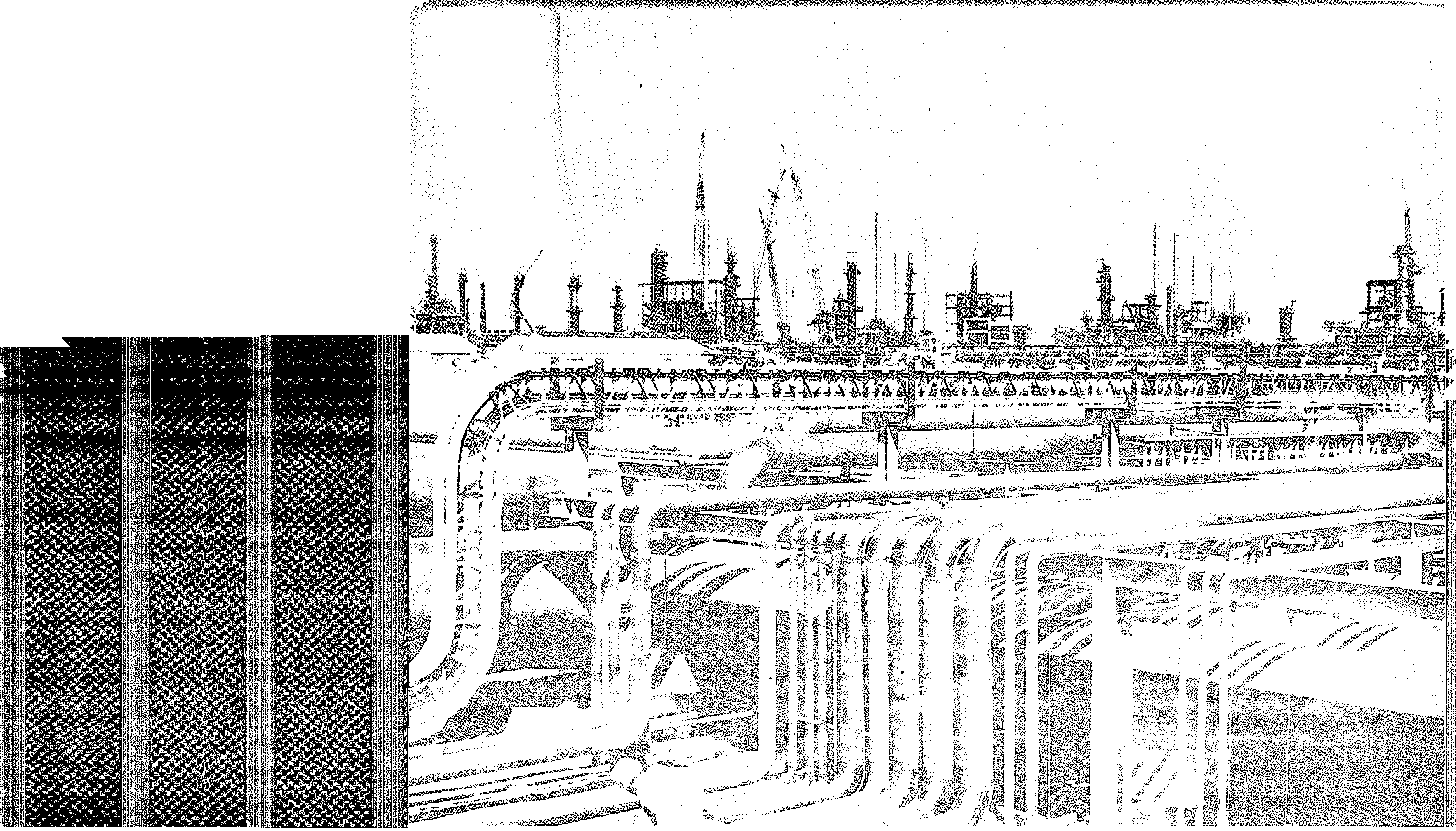

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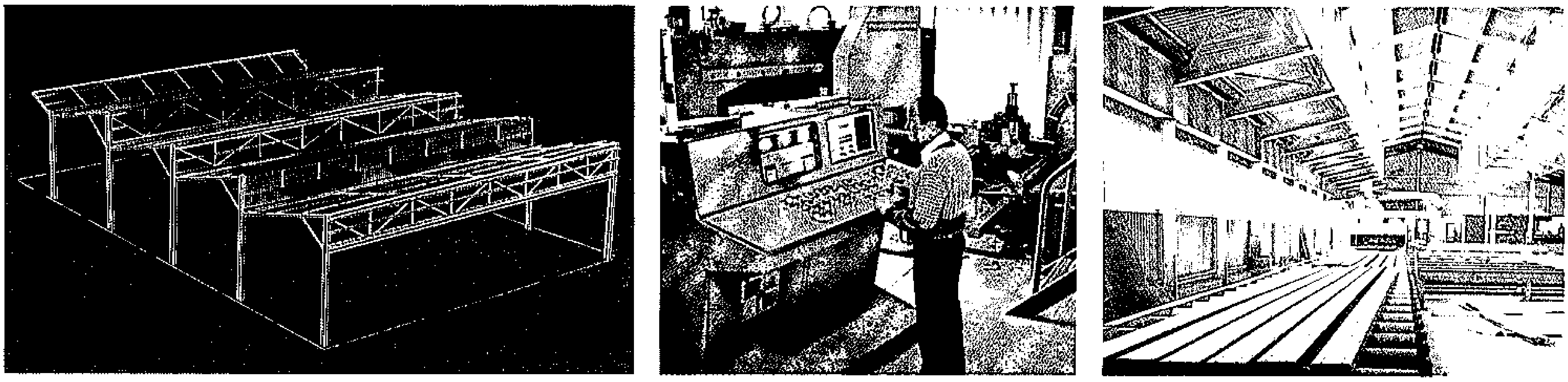

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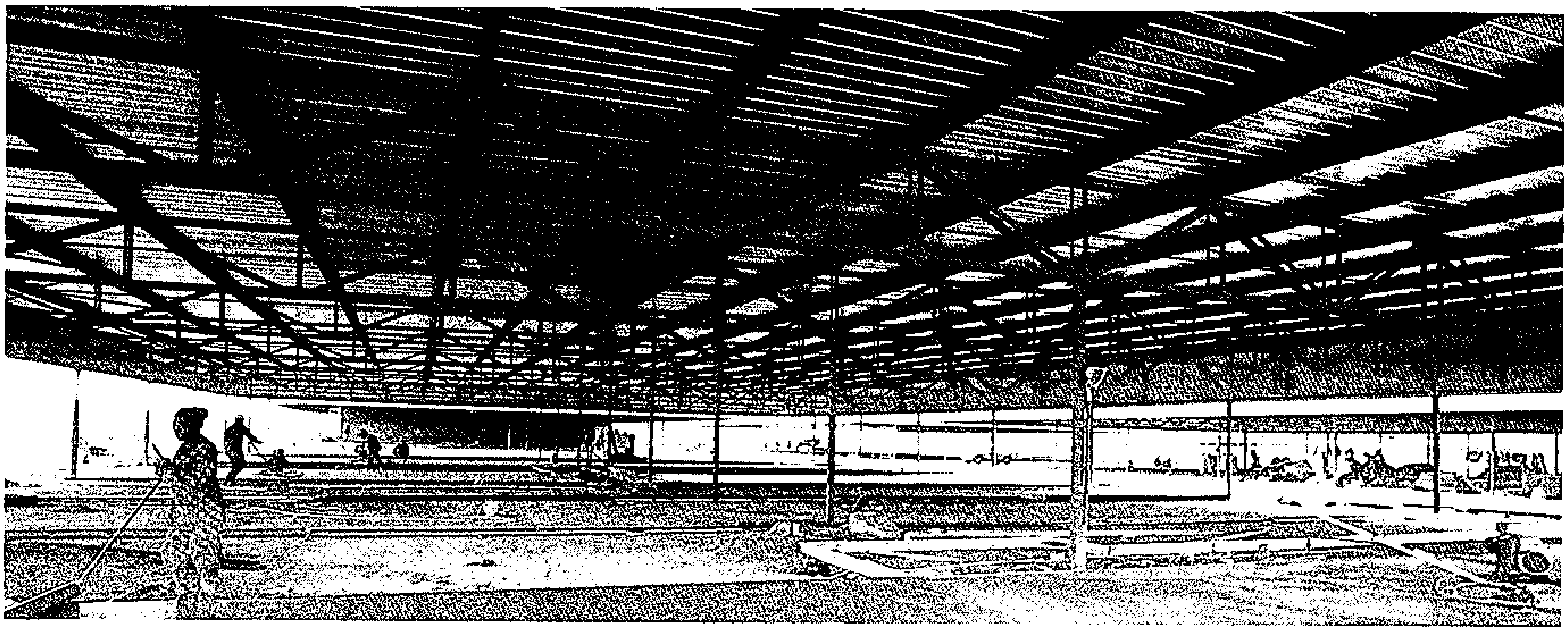

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'Cheap' way to reduce lead levels

Mercury 11/8/84 55R

Mercury Reporter

THE amount of lead used in South African petrol could be significantly reduced without major modifications to cars and refineries, says a former technical manager for Shell S A, Mr I J Leng.

And the reduction could be made cheaply and at short notice.

PFP environmental spokesman, Mr Roger Hulley, has repeatedly called on the Government to reduce lead levels because of growing evidence of the threat to the health of young children presented by lead emitted in exhaust fumes.

The existing permitted maximum concentration of lead allowed in our petrol is 0,836 g/l, one of the highest in the world. Lead is used to boost the octane rating of petrol.

Mr Leng, who is now with the Energy Research Institute at the University of Cape Town, said the concentrations of lead emissions in South Africa, although less on average than in some other countries, were as much of a danger in some urban areas as in cities overseas.

Economy

'We can't stand back and let the rest of the world take action against the threat while we do nothing.'

He said the partial or complete removal of lead from petrol was entirely feasible and would not cause any major upheaval if undertaken in stages.

While it would possibly be prohibitively expensive to reduce lead levels and maintain the present high octane ratings, there were a number of ways in which cars could be made to run on low-octane, low leaded fuel.

'The options are all real, not theoretical. The methods have been developed, tested, proven and used at some time or another.

'From the engineering standpoint there would be no insurmountable problem in implementing them in South Africa.'

By retarding spark timing slightly it would be possible to reduce lead requirements by about 50 percent at the coast and 80 percent inland. Not much would be sacrificed in the way of performance and economy, he said.

'Variations in fuel consumption of this order would not be noticed by the average motorist. In fact they are often difficult or impossible to detect even in the most carefully controlled tests on fully instrumented vehicles driven by experts.'

At the very worst the consumption of some cars would increase by between two and five percent.

'Another way to enable cars to run on lower octane fuel would be simply to adjust driving habits to suit a slightly lower performance.'

The full anti-knock quality of high octane fuel was used for less than 10 percent of the driving time.

If motorists could be persuaded to relax and drive more gently overall fuel consumption would be reduced and high octane fuel needed to counteract engine knock when driving at full power would not be needed.

Star

15/8/84

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Sabotage fears spur secret Escom security body

By Russell Gault

Security fears have led the Electricity Supply Commission (Escom) to establish South Africa's first non-State secret intelligence organisation.

Escom says it will work closely with State intelligence bodies.

And a small item in Escom's annual report — Escom would not elaborate on it today — reveals that security is a major concern.

"Essential security measures at all Escom's installations account for a significant percentage of total expenditure," the report says.

Last year Escom spent R1,6 billion, but would not say how much of that was on security.

The new super-sleuth section is being incorporated into the existing security organisation which protects all Escom's installations.

Another Escom report says: "The intelligence section will determine specific threats against the people of Escom and its installations, so that the necessary preventive measures may be taken in good time."

The same report says the signing of the Nkomati accord and other political successes "could incite our enemies to violent deeds".

A spokesman said Escom was bound by legislation to organise its own security, but close contact was maintained with police and State security organisations.

Escom's annual report also discloses that it had continuous liaison with security organisations in other parts of the world.

It is understood that this liaison amounts to advice on the latest security protection for big installations.

The huge amount of money spent on security was necessary because of the strategic and economic importance of the many power stations throughout the country.

Escom generates 93,7 percent of the nation's power.

During the height of the disastrous three-year drought which eased earlier this year, some power stations were close to shutting down because of a lack of water.

If saboteurs had been able to pierce the security cordon and close down any major stations South Africa might have had to ration electricity supplies.

Industry leaders claimed that rationing would have cost the country R2 000 million in lost exports in the first six months.

There were suggestions of looming disruption to the social fabric of the country through burgeoning unemployment.

~~220~~ 55 S-Times

9/8/84

Sasol aids U.S. gas production

A SASOL team has assisted the United States in its first production of synthesised natural gas.

Sunday Times Reporter

During the past few weeks the gas, produced from lignite, or brown coal, has been pumped into existing natural-gas pipelines in North Dakota, the culmination of a 10-year co-operation programme between Sasol, Lurgi of Frankfurt and the US syndicate, Great Plains Gasification Associates.

Development of the technology, which began in pre-war Germany, has been modified and enhanced by Sasol and Lurgi over 30 years.

Sasol currently produces almost 100-million cu m of gas a day. When the American plant in Beulah, North Dakota, reaches full production it will produce 3,6-million cu m — enough to heat 250 000 American homes.

The South African team of 30 men with their wives and children, most of whom will return home at the end of November, arrived in Beulah to sub-zero temperatures with snow at car-roof level.

During their work in the US, the men experienced blizzards so severe that they were forced to remain in specially equipped rooms for up to three days at a time.

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Kerneels Karolis, 30, of Lutzville, were in kkie when the colli- occurred on the zville-Vredendal el road about 5.30am Thursday.

one in the truck was red.

Responses sharp on 'needles'

Medical Reporter

ACUPUNCTURE, which is practised in most teaching hospitals in the United States, is a field of medicine that has yet to be exploited to the full.

This is the response of Dr L Wertlen, of East London, to an article by Dr P D Beck in a recent SA Medical Journal in which acupuncture was mentioned among the "wonderful cures that the lay public comes up with so often".

Dr Wertlen says acupuncture has been accepted by the lay public in the US as an integral part of modern medicine.

"Not enough research has been done. In our initial euphoria and fervour we all tried to tackle problems which we were not experienced enough to deal with.

"We have all had patients whom we saw once only because there was no instant improvement in their condition," says Dr Wertlen.

He invited Dr Beck to participate in the next acupuncture course for medical practioners.

Wynberg win all the glory

Staff Reporter

IT WAS 17th time lucky for Wynberg Boys' High School on Saturday.

For the past 16 years, the school has won the band section of the Western Province Command Cadet Competition. But this year the squad did even more. For the first time it scooped all the trophies in the eight categories — and crowned this feat with full marks in the uniform inspection.

School bandmaster Mr Johan van Rooyen said yesterday: "It was really thrilling. This is a show of true dedication and hard work. The standard of the competition has improved over the last few years and it took a lot of sweat on the part of our boys."

Koeberg reactor is in full use

⑤⑤ C-Times 21/3/84

Environment Reporter

KOEBERG'S number one reactor and its generator set is now in full commercial use after being formally handed over to Escom by the French contracting consortium.

Announcing this yesterday, the chairman of Escom, Mr Jan H Smith, said tests with the number one reactor and its generator set were successfully completed on July 21.

Achieved

Tests were now being carried out on the second set, which would 'probably" be brought into full commercial operation by next winter.

Mr Smith said the time taken to complete the testing from initial criticality through to commercial operation was as good as the best times achieved in the domestic programme in France.

Fuel was loaded into the first reactor on October last year and "criticality" (the starting up of the nuclear reaction) was achieved on March this year.

Increased levels

Mr Smith said that since March tests had been conducted at progressively increased power levels up to full power output. Each step was closely monitored by the Atomic Energy Corporation (AEC) which had to approve the status of the plant.

In June this year, the AEC as licenser gave permission for the output of the first set to be increased to 100 percent. This allowed the final phase of the test programme to be completed and an extended period of operation at full power followed.

Singing UWC students, protesting against tomorrow's ele the House of Representatives, prepare to bury the bronz that marked the opening of the old Coloured Persons Re tive Council building in 1970. Students stripped the plaque building, which now serves as the UWC Senate buil

Man shot in bid to steal police radio

Crime Reporter

TWO Claremont policemen who had searched a Surrey Estate house for stolen car cassette players and radios, returned to their patrol van to find another two men trying to remove their police radio on Sunday.

The policemen went to the house in Jupiter Street after receiving information when five other men were arrested.

The men had broken into a car in Claremont and the owner had described the get-away vehicle to the police.

Captain Jan Calitz, a police liaison officer, said five men, four aged 18 and one aged 16, were arrested.

On Sunday about 1am the policemen went to the house in Jupiter Street.

They searched the house and were returning to their patrol van which was parked outside when they noticed two men in the front.

The men jumped out of the van and fled. The policemen gave chase and a shot was fired. One of the men was hit in the leg and they were both arrested. The injured man was taken to hospital under guard.

It was later established that the men had been trying to remove the radio from the van.

Missing boy believed dead

Staff Reporter

A 14-YEAR-OLD Okiep boy is missing presumed drowned after he going for a swim in a disused quarry on Sunday.

A police spokesman for the Boland, Major Nico Slabber, said Vincent Cloete, of Okiep, had gone for a swim about 3pm.

His body has not been found and he is presumed to have got into difficulties in the water and drowned.

'Drai rapist in cou

THE alleged "drainpipe pleaded not Wynberg Re yesterday to of 15 charge clude rape a

James Ri mot, 23, of Flats, Lot pleaded nc nine count breaking wi to steal and include the of five cars rape, robber vating circu legal posses arm and tl possession tion.

The State the offence mitted at Kenilworth, Wynberg an from April 2

The hear journed to 1985, and M remanded.

Mr J D Hu magistrate. M appeared for Vassen appea mot.

55 [redacted] Star

22/8/84

Oil price decline could spell stagflation for SA

By Professor Roger Gidlow

The quadrupling of oil prices in the early 1970s marked the end of a period of almost uninterrupted growth in real income in western countries as a whole and the start of a decade of anemic economic growth and high inflation.

These conditions proved to be highly beneficial for South Africa in the sense that two prodigious economic booms were generated on the back of surges in the prices of precious metals.

When official oil prices fell by $5 a barrel in early 1983 this was associated with a fall in the price of gold of roughly $100 an ounce, and the bullion markets have yet to recover from this shock.

Now the oil markets are again looking vulnerable along with the precious metals.

The question, therefore, is whether the South African economy is due to be dealt yet another unanticipated shock on top of these already inflicted in recent years through world recession, falling commodity prices and droughts.

To start with it is not at all clear whether oil prices will decline.

The role of Saudi Arabia is crucial in this respect.

The Saudis are reported to have cut their production to barely more than four million barrels per day from 5,5 million barrels a few months ago, and Iranian exports are also believed to be declining.

These developments, along with signs that non-Opec producers such as the United Kingdom and Mexico are closely collaborating with Opec, provide some tentative grounds for assuming that prices can hold.

On the other hand, if they don't South Africa will be negatively affected, and the grounds for this assertion are provided by simulation exercises undertaken by the London stockbrokers Phillips and Drew.

The brokers conclude that if official oil prices fell from $29 a barrel to $22 the rate of inflation would be directly reduced on average by 1,5 percent in the industralised countries.

When the indirect effects of falling oil prices on wages and costs of production are taken into account the final reduction could be even higher.

The Third World debt crisis would be complicated by a drop in oil prices.

It could well be that the benefits to Brazil would be more than counterbalanced by the extra strains imposed on Mexico and Venezuela.

What is more, pressures would be exerted on American banks which are over-extended in loans granted to the oil industry.

Nevertheless, even when allowance is made for these factors, the price of gold could still fall markedly as inflationary expectations are diminished, and this, in turn, would weaken the rand yet again in the foreign exchange market.

On the positive side, economic growth in the non-communist countries should benefit from a fall in oil prices, and thereby spill over to South Africa.

The balance of payments positions of most industrial countries would benefit.

According to Phillips and Drew a reduction of $7 a barrel would yield a collective improvement of $15 billion in the current account position of industrial countries, and the higher real incomes would be spent on extra goods and services, thereby boosting the imports of these countries.

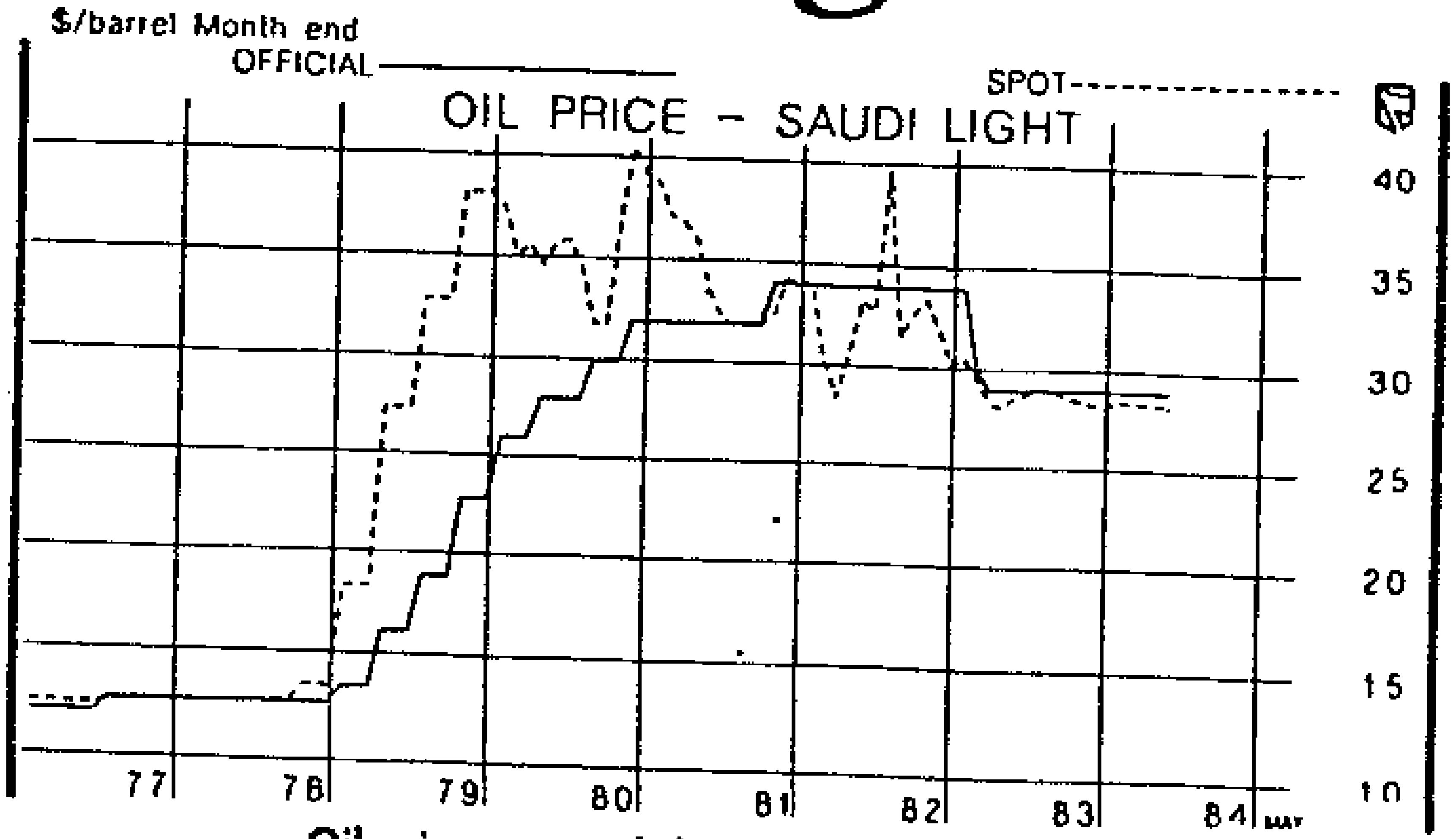
At the same time, Phillips and Drew argue that the cutback in imports by oil producing countries would be modest, purchasing $6 less of imports for every $10 fall in oil earnings.

The end result would be a higher volume of world trade.

This would boost South African non-gold mining exports, but it is still doubtful whether this benefit would fully compensate for the potential fall in gold earnings.

South Africa now desperately needs a sustained expansion in exports if there is to be any chance of a meaningful economic recovery in the next two years or more.

A drop in oil prices might condemn South Africa to an extended period of economic stagnation and high inflation.



Oil price ups and downs since the 1970s.

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Salem oil fraud: Govt releases all secrets

Star 23/8/84

24 HOURS News Team

By Michael Chester

The Government today gave the go-ahead for full exposure of the sensational Salem oiltanker fraud at the peak of the oil embargo on South African shipments in 1980.

A major disclosure is that South Africa has struck a deal with Shell Oil of Britain to share the cash recovered from the swindlers in international court battles. Scotland Yard has been handed a full dossier to help in the preparation of legal cases.

Much now hangs on the outcome of a case in the Amsterdam High Court in which a Dutch businessman, Mr Anton Reidel, is charged with deep involvement in the Salem fraud and stealing R70 million worth of oil that Shell claims it should have received.

The Salem, which sailed into Durban and unloaded its crude oil cargo, paid for by Sasol, was later scuttled off the coast of West Africa when it was supposed to be en route to Britain to deliver the identical cargo to Shell International, which had also paid for the shipment.

The incident caused a worldwide furore — but South African newspapers were hamstrung by a prohibition on publication of details of oil procurements.

Now the Government has finally decided to unfold all the details of the swindle. The brief to handle the first exposures was given to Dr D F Mostert, senior general manager of Sasol and a former director of the Strategic Fuel Fund that negotiated oil deals that broke the sanctions.

"All the secrecy has been vital so far to protect the identities of all our suppliers," Dr Mostert told *24 Hours*. "But now that South Africa has its huge Sasol operations in full swing we are no longer exposed to blackmail.

"Disclosure of all the Salem details should now help to bury all the suspicions and innuendoes.

"Oil supplies are still a highly sensitive issue and we still need to protect our suppliers and potential new sources. But the Salem episode can now be made an open book."

Dr Mostert unveiled all the Salem secrets at a seminar called by the Johannesburg Chamber of Commerce today.

GLOBAL

The seminar looked into maritime fraud on a global scale.

Next month Dr Mostert will be flying to the United States to give evidence in a court case in Texas in which Mr Jim Shorrock, who was well known in the South African oil business, is one of three men accused of oil deal frauds.

Dr Mostert is also on standby to give evidence in the Amsterdam court and in Athens, where the owner, skipper and key crew members of the Salem face prosecution.

● **See Page 18, World section.**

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SA took 'calculated risk' — and burnt fingers

24 HOURS News Team

By Stephen McQuillan

South Africa took a "calculated risk" by buying oil without the usual commercial documentation ... and burned its fingers in the Salem supertanker fraud.

The country was later left in a legal muddle — and R26 million out of pocket — after the tanker was scuttled off the coast of West Africa, with the Shell International Petroleum Company claiming the oil was illegally sold and delivered to South Africa.

These disclosures come today in a confidential report released by the Government on the 1980 oil debacle.

The report, tabled in Parliament more than a year ago and kept secret since, was disclosed to *24 Hours* after a high-level decision to make the Salem affair "an open book".

It was not possible for South Africa to insist on the usual commercial documentation, such as bills of lading, because producing countries did not allow crude oil exports to this country — especially during the peak of the oil embargo, said the report.

"The trader should not be seen to load oil in the Persian Gulf for off-loading in South Africa, and consequently bills of lading could not be made out for a destination in the RSA. The trader therefore had to off-load despite contradictory instructions on the captain's bill of lading," said the report.

The Strategic Fuel Fund insisted that it would pay for crude oil only after delivery — on condition the trader provided indemnity against liability, which could arise if bills of lading were not furnished.

"The great risk attached to such transactions was appreciated throughout by all concerned. However, since there were no alternative sources of supply at that time which were more advantageous, a calculated risk had to be taken in this case as in other similar cases," said the report, compiled by the SFF Association (Proprietary) Ltd.

Salem sinking: the history of a gigantic swindle

International swindlers took advantage of South Africa's vulnerable oil supply system to pull off the dramatic Salem fraud, writes **Stephen McQuillan.**

The history of the case is documented in a report tabled in Parliament more than a year ago and now made available to *24 Hours*.

The report, prepared by the SFF Association (Proprietary) Ltd, outlines how a supertanker was named three times before it was scuttled off the coast of West Africa.

THE PLAN: On October 9, 1979, Mr F E Soudan, executive vice-president of the American Polamax company, negotiated to sell crude oil to SFF.

Mr Soudan told SFF, among others, that his company had a refinery in the United States which had set up contracts for more oil than it required. The company wished to sell the surplus on the open market.

Schemes were drawn up to allow the SFF to dodge the oil embargo.

Plans to deliver six shipments of Arabian light oil were at issue, but arrangements were later altered.

Mr Soudan had arranged for a Mr A Reidel to supply nearly 1,5 million barrels of Kuwaiti crude oil. He confirmed that a ship named the South Sun had been bought to offload the oil in Durban under the name Lema.

On December 10 1979, Mr Reidel confirmed at the request of the SFF that his company was the owner of the consignment of Kuwaiti oil. On December 19 1979, the final discussions took place and an agreement with Beets Trading was concluded. Mr Soudan also committed himself as chief co-debtor.

THE SWINDLE: The SFF, an importer of crude oil, made a bona fide purchase on December 19 1979 of a consignment of Kuwaiti crude oil from Beets Trading AG, Zug, Switzerland.

The offloading of the oil started on December 28 1979 in Durban and 90 percent of the purchase price was paid on that date. The remainder was paid on January 3 and 10 1980.

After the crude oil had been off-loaded and paid for, the ship sank off the coast of West Africa on January 17 1980 under suspicious circumstances.

Then Shell's attorneys notified the SFF of Shell's allegation that they were the owners of the shipment of crude. They said Shell had bought the consignment from Pontoil and that Pontoil had leased the ship Salem/Lema to transport the consignment of Kuwaiti crude.

Shell alleged the oil had been delivered illegally to South Africa. The company applied to the Witwatersrand Local Division of the Supreme Court for an interdict against SFF, pending a suit to prove ownership.

The SFF was then unaware of any irregularities. An SFF representative was told to find out what claim, if any, Shell had on the crude oil. He traced some of the main conspirators in the plot to countries abroad.

The investigation later revealed that both Shell and the SFF had probably been deceived, but the extent of the swindle was not uncovered.

As soon as a prima facie case of fraud became evident the Cabinet was informed. Members of the Opposition were confidentially informed on February 29 1980 and told to keep quiet.

AVOID CHAOS

Shell agreed to allow the SFF to process the oil to avoid chaos at refineries and harming purchasers of crude oil from SFF.

Shell mentioned the possibility of a settlement. It was concluded that it was in SFF's interests to settle because:

- ● There was sufficient evidence to show that both Shell and SFF had been deceived.
- ● The SFF did not have enough documentation to finally eliminate Shell's claim of title.
- ● Shell's claim to ownership of the crude oil was in dispute and finality would be obtained only after a lengthy court case.
- ● During that period, it was not in the country's interest that South Africa's vulnerability in obtaining crude oil be exposed.
- ● Settlement was preferable to a drawn-out court case which, on the known facts, would be risky for both parties, according to the SFF's legal advisers.
- ● Some of the crude oil was delivered to local oil companies and it could have caused them international embarrassment which was not in South Africa's or their interests.

After lengthy negotiations with Shell, the matter was settled — taking into account the price paid for the oil — in a manner which resulted in both SFF and Shell each bearing about half the losses. Should money be recovered from the conspirators, the net benefit would be shared equally.

"It should be emphasised that despite the fact that the essential details of the Salem affair are known, the full facts have not been ascertained beyond all doubt," said the report. "For example, it has not yet been satisfactorily established who planned and executed the plot.

SPECULATION

"Certainty would only be achieved should extended further international investigations be undertaken, which are practically not feasible.

"In all probability, it was an international group of swindlers taking advantage of the crude oil shortage of that time, the international involvement of the parties as well as the particular vulnerability of the RSA. Facts and speculation became so entwined that commercial realism convinced Shell and SFF to settle."

THE REACTION: The report says the SFF did not finance the purchasing of the ship to the amount of $12,3 million or make any payment in advance, nor did anything to enable anyone to finance such purchases.

A local merchant bank had arranged for its financing on condition that SFF pay a portion of the purchase price when it became payable — after delivery to SA of the crude.

"It is therefore inexplicable why the merchant bank agreed to finance them," said the report.

Shell paid about $52 million for this shipment of oil and SFF $45 million. Considering prevalent market prices at the time, SFF paid less than market value for the crude while Shell probably paid more.

Although Lloyds and Shell attempted to have the money frozen in the banks, most of it was already distributed amongst the unknown participants in the conspiracy. It could only be established to whom a portion of the money was paid, namely to Mr Reidel, Mr Soudan and a Mr Mitakis — a Greek who chartered the ship and hired its crew. Mr Mitakis is one of the men now facing charges in Athens.

It was decided by all involved at the time — including the South African Police who had also been briefed — not to lay charges.

Where the money went...

DATE PAID	TO	CURRENCY/AMOUNT
03-01-1980	Mercabank Ltd for account Haven Int.	R 430 425,80
28-12-1979	Mercabank Ltd, Jeppe Street, Johannesburg, for account J C J van Vuuren	R10 235 571,75
10-01-1980	Credit Mercabank (Haven Int.)	($92 500,00)
28-12-1979	Suisse Credit Bank, Zug, for account Beets Trading Co.	$31 108 500,00
03-01-1980	Suisse Credit Bank, Zug, for account Beets Trading Co.	$ 758 733,00
10-01-1980	Suisse Credit Bank, Zug, for account Beets Trading Co.	$ 305 411,00

The mystery man

By Malcolm Fothergill

A new name has been added to the list of those associated with the Salem scandal — Mitakis.

According to the memorandum on the Salem affair compiled by the SFF Association for the Minister of Mineral and Energy Affairs, a Mr Mitakis chartered the ship and hired its crew.

Apart from the fact that he is a Greek and is facing court proceedings in Athens, nothing more is known about him.

Others named in the memorandum are Mr Frederick Soudan, a Lebanese expatriate living in Houston in the United States, and Mr Anton Reidel, a Dutch businessman.

Mr Soudan, the Salem owner, stayed in South Africa briefly in 1979, when he and a woman companion lived it up at five-star hotels in Durban. He has been charged with selling oil he did not own to South Africa and scuttling the vessel.

Mr Reidel, believed to be one of the main organisers of the swindle, is chairman of the Dutch company, Beets.

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EXPLOSIVES INDUSTRY

A new era of competition

The freeing of the explosives market has laid the ground for a shift away from traditional nitroglycerine-based products to newer ones. AECI, for 80 years the sole supplier to the market, has risen to the challenge, and benefits should also flow to those mines which initially opposed the dismantling of the monopoly.

For more than 80 years the world's second biggest commercial explosives market, SA, was served by only one company — AECI.

Its dominance was based largely on advanced technology developed by itself and its 39% shareholder, ICI; an agreement with the Chamber of Mines which made it difficult for newcomers to enter the market; and other agreements which prevented certain companies from selling explosives.

These agreements have been scrapped through government directives issued in 1982. And the market, worth about R400m a year and growing in real terms at about 6% a year, looks tempting to international explosives producers. But they will find a formidable opponent in AECI, which is now preparing to compete on a more aggressive basis.

"AECI never really marketed explosives in the past," says one of its competitors. "It merely allocated production to the various mines. But now it is starting an effective marketing effort."

One of its moves has been the outright purchase of technology from a competitor — another, a decentralisation programme which will raise the entry price for any supplier aiming to capture a large slice of the market.

AECI paid Phoenix Explosives R3,5m this year for a sub-licence to manufacture Tovex watergel explosives. Phoenix is a descendent of National Explosives (Natex) which is owned by the ebullient Oliver Hill's Hanhill group. Natex gained a toehold in the market during the early Eighties despite AECI's trading agreements and made strong representations to the Competition Board which finally judged these as being against the public interest.

Natex originally held the licences from the US Du Pont company to make a full range of explosives, including Tovex. But the Hill camp asked Du Pont to cancel the agreement with Natex and re-issue the licences to Phoenix to prevent them being snapped up by creditors of the Hanhill group — at present in liquidation.

AECI will run a joint operation with Phoenix to produce monomethylamine nitrate, the patented sensitising component which gives Tovex its potency. It will pay Du Pont production royalties but will not have the right to market the final product under the Tovex brand name.

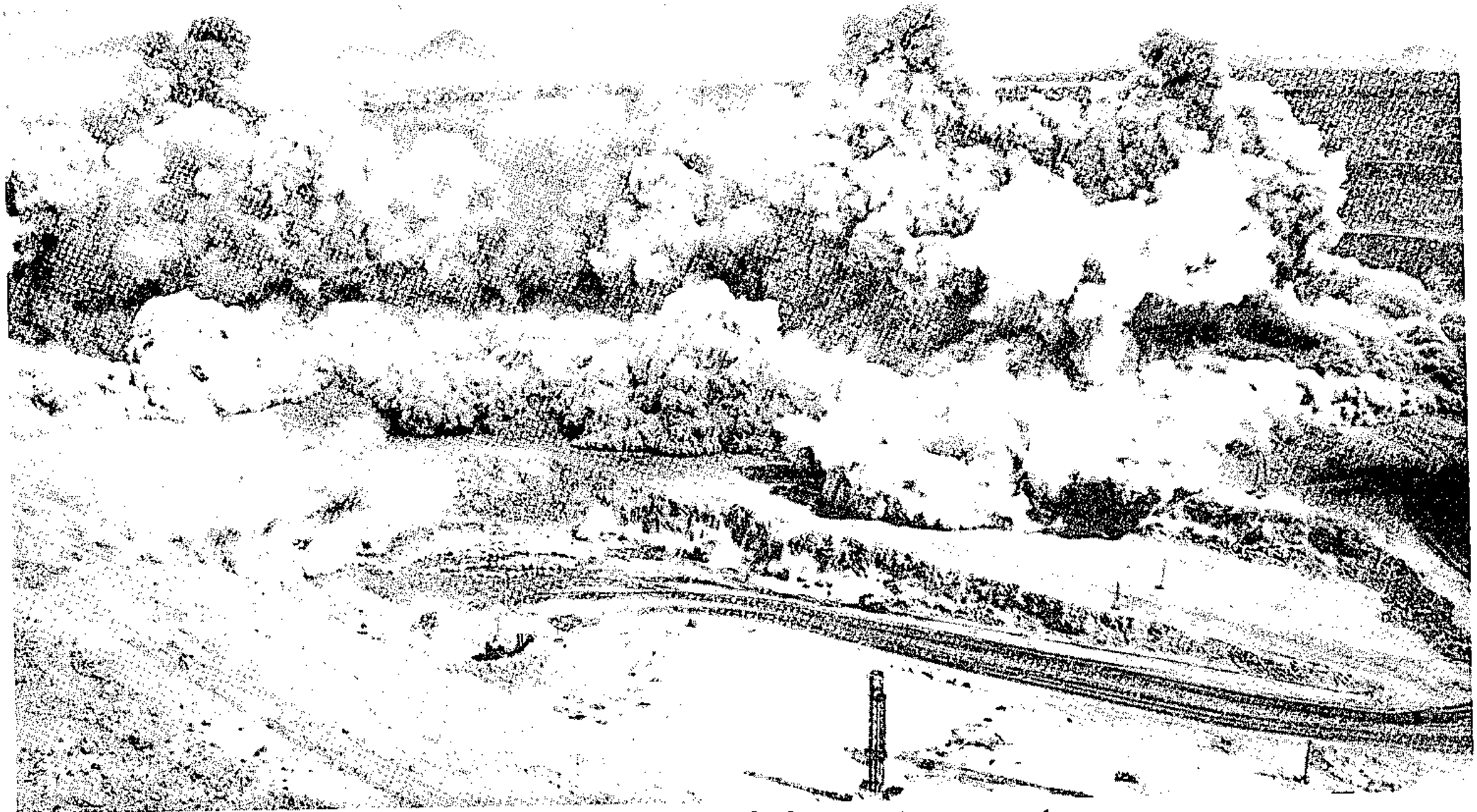
The Competition Board, which had stopped AECI from buying out Hanhill for R20m when its financial problems started, approved the licensing deal on condition that Phoenix continues to produce Tovex in competition with AECI.

Hill claims his company will get between 15%-20% of this market (worth about R150m) with Tovex, despite the fact that AECI will be selling essentially the same product.

It will be sold in the higher-priced, high-technology segment of the market which demands high-energy bangs in small diameter holes drilled in the hard rock found in many SA gold mines.

AECI's nitroglycerine-based (NG) explosives such as dynamite and gelignite have long been considered best for this application. But NG explosives give rise to noxious fumes which linger after blasting; they can cause headaches in those who handle them; and they are relatively more susceptible to accidental detonation than more modern explosives.

Tovex has comparable blasting strength and none of the disadvantages of NG products. This enables it to significantly cut total mining costs in certain circumstances.



Blow-up . . . no more monopoly by secret agreements

In the early days of Tovex AECI maintained that it was not a better alternative to its NG products and also claimed that its own equivalent of Tovex, Sinex 960, was "the best in the world."

But its views must have changed. Sinex 960 is no longer being pushed in this role and it is unlikely that AECI will ever again put up a new plant for NG explosives.

AECI's other major competitor is Sasol which was originally prevented from selling explosives by one of the old agreements. Established with enormous State aid to produce synthetic fuels, Sasol is now under pressure to perform profitably and repay R1,5 billion of its original funding on a commercial basis.

It presumably plans to use explosives as an outlet for the large quantities of ammonia it produces as a co-product to liquid fuels. Some of this is already used in the form of ammonium nitrate in Sasol fertilisers. But uptake here is limited because the fertiliser market is in the doldrums.

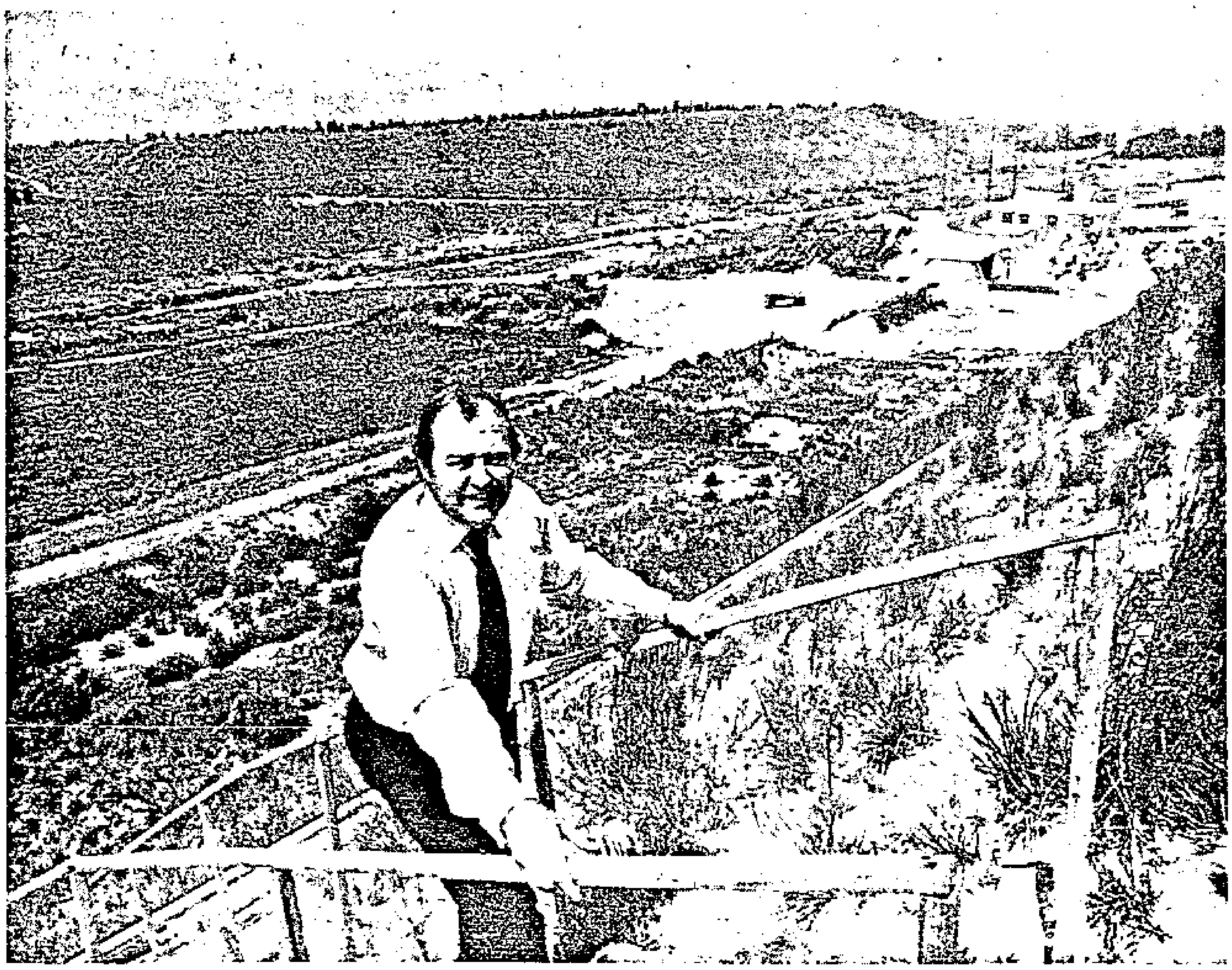
Ammonium nitrate is also a major component of anfo, a dry bulk explosives product made from small porous balls of ammonium nitrate (known as prills) and diesel oil in the ratio of about 96:4. This is a fairly low-technology product used in large quantities for blasting dry, relatively soft rock, often in open-cast mines.

AECI presently sells anfo for the "speciality price" of around R430/t compared with the "commodity price" of about R240/t when almost the same product is sold as fertiliser.

The gap between these prices may soon narrow because, as Hill predicted to the Competition Board, the freeing of the market will probably lead to dry bulk explosives being sold as commodity products — as they are in other countries.

Sasol is erecting a plant to make prills from ammonium nitrate which is presently used to produce limestone ammonium nitrate (LAN) fertiliser in a plant at its Sasolburg facilities. It will produce a range of high-technology cartridged and bulk emulsion explosives at its Secunda facilities. An advantage of this site is its location in the heart of the eastern Transvaal coal mining area.

Sasol's Uys . . . progress will be tough



Hanhill's Hill . . . Tovex fills a modern niche

The products will be made under licence to the Swedish company Nitro Nobel and the Atlas Powder Company of Dallas and sold under the trade name, Emulite.

This product has been hit by the falling rand because Sasol must import one of its important components which consists of microscopic, hollow glass spheres known as microballoons. The air in the spheres sensitises the explosive emulsion. Sasol claims the increased cost will not materially affect prices.

Sasol is negotiating for on-site testing of its bulk explosives facilities at certain mines before the end of the year. Tests of its emulsion products have already begun. After initial problems due to packaging, they are said to have performed well.

'No confrontation'

In an on-site operation the explosives company traditionally fills the boreholes drilled by the mine with explosives and charges according to the mass of product delivered. Sasol will, in addition, have at its disposal the ability to carry out blasting optimisation studies on factors such as drilling patterns, hole diameter and depth and timing of detonation. It will use Blaspa computer simulation programmes developed in Canada.

AECI offers similar services.

"We are not planning a confrontation with any other company," says Sasol GM Janse Uys. "We realise we will be in competition with perhaps four others and our progress in the market will be a hard grind." Despite these soft words, Sasol's hard grind may one day bring it about 25% of the bulk and dry blasting agents market valued at about R200m.

AECI must be alive to the threat. It recently announced a plan to put up four new explosives plants in mining areas to allow daily deliveries to a large proportion of its customers. As part of the scheme it also commissioned a factory in the platinum mining area of Bophuthatswana in 1982.

This decentralisation provides several benefits for customers including lower transport costs and less need to hold large stocks of explosives in expensive magazines. It also represents an improvement on the situation which has prevailed for decades in which AECI supplied the entire country's needs from only two plants, Modderfontein and Somerset West.

AECI has also established 14 on-site plants for producing and dispensing bulk explosives for its customers' large open-cast mines. But relative newcomer Natex, which still has only a fraction of AECI's market share, already has four on-site plants.

For years AECI's prices of the traditional NG explosives have been among the lowest in the world while its newer products have tended to be more expensive. NG prices could soon rise to reflect costs while prices of the other pro could be pushed down by competit

(55) FM 24/8/84

should accelerate the swing from NG to more modern explosives — a trend to be welcomed by AECI's competitors as none of them make NG.

There is no doubt that the mines will gain from the freeing of the market. But their benefits will flow largely from competition between suppliers in the area of service where the accent will be on reducing mining rather than explosives costs.

In the end these benefits may also become apparent to those mining houses with shares in AECI which originally opposed government's meddling in its secret supply agreements with the Chamber of Mines.

Mercury 18/9/84

No hold-back in the nuclear industry

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RECENT reports have created the impression that the contribution nuclear energy makes in the international generation of electricity is at a standstill, says Dr Wynand de Villiers, executive chairman of the South African Atomic Energy Corporation.

By
Bill Faill

This is not the case, he says — the latest statistics point to a substantial growth in nuclear generating capacity in the next few years.

According to authoritative sources 306 reactors in nuclear power stations were licensed for production by the end of 1983. Of these 293 were operational, and in 1984 several more came on line including Koeberg in this country. The generating capacity of nuclear power stations increased by 8,6 percent in 1983.

Dr de Villiers points out that the growth in the international nuclear industry is best illustrated by the fact that 220 new reactors were under construction at the end of 1983. These will become operational in the next few years.

At the end of 1983 nuclear energy was being used in 25 countries to generate electricity. Six more countries were in the process of constructing their first reactors and some 20 more, many of them under-developed countries, were considering nuclear power as part of their energy programmes.

Dr de Villiers says the status of the nuclear power industry in the United States is usually quoted as typical of the stagnation in the industry. While it is a fact that the projected growth in nuclear power of ten or more years ago has not been achieved this can be attributed to many factors.

The most important are the tightening up of licensing procedures and safety requirements, leading to increased construction costs and resulting delays. Simultaneously the oil crisis resulted in successful energy-conservation programmes and the world-wide economic recession in a lower electricity demand.

However, the U S presents a completely different picture now, he says. In 1983 the contribution of nuclear energy to electricity production increased by 9,5 percent. A total of 86 reactors were licensed, with another 46 approaching completion. Of these, 18 were more than 90 percent complete.

'Of these 18 reactors seven have already been granted licences to load fuel and run operational tests. They should become fully operational later this year. The remaining 11 could be in operation before the end of 1985 and should the U S authorities be able to overcome their licensing backlog many more units can become operational much sooner.'

In France the share of nuclear energy in the provision of electricity increased by 33 percent in 1983, and nuclear power stations now provide 48 percent of the country's electricity. France has 36 reactors in production and 27 more under construction.

In Japan 25 reactors are producing electricity at present, with two more due to come on line almost immediately. The country is planning to derive 28 percent of its electricity from nuclear sources by 1990.

Other countries with ambitious nuclear-power programmes are Canada, with 14 working reactors and 11 under construction, West Germany with 15 and 12 respectively, the U K with 32 and 10 and Russia with 40 and 31.

'South Africa is in no way out of step having entered the nuclear-power era, especially in view of the availability of uranium as the energy source and the value of fossil fuel for the provision of liquid fuels and other products,' Dr de Villiers concludes.

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Watchdog

A safeguard for your rights. Edited by BOB MOLLOY

Tips to help you cut those high energy bills

A survey
by
HERBERT
SACKSON

WITH the ever increasing cost of electricity, energy use can be reduced by making homes more energy efficient. Even if it costs money, such spending can hold down energy costs.

APPLIANCE	CONSUMPTION in Kw	COST P/Hr in cents
Geyser	3,0	16,8
Stove Plate	1,5	8,4
Oven	3,5	19,6
D/freeze upright	0,3	1,68
chest	0,5	2,8
Kettle	2,0	11,2
Iron	0,5	2,8
Toaster, pop-up	1,0	5,6
double	1,5	8,4
Double hot-plate	2,0	11,2
Electric fry-pan	1,5	8,4
Microwave oven	1,0	5,6
Vacuum cleaner	0,5	2,8
Polisher	0,5	2,8
Hi-Fi	0,25	1,4
Television	0,25	1,4
Video player	0,25	1,4
Asbestos heater	1,5	8,4
Infra-red heater	3,0	16,8
Lamp 100 watt	0,1	0,56
60 watt	0,06	0,34
150 watt	0,15	0,84

You can conserve energy by sitting down on the job but you can save a lot more by following the accompanying list of energy-saving hints

Water heaters:

"Energy efficient" geysers might cost a little more but their lower operating costs can more than make this up.

Buy a geyser with thick insulation which will retain heat much longer.

Should your geyser be inadequately insulated, add insulation but be sure not to blank off air vents to create a safety hazard.

Insulate and lag your hot water pipes as well.

Check the thermostat setting. Regardless of the reading, reduce it by about five degrees. You will not notice a difference in your water temperature but will save electricity.

In the kitchen:

Never boil water in an open pan. It will boil faster and use less electricity in a kettle or covered pan.

Keep stove elements and reflectors clean. This will improve efficiency and save electricity.

Match the size of the pan to the heating element. More heat will get to the pan, less to the air.

Turn off stove plates everal minutes before he allotted cooking ime. The element will stay hot enough to finish the cooking. This also applies to the oven.

Never use a pan or pot with a "dished" bottom. Heat is lost through lack of contact with the element.

When using the oven, make the most of the heat. Cook as many foods as you can at the same time.

Don't keep opening the oven door to check food. Each time this is done, heat escapes and more energy is needed to regain the cooking level. Rather watch the clock or use a timer.

Use small (portable) electric pans or ovens for small meals in preference to the kitchen range/oven. Smaller appliances use less power.

Use a pressure cooker or microwave oven if you have them. They save energy by reducing cooking time.

The dishwasher:

Be sure the dishwasher is full — but not overloaded.

Let your dishes "air dry". If you don't have an automatic air-dry switch, turn off the control knob after the final rinse. Prop the door open a little and the dishes will dry faster.

Scrape dishes before loading them into the washer so that you won't have to rinse them. If they need rinsing, use cold water.

Refrigerator:

Don't keep your fridge or freezer too cold. Resetting to even a few degrees warmer will not affect the food but save electricity.

When buying a frige-/freezer, give preference to one that must be defrosted manually. These consume less energy than the automatic defrost type.

Do not allow frost build-up. This increases the amount of energy needed to keep the mechanism efficient. Defrost when rime is 6 mm thick.

Make sure door seals are tight. Test by closing the door over a strip of paper or banknote — half in and half out. If the paper can be pulled out easily, the seal needs replacement or the latch might need adjustment.

Washers:

Wash clothes in warm or cold water. Rinse in cold. Use hot *only* if absolutely necessary.

Fill the washer, but do not overload.

Use the "suds-saver" if you have one — this will allow you to use one tub full of hot water for several loads.

Don't use too much detergent. Heavier sudsing makes the machine work harder, thereby using more energy.

Pre-soak or use a "soak cycle" when washing heavily soiled garments. This will avoid two washings and save energy.

Tumble dryer:

Fill dryers, but do not overload, and keep the lint screen clean. Lint impedes the flow of air in the dryer and causes the machine to use more energy.

Keep the exhaust clean and check it regularly. A clogged exhaust lengthens the drying time and uses more power.

If your dryer has an automatic dry cycle, use it. Over-drying merely wastes energy.

Dry clothes in consecutive loads. Stop-start drying uses more energy. More power is needed to warm the dryer to operating temperature each time the cycle is begun from cold.

Separate loads into heavy and light items. Since the lightweight takes less drying time, the dryer does not have to work as long for these loads.

If drying the family wash takes more than one load, leave small, lightweight items until last. You may be able to dry them after you turn off the power, with heat retained by the machine from earlier loads.

Save energy by using the old-fashioned clothes line. As a bonus, clothes dried outdoors often seem fresher and cleaner than those taken from a mechanical dryer.

Ironing:

Remove clothes that will need ironing from the dryer while still damp. There is no point in wasting energy to dry them thoroughly if they have to be dampened again.

You can save ironing time and energy by "pressing" sheets and pillowcases on the warm top of your dryer. Fold them carefully, then smooth them out on the flat surface.

Save energy needed for ironing by hanging clothes in the bathroom while you are bathing or showering. The steam will remove most of the wrinkles.

Lighting:

Nearly 20 percent of domestic power is used for lighting. Most people light their homes too brightly. Lowering of lighting levels is a simple conservation measure.

Turn off lights in any room not in use.

"Light zone" your home to conserve electricity. Concentrate lighting in reading and working areas and where it is needed for safety — such as stairs. Reduce lighting in other areas but avoid sharp contrasts.

To reduce overall lighting in non-working spaces, remove one bulb out of three in multiple light fixtures. Replace with a "dud" one for safety. Replace other bulbs throughout the house with bulbs of the next lowest Wattage.

Consider installing dimmer switches when replacing light switches. These make it easy to reduce lighting intensity in a room and thus save energy.

Use one large bulb instead of several small ones in areas where bright light is needed.

Use "long-life" incandescent lamps only in hard-to-reach places. These are less energy-efficient than ordinary lamps.

Need new lamps? Consider the advantages of those with three-way switches. They make it easy to keep lighting levels low when intense light is unnecessary — a big saving in electricity. Use the "high" switch only for reading or other activities that require brighter light.

Always turn three-way bulbs down to the lowest lighting level when watching TV. You will reduce the glare and use less energy.

Use low-Wattage night-light bulbs. The 4 W with a clear finish is almost as bright as a 10 W frosted but uses much less energy.

Use fluorescent lights carefully. Compare "energy use" information and operating costs of similar models with that offered by the same or other manufacturers.

Keep appliances in good order so that they will last longer, work more efficiently and use less energy.

Before buying new appliances with "special features", find out how much energy they use compared with other perhaps less convenient models.

Use appliances wisely and use the one that takes the least amount of energy for the job. For example: toasting bread in the oven uses three times more energy than the toaster.

When shopping:

Try to buy products that will last. More durable products save the energy tht would be required to make replacements more often.

Buy equipment on the basis of initial cost, plus operating costs, rather than on the basis of purchase price alone.

When you buy fabrics or garments, try to choose those that can be washed in cold water and require little or no ironing.

Give gifts with year-round benefits. If you have appliances on your gift list, select long-lasting models that use the least amount of energy.

Don't buy motorized equipment or gadgets when hand-operated versions will do.

Buy the household equipment that's right for you. Purchasing the right equipment for your home and needs, and using it wisely while taking good care of it can reduce energy costs considerably.

Bigger isn't necessarily better. Don't buy a larger or more powerful piece of equipment than

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Double trouble on house insurance

From a Somerset West reader:

I WISH to tell you of an insurance rip-off I have just experienced.

I became the registered owner of a property (which I occupied on July 7) on May 7.

Although I put on my bond application form that I would insure it myself I was told that they had to do the insurance (conditional selling) as they were unable to obtain proof of yearly insurance payments for the thousands of bonds on their books. I also understood that this facilitates granting of the bond.

I signed the grant letter, which included a paragraph (very small print) stating that commencement of the insurance policy was from the date of signing ie March 10.

Therefore the insurance company gets paid from March 10 to May 7 as well as the original owner's insurance company (double payment). I very much doubt there would have been two payments in case of a claim for that period.

Please warn other readers through your excellent column.

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wherever you can — they give out more "lumens per Watt". For example: a 40 W fluorescent lamp gives off 80 lumens/W and a 60 W incandescent lamp only 15 lumens/W. The savings over a period could more than pay for the changing the fixture.

Keep all lamps and lighting fixtures clean. Dirt absorbs light.

Remember to use a clear globe in a fixture, such as a chandelier, and a frosted one in a pendant fitting or reading light where the globe is visible.

Appliances:

Don't leave your appliance running when not in use. This is a complete waste of energy.

When buying appliances, read the labels you need. Whether it is a geyser, deep freeze or fridge make sure its size and power are right for your home. Ask your dealer, a trade association or a consumer interest group for help in judging this factor.

Saving

Try to use energy-intensive appliances such as dishwashers, washing machines, tumble driers and ovens in the early morning or late evening to help reduce the peak load.

If everyone scheduled household chores during off-peak hours, fuel use would be reduced and the country's energy would be conserved.

Try it — it works.

ENERGY COSTS:

The following energy costs are based on the Cape Town City Council electricity department rate for domestic tariffs of 5,6c per unit (one kW/h). While it is accepted that most household appliances are run for short periods, the costs are those which would be incurred for each hour of operation.

● See table.

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Pretoria police probe international oil deal

Star 18/9/84

Own Correspondent

Pretoria police are probing a multimillion-rand oil deal which involves several prominent Johannesburg businessmen including a former Cabinet Minister.

A Pretoria importer and financier claims to be R10 million out of pocket in commission for his role in arranging an Arabian crude deal for foreign buyers.

Pretoria Commercial Branch detectives are investigating the deals in which South Africans acted as middlemen between Saudi Arabian sellers and European buyers.

The oil did not involve the South African Government nor was it destined for private enterprises in this country.

It is understood that Scotland Yard has also launched inquiries into the deals and has questioned one of the go-betweens in these black market transactions.

Commission on four open market deals exceeded R235 million and the Pretoria importer claims that R10 million was his commission.

It is understood that, about two years ago, the financier-importer employed a city businessman to represent him as an agent in certain overseas deals. In his overseas negotiations the businessman met the former Cabinet Minister and one of his aides.

This meeting led to the three becoming involved in the same private oil deals.

The Pretoria importer claims he spent more than R40 000 on his agent's travel and other expenses.

This happened about two years ago. The team's task was to organise outlets for crude oil supplied by a member of the Saudi Arabian royal family.

In June last year, the Pretoria financier apparently became suspicious and telexed an inquiry to the buyer's agent in London, asking what had happened to his commission.

He was told the transaction had collapsed. But it is understood that the Saudi Arabian seller claimed that agreement had been reached and the deal had gone through.

KDM 18/9/84 (55)

Atom power hard to turn off

THE FIRST generation of commercial nuclear power plants is now reaching the autumn of life. Yet the technology for shutting reactors has yet to be established.

Operators of nuclear power plants have to meet the cost of closing them. Money for this difficult and expensive operation is gathered during the operating lives of the plants from a levy on electricity tariffs.

Estimates range from under 10% of the plant's construction costs to as high as 40%.

The question of decommissioning reactors is not as remote as it may seem. A recent estimate suggest that the UK alone will have to retire about 30 by the end of the century. How, or even whether, they will be dismantled is by no means clear.

There are two basic options. The first involves blocking the reactor in concrete and leaving it forever. The second is for dismantling in three stages.

Stage 1: The reactor is shut, the control system disconnected and the nuclear fuel is removed. The remaining structure has to be kept under constant surveillance.

Stage 2: The installation is stripped to the reactor vessel and core, leaving about 10% of the original installation containing the most highly radio-active components. Surveillance is still needed.

Stage 3: All remaining components are removed to leave the site free for public use.

Operators are faced with the choice of delaying the later stages so that the radio-active elements decay. This might involve carrying out Stages 1 and 2 as soon as possible then delaying Stage 3 for anything from 10 to 100 years. The site would be cleared of everything but the reactor core, leaving it free for the construction of another nuclear unit.

Alternatively, Stage 1 — a comparatively simple operation — can be carried out at once, with Stages 2 and 3 delayed for 50 years or more.

To talk about decommissioning choices may be misleading. There are constraints on how quickly the operation can be done. Nuclear industry estimates suggest that the entire operation, from shutdown to site release, might be done in eight to 15 years.

At an EEC conference on decommissioning recently a group of robotics experts put the matter frankly: "It is clear that decommissioning will take years, during which time we will be dealing with levels of radiation and waste quantitites still unheard of."

If the decommissioning operation were to be carried out all at once, remote control or robotic methods would be needed to penetrate the reactor core, which would be unsafe for human entry for anything up to 120 years.

If robots are needed a new set of problems arises. Robots, as they are being developed for industrial uses, are designed to carry out repetitive routines in a fixed location.

Decommissioning requirements will be quite the opposite. They will need flexibiliy and the capacity to work in a constantly-changing environment. Given the changes which have taken place in reactor design over the past 20 years, very few countries will be able to design a uniform system for decommissioning.

Even if suitable remote control robotic systems were developed there would be formidable osbstacles. Nuclear reactors are not designed to give easy access to their cores. They are, as a paper at the EEC conference put it, "complex mazes of concrete structures, piping, reservoirs, wiring .... no provision has been made to ease access to critical areas. On the contrary, labyrinths of nutron-absorbing concrete act as biological shielding."

The difficulties of rapid dismantling, as well as the expected cost benefits, would seem to point towards deferment of dismantling the most highly radioactive parts of the reactor. Is this a choice that can be taken freely?

Deferred decommissioning would leave the nuclear industry open to the charge of passing the buck to future generations. Perhaps more to the point, leaving the reactor to stand for 100 years implies a good deal of faith in the structural integrity of the inner reactor components.

However, the EEC has already carried out studies on this problem, based on the UK's Magnox reactors, and concluded that "with reasonable maintenance and attention to some minor deficiencies" reactor vessels should remain in good condition for up to 50 years.

The question of nuclear waste disposal hangs over the whole decommissioning issue. There is as yet no international standard of what consititutes radioactive waste as opposed to waste which can simply be dumped on the nearest rubbish tip. So cost estimates are difficult to make with any accuracy. — Financial Times.

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British company to develop SA oil field?

19/9/84 Star

Financial Staff

One of the world's largest marine engineering companies is exploring potential relationships with South African engineering firms to establish a permanent engineering and project management presence in this country.

Brown and Root of London, part of the R9 billion-a-year Halliburton Company of the US, is looking into metallurgical engineering, petro-chemical and industrial consultancy and construction opportunities in Southern Africa.

Senior executives of Brown and Root Europe-Africa Division, including vice-president and chief engineer, Dr Larry Farmer, are to hold talks with Government and private sector interests.

Against the background of the possible extraction of gas at Mossel Bay, the company intends bringing to South Africa its considerable marine engineering project management support and services expertise.

This expertise extends to engineering feasibility studies, project control, engineering surveillance, construction management and maintenance management.

The company has more than 20 years' experience in North Sea oil development and has had responsibility for the BP Forties, Britoil Beatrice and British Gas Morecambe Bay fields.

Its experience in the North Sea is of particular interest to South Africa in that conditions off Mossel Bay, which require extraction in an area of high swells and depths, are similar to those of the North Sea.

The Mossel Bay find is rated as a medium-sized field and Brown and Root believe they can maximise its potential.

55 24/9/84

The Star Monday

Financier says he was offered bribe to stop oil probe

Pretoria Correspondent

A Pretoria financier and importer was allegedly offered a substantial amount by a London businessman to "get certain people off his back" in connection with multimillion-rand oil deals and missing commissions.

The financier, named at the weekend as Mr Barney Lindeque, was allegedly approached in June last year by a former executive of his company, also a Pretoria man.

The offer was that Mr Lindeque would be paid a large sum of money — believed to run into millions — to quieten down investigations in South Africa and overseas on the oil deals.

Mr Lindeque refused the offer. He claims to have lost about R10 million in commissions due to him for his role as broker in four deals.

According to weekend reports, one of the people involved in the deals, a former Scotland Yard policeman, Mr David Watkins, of Jersey, intends flying to South Africa to pursue his efforts for commission due to Mr Lindeque.

Mr Watkins a private investigator, acted for Mr Lindeque when the Pretoria financier first sensed something was amiss in June last year.

It is believed Mr Lindeque acted as a middleman between agents respresenting Sheikh Salal of the Saudi Arabian royal family and representatives of European crude oil buyers.

Mr Lindeque first became in volved in oil for private European buyers when approached by his former employee, in June 1982.

The ex-employee's approach apparently followed a meeting he had had in London with the former Minister of Justice, Mr Jimmy Kruger and Cape Town businessman, Mr Hilton Frans.

Four oil deals were later negotiated: 250 000 barrels of crude a day for three years, and three "spot contracts" totalling about 8,3 million barrels of Irianian oil. Commissions ranged from five cents to 25 cents a barrel.

Two agents prominent in the deals, were Mr Rafika Tunisian representing the sheikh, and Mr Richard Hoe, who acted for some European oil customers.

Mr Lindeque said he had originally been told some oil transactions had fallen through, but he later established they had gone through but he had not received his commission.

SA told to 'open nuclear plants'

S Times 29/9/84

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VIENNA. — South Africa was told yesterday to open all nuclear plants to international inspection or face sanctions by the International Atomic Energy Agency (IAEA).

An IAEA general conference resolution adopted in Vienna gave Pretoria one year to meet the demand. The resolution, which expressed alarm at South African nuclear abilities, was passed by 57 votes to 10, with 23 abstentions. The United States and other Western nations opposed it.

The resolution against South Africa was tabled by Morocco on behalf of black African states. It said unsafeguarded South African nuclear facilities enabled Pretoria to make nuclear weapons posing a security threat to the continent.

The IAEA safeguards some South African nuclear facilities but not a pilot nuclear enrichment plant near Pretoria. The safeguards system checks diversion of civilian nuclear fuel to military projects.

An IAEA member must submit plants to safeguards if they are built with agency help, but the pilot enrichment plant received no such assistance. — Sapa-Reuter

'Spies' check on SA oil supplies

6/10/84 55 E. Post

Weekend Post Correspondent

LONDON — Seamen and port workers throughout the world are being drafted into a "spy network" seeking to cut off the flow of illicit oil to South Africa.

Britain's 25 000-strong National Union of Seamen (NUS) is one of the prime movers in the campaign launched in collaboration with unions from dozens of countries.

Their intention is to supply a stream of precise early information on South Africa's oil traffic and the suppliers.

The target of the multinational organisers of the maritime union action is to arm unions, governments, anti-apartheid activists and the United Nations with information they can act on quickly.

They threaten major disruptions to South Africa's vital oil trade through:

- To force and embarrass governments into taking action against individuals, oil companies, suppliers and shipping companies.
- Through these disruptions to force up the price of oil to South Africa.

The campaign "High-seas Spy" was launched following the formation earlier this year of the maritime unions against apartheid (MUAA).

The key members of the world body are Britain's NUS, the Transport and General Workers Union (TGWU) — the biggest union in Britain — and the seamens unions in Australia and Denmark.

While oil movements are the key target, monitoring action will extend to all strategic commodities from arms to minerals.

The previous main stumbling block to monitoring was the fact that the oil embargo is voluntary making it difficult to pinpoint the source of supplies and high seas trade-offs.

Mr Jim Slater, secretary-general of Britain's NUS and a seasoned international anti-apartheid activist, is one of the driving forces.

Earlier this year he addressed the UN special committee against apartheid to seek support for a conference of maritime unions scheduled to be held in 1985.

The plan is for it to be held under the auspices of the International Labour Organisation (ILO), which has already guaranteed its full support, and the UN special committee.

But the union leaders are getting the flow of oil information moving without delay to provide the ammunition for unprecedented action to complicate supplies of South Africa's most vital commodity.

The international petroleum "spy network" of hundreds of thousands of seamen and port workers is already receiving the first of what will become a regular supply of circulars advising on what clandestine action to take.

All information received will go to the shipping research bureau, a highly sophisticated wing of the European anti-apartheid movement, based in the Netherlands, which has already produced several detailed and embarrassing reports on South Africa's oil trade leading to conflict in the Dutch Parliament.

Anti-apartheid leaders see the mobilisation of the seamen's spy campaign as potentially one of their greatest boycott success stories.

Mr Abdul Minty, the international anti-apartheid movement's leading military and strategic commodities expert this week said the campaign had far reaching implications.

Hope for govt gas decision

20/10/84 (55) C-Times

Chief Reporter

SOEKOR, the State-sponsored oil exploration company, was hoping for a cabinet decision early in the next parliamentary session on gas production from wells being investigated off the Southern Cape, a spokesman said yesterday.

He said rumours that the search for natural gas in the Mossel Bay/Plettenberg Bay area had yielded results far more significant than had been officially disclosed were "mere speculation at this stage".

The spokesman said detailed feasibility studies were in progress and reports on the results were being submitted to the cabinet.

Liquid fuel

It was reported earlier in the year that South Africa was ready to produce offshore natural gas from a major field established off the Cape coast and that engineers were studying a R2 000-million plan to convert the gas to petrol and diesel fuel.

It was officially disclosed that Soekor's target figure was 1-trillion cubic feet of gas, which would yield 20 000 barrels of liquid fuel a day.

Soekor, which has never disclosed how close it is to its target, has said that once this figure is reached, the high costs of extraction will be justified.

The corporation has been investigating ways of getting the gas ashore, and of converting it into liquid fuel.

Spectacular

● The first major gas discovery on the geological structure now being explored off the Southern Cape coast was made in 1980, and since then further wells have been encountered, containing gas in varying quantities.

Gas-ignition "flares" emitted by the exploratory rigs, which have been particularly spectacular at night and which might have prompted some of the rumours, have been described as "quite routine" as the search continues.

The Sedco K rig is still drilling in the Mossel Bay area, and the more modern Actinia is being used farther to the east, in the Plettenberg Bay area.

Vying for oil contract

SS C.Times 26/10/84

Chief Reporter

SOEKOR has declined to comment on reports that some of the world's biggest oil engineering companies are vying for a lucrative contract to help South Africa exploit its first commercially viable gas-strike, off the Southern Cape coast.

Today is believed to be the deadline for pre-qualifying tenders for a feasibility study of how best the considerable natural gas resources in the Mossel Bay/Plettenberg Bay area can be exploited.

It has been reported that the project could cost up to R3 000-million and yield as much as 20 percent of the Republic's fuel needs when the gas is converted into liquid fuels.

Negotiations between Soekor, South Africa's State-sponsored exploration company, and oil companies overseas have been conducted in secret, and the names of tenderers or potential tenderers have not been officially disclosed.

Soekor is aiming at a target of one trillion cubic feet of gas yielding 20 000 barrels of liquid fuel a day.

(55)

E.Post

27/10/84

Wraps lifted off secret SA oil deals

OSLO — Norway has emerged as a centre for exporting oil to South Africa — a trade shrouded in secrecy because of the risk of the country being seen to be propping up apartheid, shipping industry analysts say.

Although the trade is legal, the businessmen behind the deals, ship brokers, agents, managers and shipowners will only talk on condition they remain anonymous.

They relate tales of secret communication codes, oil tankers with names painted out to avoid indentification and the open flouting of an oil boycott by Middle East nations against South Africa.

"If we didn't do it, somebody else would, and we are not breaking any laws, so the trade flourishes," one ship broker said.

Attempts by the United Nations to introduce a mandatory oil embargo on South Africa have failed, but many nations, including Norway, have vowed not to supply it with their oil.

A Norwegian Foreign Ministry spokesman said, however, the Government would merely damage Norway's important shipping industry if it alone imposed a total oil trade embargo, since other countries would take its place.

The Amsterdam-based Shipping Research Bureau, an anti-apartheid group monitoring shipping to South Africa, said earlier this year the Norwegian oil tankers could have supplied about 35% of South Africa's needs in the 18 months to January, 1983.

It accused Norwegian shipping companies, which own 7% of the world's tanker fleet, of secretly shipping Middle East oil to South Africa despite an embargo imposed by the Organisation of Petroleum Exporting Countries (Opec).

The deals are generally concluded in strict secrecy.

The easiest way to transport oil to South Africa is to give a false destination for the vessel concerned, or to simply say it is heading for a certain continent.

Another common method is for vessels to load oil in the Gulf area, then transfer their cargo at sea to other tankers that sail to and from South Africa.

Traders in Oslo say the majority of South Africa's oil needs are met from the Middle East, but European ports are also used. — Sapa-Reuter.

Sowetan 30/10/84 [illegible] 55 [illegible]

Power levy shock in Orlando West

RESIDENTS of the self-built houses in Orlando West II (Mzimhlophe) are up in arms over the Soweto Council's demand that they pay the R12 electricity levy — the same amount paid by residents staying in rented houses.

In circulars distributed in the area early this month, the residents are asked to start paying the monthly levy of R12 as from November 1, 1984.

At a meeting held in one of the resident's houses at the weekend, the residents resolved to send a delegation to the township manager's offices to quarter the levy, which they said was "unfair because we tubed and wired our houses at our own expenses."

A spokesman for the residents, who would not be named said: "People who are staying in houses rented from the council are paying R12 because their houses were tubed and wired by the council.

"From what we know, we are supposed to pay only R4 and not R12 as we have been asked," said the spokesman.

Mr Nico Malan, Soweto Council's Town Clerk, yesterday said the payment of the electricity levy by residents who had wired and tubed their own houses depended on whether the council had upgraded the wiring in the houses.

If no upgrading has been done, the residents would pay R8 less than what residents in council rented houses pay.

Mr Malan also said that individuals who had received notices to pay the levy could go to the local township manager's offices to be told what had been done to their houses to necessitate the payment of the levy.

Ford to retrench

FORD yesterday confirmed that it would be retrenching employees, probably at the end of the week.

Mr Fred Ferreira, director of industrial relations at Ford, said further lay-offs would definitely take place, but declined to comment on how many would lose their jobs.

Retrenchments would probably take place at the end of this week, he said.

Mr Ferreira expected the National Automobile and Allied Workers' Union to make representations to management soon.

The Evening Post reported on Friday that Ford would retrench between 300 and 400 salaried and hourly-paid workers on Friday this week, bringing the number of retrenchments at Ford in the past two months to more than 800.

The regional secretary of Naawu. Mr Les Ketteldas, said last week the proposed retrenchments showed a lack of planning by management.

Ford retrenched 425 employees on September 7 and shut down its Port Elizabeth plant for five working days. — Sapa.

Cops deny killing

THE SOUTH AFRICAN Police yesterday strongly refuted allegations that it was responsible for the death of a baby girl during an operation in Sharpeville on September 3 in which tearsmoke was used.

It was alleged that the baby, Maude Zungu, died as a result of tearsmoke in the room in which she was sleeping.

"This allegation is devoid of all truth . . . it has been ascertained the baby died of natural causes and that a doctor issued a death certificate to the effect that death was due to haemolytic anaemia," a spokesman for the SAP Public Relations division said in Pretoria. — Sapa.

2/11/84 ⑤⑤ C-Times

Koeberg fault led to shutdown

Staff Reporter

A FAULT in the turbine condenser system of the Koeberg nuclear power station had led to a five-day shut-down which ended only last night, an Escom spokesman said.

He added that the work had been completed and the station was slowly brought back into commission throughout last night.

"The systems undergoing maintenance are not directly connected to the nuclear aspect of the station," the spokesman said. "This sort of problem . . . is not unusual."

One of the thousands of tubes through which sea water passes to cool purified water in the secondary circuit had sprung a leak. This was immediately registered by monitoring instruments.

"Normal cleansing procedures could have taken care of this leak, but it was decided to fix it." The five-day shutdown was not unusually long for such an operation, he said.

Work could not be done on the condenser while steam was passing through.

The spokesman explained that there were three separate circuits within a nuclear power station. The primary circuit transferred heat from the reactor to the secondary system, where steam was generated to turn the turbines. The third system cooled and condensed the steam.

"The fault was in the condenser at the interface between the second and third circuits," he said.

Electricity had in the meantime been supplied by the national grid, and no consumer had suffered power cuts as a result of the shutdown.

The Argus, Friday November 2 1984 7

Koeberg plant shut for 5 days

Tygerberg Bureau

THE technical fault which has shut down the Koeberg nuclear power plant for five days is "fairly common in power stations of all kinds", an Escom spokesman said today.

This was why the shutdown was not made public before the news leaked out last night.

The spokesman said there is no danger of leaking radioactivity. The fault is in the turbine condenser system, which has no direct link with any of the nuclear systems.

FULL OPERATION

The spokesman said Escom suffered no loss as a result of the shutdown and there were no power cuts because sufficient electricity was produced by normal supplies on the national network.

The power station stopped generating power on Saturday night for repairs.

Routine maintenance, which was to have been carried out during the annual refuelling of the station, was undertaken at the same time. The station will be phased into full operation today.

- The Koeberg cut is not responsible for clock and computer malfunctions in the past two days — according to Escom, these are because appliances are being fed a lower frequency "diet".

A spokesman said: "The generators driving the country's power grid system have to be synchronised. When there are synchronisation problems, a lower power frequency is delivered."

Most of Secunda's workers dismissed

155

Star 6/11/84

Labour Reporter

Sasol this morning told most of its 6 500 Secunda workers they had dismissed themselves by observing the two-day regional stayaway and asked them to collect their pay tomorrow.

Ultimatums were issued to morning-shift workers by the management of Sasol 2 and 3 in Secunda last night and a return-to-work deadline of 10.30 am was set.

The assistant general manager of Sasol, Mr Robin Hugo, today said notices had been distributed to all employees warning them the stayaway constituted a breach of their contracts.

Most employees who participated in the stayaway live in hostels in the eMbalenhle township.

The Chemical Workers' Industrial Union (CWIU), which claims a representative majority at the plants, held a meeting there at 4.30 am today but failed to persuade workers to return.

They refused to enter buses laid on to transport them after the meeting, and in spite of an extension of the deadline to 11.30 am most failed to return to work.

The afternoon and night-shift workers have been warned to return within two hours after the normal clock-in time.

Sasol's sacked 6 000 will wait to be evicted

55

Star
7/11/84

By Carolyn Dempster and Langa Skosana

Buses were waiting and a makeshift pay-out point had been erected in the Secunda township of eMbalenhle to prepare for the removal of the 6 000 Sasol workers who were dismissed yesterday for taking part in the two-day regional stayaway.

While a mass meeting of dismissed workers at the eMbalenhle township hostel this morning resolved to wait to be evicted, police with dogs patrolled the township in hippos and vans with dogs.

More than 6 000 workers at Sasol's two Secunda plants — Sasol 2 and 3 — were told yesterday that they had "dismissed themselves" by observing the stayaway and failing to meet return-to-work deadlines.

Arrangements have been made to pay out the workers and send them home by 6 pm tonight, a spokesman for Sasol said.

But the company has given a verbal undertaking to the Chemical Workers' Industrial Union (CWIU) that the workers will not be unlawfully evicted from the hostels.

Workers who arrived at the gates of Sasol 2 and 3 this morning were turned away by security and told they were no longer employees.

Mr Michak Ravuku, branch chairman of the CWIU, said the workers would not voluntarily be sent back to the homelands to starve.

● To Page 3, Col 7 ☞

Quiet return to work after stayaway

By Staff Reporters

Normality returned to Transvaal townships today as workers streamed to work after observing a two-day stayaway in protest at the Government's intransigence in attending to black people's grievances.

The stayaway was accompanied by violence in which at least 22 people, including one policeman, have died since Sunday.

The army was deployed to help police in the townships, but this has not been confirmed or denied by police spokesmen.

Workers in townships of the East Rand, Vaal Triangle, Johannesburg and Pretoria went to work today without incident.

In Tembisa, the scene of intense violence over the two days, thousands of residents flocked to work.

Several people who had managed to sneak to work yesterday were severely assaulted when

● To Page 3, Col 7 ☞

Workers urged to unite

The Minister of Manpower, Mr Pietie du Plessis, today called on workers involved in the mass stayaway of the last two days to stand together and not allow themselves to be exploited for purposes which were not in their interests.

"The fact that there had to be such widespread victimisation and intimidation to force people to stay away from work proves that certain revolutionary and political cowboys do not have the popular support they claim," he said.

"Intimidation is one of the lowest, most undemocratic and unchristian tactics that can be used to make people subscribe to your particular political view."

The Minister said there was adequate provision in existing labour legislation for all workers of every race to improve their working conditions. Illegal strikes served only to cause unnecessary hardship, he said. — Political Correspondent.

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SADF involvement 'should be quite clear'

The police will not issue statements on future joint South African Police-Defence Force operations.

"The State President himself as well as prominent members of the Government have already spelled out the situation clearly," said a spokesman for the Police Division for Public Relations in Pretoria today.

"The Defence Force assisted us in the past and will do so in future whenever it is required," the spokesman said.

"When members of the Defence Force are seen taking part in a police operation, their involvement should be quite clear and the issuing of statements unnecessary."

● Some vehicles of the Defence Force which moved into Tembisa on Monday to help quell fierce rioting during the two-day stayaway, were seen pulling out of the area today.

Police however continued to patrol the township and armed soldiers in a Casspir stood guard near the shop of Tembisa mayor Mr Lucas Mothiba, one of the few shops to escape being stoned and set alight during the riots.

A road grader of the East Rand Development Board started removing debris which had been used to barricade the streets.

Dismissed Sasol workers will wait to be evicted

● **From Page 1.**

But most of them wished to avoid bloodshed and would not resist management attempts to get them out of the hostels.

The CWIU has sent a telex to Sasol advising it that any attempts to remove the workers from the hostels will be regarded as unlawful action.

In a statement released today, Mr Rod Crompton, general secretary of the CWIU, accused Sasol of using the stayaway as a means of getting rid of the union.

By refusing to allow the workers to return to work, the corporation was sustaining massive losses "which, with its access to taxpayers' money, it seems prepared to sustain to an extent not possible in the private sector", he said.

Unofficial estimates are that Sasol has lost about R12 million due to the stayaway

But a spokesman for Sasol said production had not been unduly affected over the two days and recruitment of a new labour force would begin immediately.

Stayaway ends quietly

● From Page 1.

they returned in the afternoon despite the presence of troops and police in Casspirs.

At Kalafong Hospital outside Pretoria, at least 17 people from Atteridgeville — including two youths who died — were treated for bullet wounds, superintendant Dr G Joubert confirmed.

John Phefo (17) of 44 Masemulo Street and Wallace Ramskin (13) — died during confrontations with police. Both were shot in the neck.

The police public relations officer in Pretoria, Major Quinton Papenfus, said policemen had used only rubber bullets "which could not cause death".

"If people feel the deaths in Atteridgeville were caused by police, I strongly deny this because we did not use sharp ammunition but only rubber bullets and teargas to disperse mobs."

The allegation that the youths were killed by police would be investigated, he added.

Only 24,6 percent of the 2 832 East Rand pupils scheduled to write biology and physical science matric examinations yesterday turned up.

No pupils attended any of the East Rand's 53 schools and all pupils in the Vaal Triangle and Atteridgeville continued to boy cott classes yesterday.

How the country's uranium enrichment process developed

55 Star 7/11/84

Some of the technology that went into South Africa's uranium enrichment project is being displayed at the Uranium Enrichment Corporation (UCOR) stand.

As the enrichment process developed by UCOR was entirely indigenous, several highly sophisticated technologies had to be developed at the same time.

These included the design and development of high-speed compressors and other process components, the mass production and automated handling of small components, special welding techniques and also the handling of special materials such as aluminium and exotic alloys.

All these were supported by a comprehensive research and quality control programme.

Of special interest is UCOR's turbo machine development facilities, where a high degree of sophistication has been reached in aerodynamic design manufacture development.

The development of the advanced axial flow compressor recently earned the corporation an award from the Institution of Mechanical Engineers.

The ability to make small components by electroforming is an interesting feature of the technology developed by UCOR. This technology, often described as the ability to "grow components" in a variety of materials, is said to offer considerable promise for future applications.

NUCOR studies peaceful uses for the vast reserves of cheap uranium

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Star

7/11/84

South Africa is one of the world's major uranium producers and has the third largest reserves of low-cost uranium in the Western world.

To ensure that the maximum benefit was derived from these resources and that the country could enjoy the many peaceful applications of nuclear science and energy, a comprehensive research programme was started in 1959 by the Atomic Energy Board.

The Nuclear Development Corporation of SA (NUCOR) took over in July 1982 and divided its research programme into three main themes. These were nuclear raw materials, nuclear power fuel-cycle activities and the application of radio-isotopes and radiation, all of which are depicted at the NUCOR stand.

Emphasis is laid on the application of radio-isotopes and radiation and five well-defined technological areas are exhibited. These are nuclear techniques in industrial service, isotope production for industrial use, isotope production for medical use, radiation technology and activation anaylsis.

The nuclear techniques industrial service deals with problems in various industries, such as mining, pulp and paper, sugar, petro-chemical and agriculture. Methods involving radio-active tracers are being used for the determination of flow dynamics of processes, leak detection and flow-rate measurements.

The Isotope Production Centre at Pelindaba makes radioactive isotopes for industrial radiography, smoke detectors, level gauges and leak detection and for medical use.

The most important isotope for medical use is molybdenum-99. While not used for diagnostic or therapeutic purpose its daughter, technetium-99m is used in different chemical forms for scanning parts of the body, such as bones and the liver.

Because of its penetrating nature, gamma radiation is being used for killing harmful bacteria and insects in food. It also retards the ripening of vegetables, stops the growth of fungi and is ideal for the preservation of food.

One of the successes of activation analysis is the determination of uranium concentrations as low as one part per million in the large batches of presamples analysed on a routine basis at Pelindaba.

27c + 3c GST JOHANNESBURG THURSDAY NOVEMBER 8 1984

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Massive show of force made workers go home — union

By Carolyn Dempster,
Labour Reporter

A massive show of force by police and army units at Sasol hostels in Secunda yesterday forced many of the 6 000 dismissed workers to return home, the Chemical Workers' Industrial Union's general secretary said today.

Mr Rod Crompton said that in one incident four Hippos and four Land-Rovers containing South African Defence Force personnel surrounded the hostel block in eMbalenhle where the CWIU's shop stewards' committee was meeting.

"Stewards ran for their lives, some jumping from second-floor windows and balconies. One union official was caught and detained," he said.

Police said the claims could not be confirmed and the situation in Secunda had been reported as quiet.

By late last night more than 2 800 of the workers had been paid off and 43 buses dispatched to various homelands.

The employees were told they had "dismissed themselves" after failing to report for work on Monday and refusing to heed management deadlines to return to work.

A Sasol spokesman said production had not been affected and the recruitment of new employees was in full swing.

He conceded the situation could not go on "indefinitely" and said work usually done by skilled employees would be contracted out.

Union allegations that the mass dismissal constituted an unfair labour practice were dismissed.

"We would not fire that number of people without taking expert legal advice," the spokesman said.

"We cannot allow grievances which have nothing to do with our labour relations to affect the running of the plant," he said.

The 150 000-member Federation of South African Trade Unions (Fosatu) today lashed Sasol for its "deliberately provocative" action.

"If the mass dismissal was carried out on the instruction of the Government, then it is that kind of insensitive provocation that gave rise to the stayaway," Fosatu's general secretary, Mr Joe Foster, said.

Fosatu's central committee fully supported the stayaway "as an act of protest against specific Government policies and against the state of civil war that has been created in the Transvaal townships".

Sasol had now chosen to provoke a massive industrial relations confrontation by responding to the stayaway with mass firings, Mr Foster said.

"Sasol has made a gross error and unless its decision is reviewed, the cost in terms of production and future industrial relations will be extremely high."

● See Pages 3 and 13, World section.

The workers . . . thousands of Sasol employees gather outside their hostels just before hundreds of them were repatriated to their homelands.

Pay-off . . . and a grim future for Sasol workers

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8/11/84

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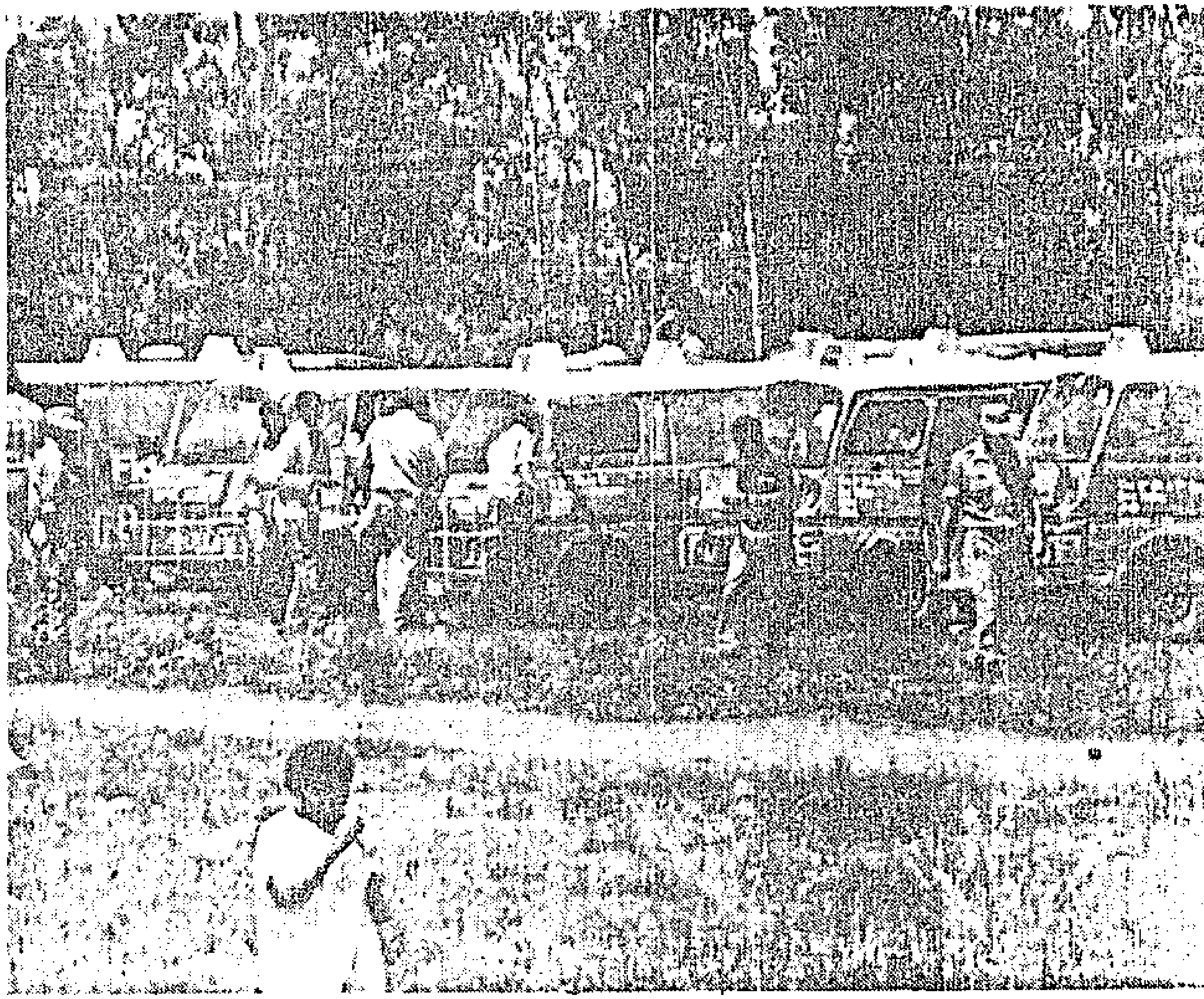


The money . . . kombis with cash for the dismiss

By Langa Skosana

Hundreds of grim-faced workers at the Sasol plant in Secunda in the Eastern Transvaal reluctantly vacated their hostels last night.

They had been ordered to leave after taking part in a politically motivated two-day work stoppage.

The workers told touching stories of the bleak future they faced when they reached their homelands after repatriation.

About 30 buses laid on by Sasol ferried the workers to their homes.

Some workers were confused and near tears.

Police in riot gear kept a watchful eye as the workers were paid off and taken away.

A worker from Keiskamahoek in the Ciskei, Mr Mzwenkosi Dantsy said he had been without work for almost two years before he got a job at Sasol.

WORK

"Just when I thought I had found a job this is what happens," he added.

His wife and child and some of his relatives sometimes went without food because of lack of employment and the drought that ravaged the area, he said.

Without a job, he went on, his situation was going to be worse.

Influx control, said Mr Dantsy, added to his miseries.

He said the law required that he got permission from local authorities to reside and work in any area in South Africa.

This would be difficult because prospective employers would not want to employ a striker.

He said he joined the strike because he did not want to be the odd-man-out when the majority voted for staying out.

He felt that scabbing would be risky so he decided to join.

He understood the purpose of the stayaway was to protest against an increase in bus fares in Secunda and also in sympathy with students who were boycotting classes on those days.

"I did not expect the company to take such drastic action and dismiss us without consultation with our union leaders," he said.

ACTION

"I believe there is something wrong and the authorities will have to put this right."

Mr Patrick Lethibela, from Herschel in the Transkei, said that although he believed the workers were right to take part in the strike, he was shocked and dismayed at the action of the Sasol management.

"I think the company should have just docked our pay for the days we were absent from work," he added.

He said he had two small children who had to be fed.

He did not know what he was going to do.

Mr Thomas Chauke, an electrical operator from Gazankulu, is one of many skilled workers who live in three or four-bedroomed houses, which they rent from Sasol.

He and his collegues are also affected by the quit order and have to leave at the end of the month.

He said he had just bought a new kitchen and bedroom suite for his home and would have to carry the furniture back to Gazankulu.

Star 21/11/84

Soweto electricity dearer

55

SCA

By Michael Tissong

In a circular to consumers, the Soweto Town Council has announced it has pushed up electricity tariffs by 20 percent.

This increase has been condemned by the Soweto Civic Association (SCA) as an inhuman act in the present economic climate. A spokesman, Mr Tom Manthata, said the SCA executive would discuss the increase on Sunday.

The circular said the tariff for metered consumption would be adjusted by 0,8c a unit. Town Clerk Mr Nico Malan said: "This means a person who presently pays a monthly account of R25 will pay R30."

55

Star

9/11/84

Sasol workers confused

By Carolyn Dempster and Chris More

Only a trickle of the 6 000 dismissed Sasol workers remained in the township of eMbalenhle yesterday, as the last of the hostel dwellers were paid off and bused home.

Confusion surrounded the position of skilled and semi-skilled workers in Sasol houses in Extension 4 of the township.

Some of the dismissed workers believed they had been given until the end of the month to get out, while others were told they would have to report back on Monday morning.

But a spokesman for Sasol said no notice had been given to those who occupied the houses, nor would any action be taken against them. He said there were 517 workers who resided in the houses.

MALICIOUS

In response to a query by the Federation of South African Trade Unions (Fosatu) that Sasol's action in firing the workers who participated in the two-day stayaway had been carried out on the instruction of the Government, the spokesman said this was a "malicious, gross untruth".

"Any intimation that the Government or any other governmental agency either instructed or expressed a wish in this regard is a gross untruth."

The bulk of the workers had been paid off and only a few had not yet collected their wages, he added.

11/11/84 55 S. Times

Sasol union accuses Govt

By Angus Macmillan

THE firing of 6 000 black workers at Sasol 2 and Sasol 3 could spark a new confrontation between labour unions and the Government.

The workers were dismissed on Wednesday after taking part in the campaign organised by the Transvaal Regional Stayaway Committee.

Sasol denies any Government involvement in the wholesale dismissals, but the Chemical Workers Industrial Union (CWIU) and some industrial relations consultants suspect a Cabinet hand in the decision.

CWIU general secretary Rod Crompton says: "We know the decision came from high places. A company without strong Government connections could not fire so many workers just like that. The recruiting, screening and training costs would be prohibitive."

He claims there was collusion between Sasol and the army to disturb worker meetings and give ultimatums to return to work.

Insisted

CWIU representatives arranged exemption for its 4 000 Secunda members not to take part in the stayaway, but Mr Crompton says they insisted on joining.

Sasol assistant general manager Robin Hugo calls accusations of Government involvement in the dismissals a gross and malicious untruth.

"We are a private company listed on the Johannesburg Stock Exchange. The Government had absolutely nothing to do with our decision to dismiss the workers.

"We first warned workers on the Thursday before the stayaway was called not to take part."

An industrial relations consultant says Government involvement in the firings is likely, especially after Mr F W de Klerk's comment on the campaign.

Nightmare the jobs en

C Press 55 [illegible] ~~[illegible]~~ [illegible]

11/11/84

WHEN SOME of the 6 500 Sasol Two and Three workers reported for duty on Tuesday morning and were turned away, it was the beginning of a nightmare.

By ZB MOLEFE and CONAN MAHLANGU

Within hours they met with Chemical Workers' Industrial Union shop stewards to plan their next move.

They agreed that their representatives would immediately drive to Johannesburg and contact their lawyers. The rest would stay behind.

But it was not to be — seconds later their hostels were surrounded by heavily armed policemen in camouflage dress.

They were ordered to pack all their belongings into plastic bags and leave.

Hostel inmates told City Press that one of their organisers, Tsidi Mothupi, was assaulted by the police and arrested.

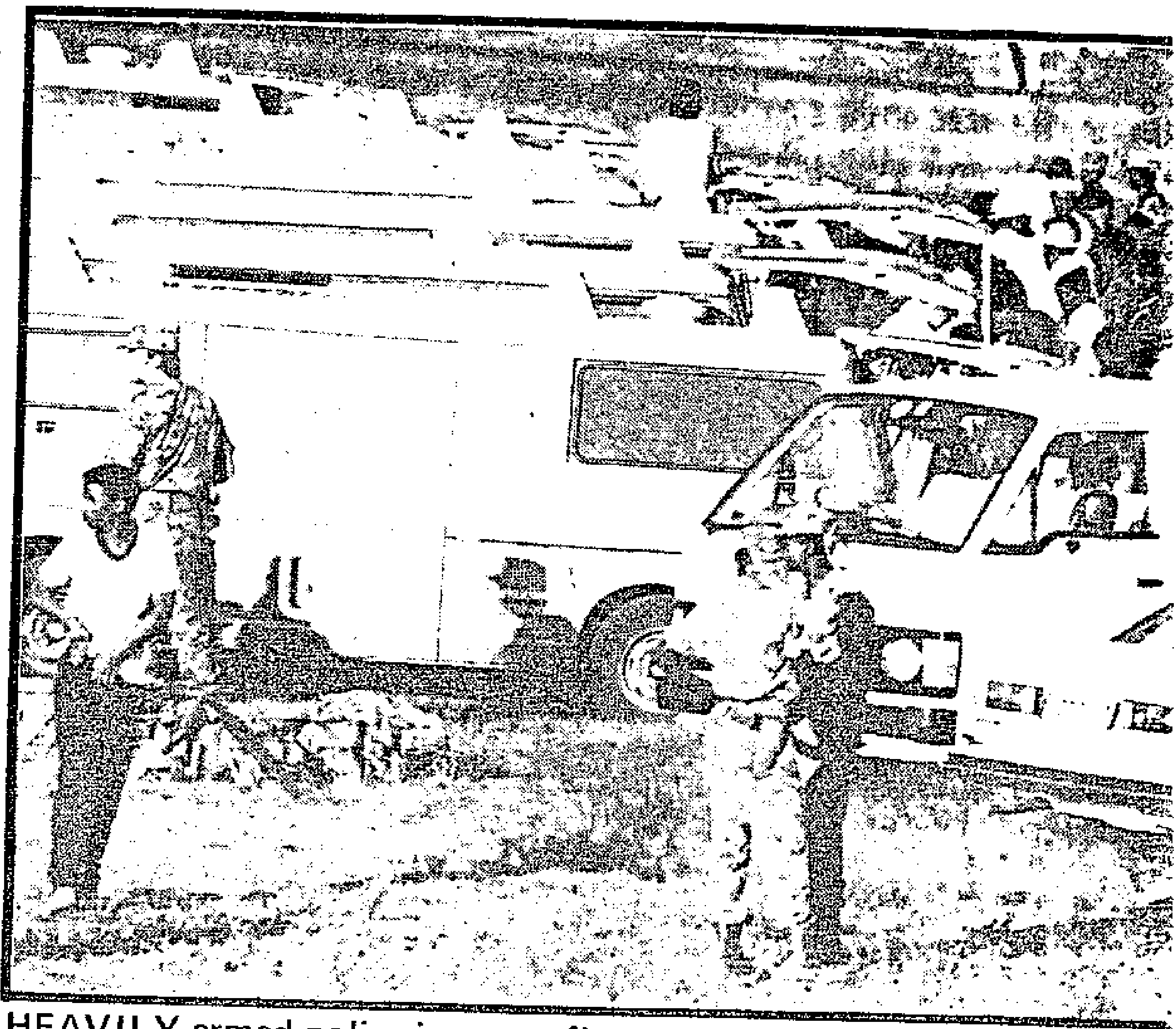
When the workers trooped into an open space outside the eMbalenhle township, the message sank in.

A neat row of buses on the side of the road faced a laager of payroll vans with police lines behind them.

They were being paid off by Sasol.

The workers boarded the buses marked with their places of origin — QwaQwa, Bushbuckridge, KwaZulu and Transkei.

"This is very sad. This is something bigger than Sasol. We could not turn back after our solidarity with what was happening to blacks in the two days during the stayaway," said Manene Yoliswa from the Transkei's Qumbu district, who worked as an operator for 18 months.



HEAVILY armed police in camouflage dress mingled with thousands o were paid off and sent to their homes this week.

"Maybe this is the beginning of something, but I can't say what. There is no time for us to feel sorry or afraid. We must show Sasol that we are brave," said Maxwell Mayekiso from Queenstown.

He suffered a double blow — his brother Hamilton also lost his job.

Queues formed at the payroll vans as men and women collected their pay packets and slowly walked to the buses which would take them home.

A few fortunate ones went back to their rented rooms in the township to wait — uncertain of their future.

Young Mary-Jane Mahlangu summed up the painful situation.

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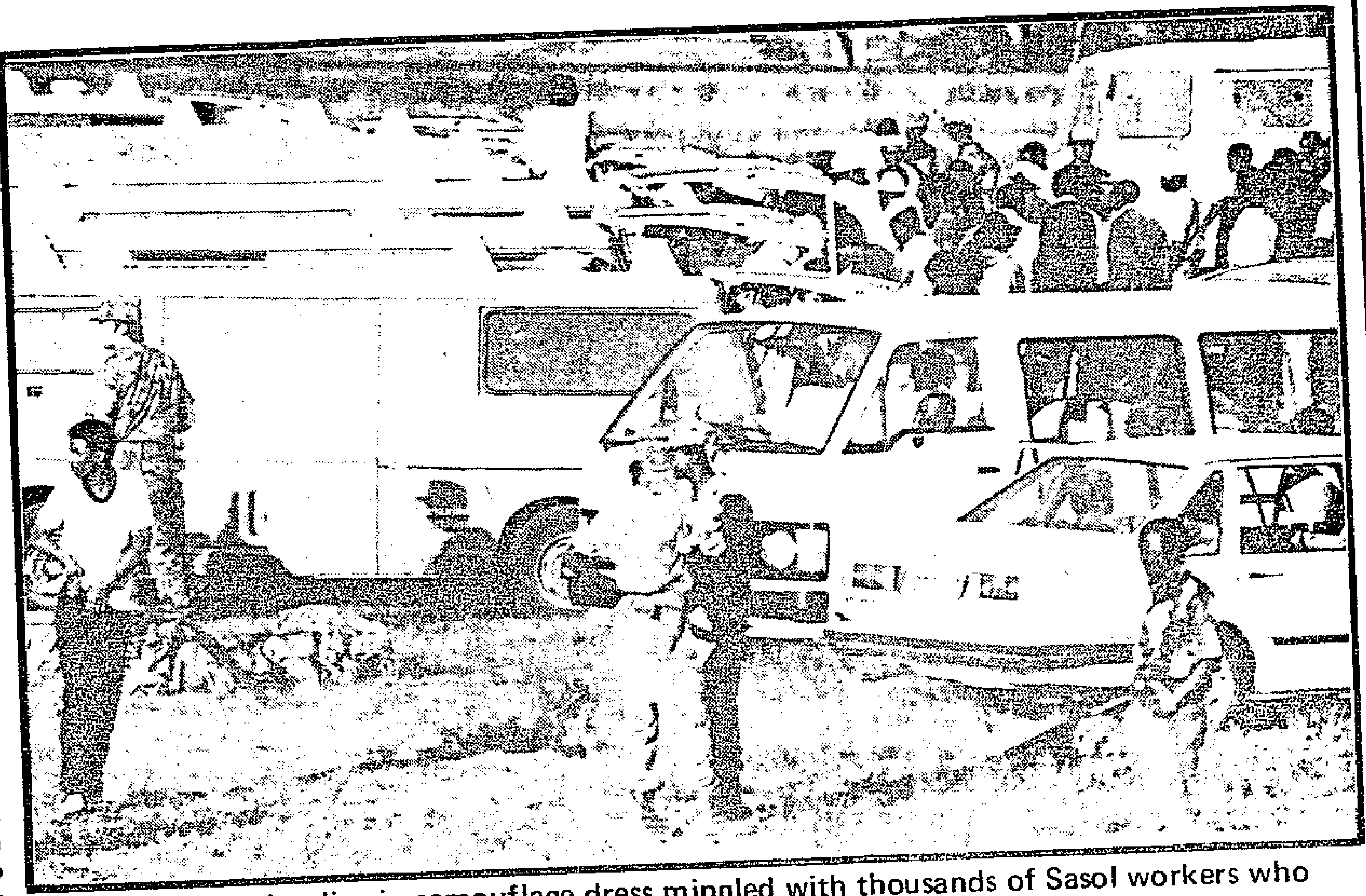

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Young Mary-Jane Mahlangu summed up the painful situation.

She left Vrede, her home in the Free State, in 1981 to seek employment at Sasol. Her job at the giant petrol plant meant a world of difference to her parents — she was the sole breadwinner.

argus 20/11/84 (55)

Koeberg moves towards full power

Staff Reporter

KOEBERG nuclear power station is on the road to full power generation.

Fuel-loading on Unit 2 began at noon yesterday and will take about a week. Full output is expected to be reached in mid-1985.

Escom's regional manager for the Western Cape, Mr G F Hellstrom, said the operation, supervised by Koeberg personnel, takes place under water by remote control.

"The decision to proceed with fuel-loading was taken after a stringent testing programme had been completed on Unit 2 and after the Atomic Energy Corporation (AEC) granted its permission," said Mr Hellstrom.

He emphasised there was no danger to the public during fuel-loading.

Inspectors from AEC would watch this operation and members of the International Atomic Energy Agency (IAEA) were expected to visit the site to satisfy themselves that the work was in compliance with tripartite agreements between South Africa, France and the IAEA.

Argus 22/11/84 (55)

Shock increases in electricity costs next year

Staff Reporters

PENINSULA households — particularly in the northern areas — face shock electricity tariff increases in the new year which will push up some power bills by more than 20 percent.

The first increase is due in January when Escom increase its tariff by an average 10 percent.

But consumers in some Peninsula areas will benefit from Cape Town City Council's own power generation and tariff increases will be less.

10,67 PERCENT

Escom's regional information officer, Mr André van Heerden, said today the tariff increase for the entire Western and Northern Cape would be 10,67 percent.

Increases elsewhere are 10,69 percent for the Rand and Free State, 9,43 percent for the Eastern Transvaal, 10,38 percent for Natal and 5,33 percent for the Eastern Cape.

Escom has announced a further 10 percent increase on the January tariff in the middle of 1985.

Coal-price changes could add a further two percent to the price of power — a total increase of 24 percent on the 1984 tariff.

A spokesman for the city electrical engineer's office said: "This is quite a stiff increase, but it is too early for us to give a clear indication of the impact on Cape Town consumers.

"TARIFFS LESS"

"Because we are a generating authority the tariffs in the Peninsula area will be less than in those areas served only by Escom.

"The Peninsula area which will benefit from our power generation includes the Cape Town municipal area, some adjacent Divisional Council areas, Milnerton, Pinelands, Fish Hoek and Simon's Town.

"The increases for this area may take a different form. It might be feasible to cushion the increase by introducing it over a different period."

Escom said it had to increase tariffs because it had "no alternative".

(Turn to Page 3, col 1)

The Argus Tygerberg Bureau reports that business leaders and municipal spokesmen in the northern areas reacted with shock to the price increases and said almost unanimously that it was a direct and severe blow to all consumers.

The president of the Tygerberg Chamber of Commerce and Industrial Association, Mr Johan Bräsler said: "We appreciate that increases are essential — probably owing to interest rates on overseas loans and the rand value against the dollar — but it comes at a difficult time for consumers, especially industry operating well below capacity.

"This will result in increased running costs and increase the inflation rate, with fewer rands in the pockets of consumers."

Mr J P Barnard, Town Clerk of Parow, said the increase would definitely affect the town's budget.

"We certainly never make provision for such a big increase.

"If your electricity bill suddenly rises from R50 to R60 a month, it is a considerable increase", he said.

Kraaifontein's town engineer, Mr G Davidson, said: "This is stunning. I suppose they have their reasons, but the consumer is going to suffer. Kraaifontein buys directly from Escom. So it is really between them and Escom."

The deputy city engineer of Bellville, Mr D Malan, said it would increase the cost of providing certain facilities but the blow would be felt directly by the consumer.

Said the president of Bellville Chamber of Commerce, Mr John Elford: "Ridiculous. It's a big increase."

He said the chamber would not comment officially at this stage.

The secretary of the Durbanville Chamber of Commerce, Mr Henry Sacks, just whistled when told about the increase and said the shock took his breath away — and that was sufficient comment.

In spite of the increases Escom's tariffs remain the lowest in the world, Escom said

● The Argus correspondent reports from Johannesburg that hotels will be hit hard and in most cases the extra charges will be passed on to the public.

"I can see no alternative. These charges by Escom are going to hurt the industry seriously," said Federated Hotel Association president, Mr S V Hoffmann.

SASOL (55)

FM. 16/11/84

The big boot

The irony of last week's Sasol dismissals is that members of the Chemical Industrial Workers' Union (CWIU) — the bulk of the company's workers — had been exempted from participating by the stayaway organisers because Sasol was newly unionised.

That the workers nevertheless chose to show solidarity with the stayaway indicates the extent of black grievances. Sasol's response was uncompromising. The dismissals — of 6 500 workers, according to the union, and 5 400, according to the company — are in stark contrast to the tolerance shown by other Transvaal employers.

By the end of last week, the workers had been paid off and evicted from the company hostels under the watchful eye of a massive police contingent to face the journey back to the homelands.

In the aftermath, there have been dark whispers that the dismissals were ordered by State authorities to make an example of workers who "destabilise" the SA economy. Sasol has denied this. Says senior GM Dirk Mostert: "Sasol is a public company in the private sector ... and the decision to dismiss ... workers was a Sasol management decision." He stresses that it was a business and not a political decision and that the company took the only action it could have after it had issued numerous warnings to the workers to return.

According to the company, the Sasol 2 and 3 plants at Secunda are dependent on "a very high degree of labour force reliability" for their safe operation. The plants need to be kept going continuously and the "non-availability of personnel could result in serious production losses and endanger the safety of the plant and employees."

Sasol claims that the two Secunda plants have not suffered any production losses and that "no production losses are foreseen." Mostert attributes the maintenance of production levels so far to "loyal Sasol workers who have made a tremendous effort."

The remaining workers, who represent 62% of the total original workforce, he says, have been pulled off non-essential tasks and are working 12-hour shifts. But he denies union allegations that army personnel have been called in to take over security functions at the plant to allow guards to assist in production.

Sasol's claims are difficult to credit. Hundreds of the dismissed workers are skilled and semi-skilled. Even the company agrees that it will take up to eight months before new recruits, some of whom have already been employed, are fully trained.

CWIU general secretary Rod Crompton says that some workers have been told they may reapply for their positions after a month. Mostert says only: "At the moment, we have no intention to re-employ any of the dismissed workers."

At present, question marks hang over the fate of several hundred employees who were dismissed but who have not yet vacated their company accommodation. Some 250 live in company houses, while 300 others remain in the hostels. The company has not yet taken steps to evict them and it remains to be seen whether any, especially those skilled workers occupying the houses, will be re-employed.

Crompton tells the *FM* that the union is still considering taking legal action against Sasol. Regardless of whether Sasol's decision was legal or not, it was immoral.

Sasol's action has reverberated throughout the country and has drawn sharp criticism from overseas labour bodies. The Federation of SA Trade Unions (Fosatu), to which CWIU is affiliated, plans to mobilise further foreign support for its cause.

22/11/84

Electricity price hike

(55) [illegible]

Own Correspondent

C. Times

JOHANNESBURG. — Escom has announced that electricity tariffs will rise by 10 percent from January 1, 1985.

A further 10 percent increase will follow in the middle of next year, according to a statement released yesterday by Escom.

The statement said two percent may be added on to these hikes by an expected rise in the price of coal.

The Escom chairman, Mr. Jan H Smith, said the increase in General Sales Tax and the fall in the value of the rand had forced the "interim tariff increases".

ing Post

CITY LATE

THURSDAY, NOVEMBER 22, 1984

Price 23c plus 2c tax

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Cost of electricity in PE to rise 'by less than 5,3%'

Post Reporter

E. Post

THE cost of electricity to the consumer in Port Elizabeth will increase by less than 5,3% in January, says the City Electrical Engineer, Mr Charles Adams.

Mr Adams was commenting on the 10% increase in tariffs announced by Escom.

Although the municipality had not yet been able to calculate the new tariffs, the price of electricity in Port Elizabeth would rise by less than 5,3%, he said.

Mr Adams said the figure of 10% announced by Escom was a weighted average across the whole country.

He said the increase of 5,3% was the rate charged electricity users drawing from the Orange River Undertaking. This figure varied in other areas of the country.

Port Elizabeth generated almost half of its own electricity needs and this would favourably reduce the tariff increase to the consumer.

The local generation of electricity generation would favourably reduce the amount passed on to the consumer.

Once the new tariff was calculated, it would be put to the City Council for approval in January, he said.

Mr Adams said the mid-year increase of 10% announced by Escom was only a possiblity, as was the further 2% increase if the price of coal rose.

The cost of electricity would, if necessary, be passed on to the Port Elizabeth consumer in the same proportions as in January.

Sapa reports that the director of the Consumer Council, Mr Jan Cronje, said in a statement that Escom's announcement, which would result in electricity being up to 23% more expensive next year than at present, made a mockery of the previous "modest" 6% tariff increase.

Mr Cronje said that because these increases would also have a drastic effect on the country's exports, it was imperative for the central Government to take a thorough look at Escom's tariff policy.

The Federated Chamber of Industries said the extent of the tariff increases would "exert considerable upward pressure" on prices.

"The chamber questions the wisdom of building up the capital development fund during a recessionary period."

● See Page 12

Escom tariffs probe call

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C. Times 23/11/84

Staff Reporter

ORGANIZED industry and commerce has joined the Consumer Council in calling for an investigation into Escom's tariff policy in the wake of the shock increase in the price of electricity announced yesterday.

Escom has announced that the price of its electricity will rise by up to 23 percent during the next year.

The president of the Afrikaanse Handelsinstituut, Mr Leon Bartel, said yesterday his organization was extremely anxious about the impact of the price rise on all sectors of the economy.

Investigation

"In the light of the calls from various sources for price increases to be contained at all costs in the fight against inflation, it is a pity that Escom is not in a position to make a contribution to this effort," he said.

"This announced tariff increase confirms the need for an immediate investigation into Escom's tariff structure."

The Federated Chamber of Industries has criticized Escom for neglecting to take note of the phase of the business cycle in planning the latest increases so as to "minimize disruption of the private sector".

They also question the wisdom of building up the capital development fund during a recessionary period and warn that the tariff increases will exert considerable upward pressure on prices and erode the competitiveness of many industries.

The director of the Consumer Council, Mr Jan Cronje, has called on the central authorities to take an "incisive look" at Escom's tariff policy in the light of the drastic effect the increase would have on exports.

Describing the announced increases as the "final blow" for consumers, Mr Cronje asked whether Escom realized this "shocking step" would cause other quarters such a transport services, municipalities and the manufacturing sector to pass these increases on to the consumer.

The South African Agricultural Union said the announcement had been met with disappointement in agricultural circles.

The tariff increase was greeted with dismay by the Building Industries Federation of South Africa as it would place extra pressure on homeowners with bonds.

Impact

The Association of Chambers of Commerce yesterday said it regretted that Escom was to increase electricity tariffs.

In a statement Assocom said: "Although the announced 10 percent increase is below the current rate of inflation, it must be pointed out that the impact will probably be higher after such increases are handled by those local authorities responsible for onward transmission to consumers."

Clarification seen as 'misleading'

Users hit out at Escom price rises

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STAR 23/11/84

Escom has issued a second statement clarifying the big electricity increases that have left all sectors of the economy stunned and angry.

The new statement blames the media for the furore that has ensued.

Escom underlined that income from the increases will average out at between 15 and 17 percent more for 1985 as a calendar year.

However, economists insisted today that the interpretation was misleading to consumers.

By the time the 10 percent increase in January grows with the burden of an additional 12 percent in July, the size of electricity bills will be a stunning 23 percent higher by the middle of next year.

Reaction has flooded in from all over South Africa. Consumers, homeowners, industrialists, farmers, builders, shopkeepers, municipalities and just about every other group that uses electricity have labelled the increases a huge price push.

The first 10 percent will hit the nation on January 1. The second will take effect from July 1. This may be accompanied by an extra two percent increase if coal prices go up.

The cumulative effect will be to reap at least an extra R700 million from consumers during 1985. That figure may well soar higher, depending on demand.

The Consumer Council slammed the increase as a 23 percent hike — the final effect of a 12 percent mid-year increase on top of a total already inflated by the 10 percent increase at the start of the year.

This means that Escom's revenue for 1985 will jump to well over R4 billion, compared with R3,3 billion in 1983.

The council also joined other critics such as the Sandton Town Council, which urged an inquiry into Escom's pricing policies.

The Federated Chamber of Industries, the Cape Chamber of Industries, the Association of Chambers of Commerce, the Building Industries Federation and the South African Agricultural Union all heaped their condemnation on Escom.

The union's president, Mr Kobus Jooste, said the agricultural sector was in no position to absorb the increases after years of punishing drought.

The Association of Chambers of Commerce said it feared for energy-intensive industries once the mid-year increase was applied.

Forecast

Building Industries Federation executive president Mr Lou Davis forecast that people would be forced out of their homes as a result of the power price surge.

"This could mean that some homeowners are no longer able to meet their monthly commitments on bonds. They are already hard-pressed with increased interest rates on bonds."

Cape Chamber of Industries president Mr Chris Newton said the wisdom and timing of the increase was questionable.

A semi-state organisation like Escom should not be building up its capital development fund in bad business times, he said.

In defence of its case — although it was making no comment about its controversial plans to increase its capital funds — Escom claims that South Africans pay the world's lowest electricity rates.

In one of its statements Escom repeated rates said to be applied in other countries and made comparisons. South Africans paid 7,22c/kwh, compared with 12,78c in parts of the United States and 8,4c in France.

Escom increases are 'reasonable'

55

STAR
24/11/84

by
Colleen Ryan, Municipal Reporter

Escom's tariff increases are entirely reasonable and those who criticise it are speaking out of ignorance, says Johannesburg City Electrical Engineer Mr Wessel Barnard.

An angry Mr Barnard told *The Star* that the critics deserved to be "hung up on the nearest tree."

Industrial and domestic consumers strongly condemned Escom this week when it announced a tariff increase of about 20 percent for 1985.

Mr Barnard, who is also president of the Association of Municipal Electricity Undertakings, said the electricity industry was highly capital-intensive.

"The rand has been slaughtered, interests rates are sky high, so we must expect that it will hit the electricity industry hard," he said.

"It is high time the public woke up to the fact that electricity is a commodity that has to be paid for," he said.

Escom's chairman, Mr Jan Smith, said electricity tariffs would increase by 10 percent in January and by a "similar" amount in July. However, coal price increases could add a further two percent to the price of electricity.

Johannesburg householders will pay five percent more for electricity next year, said a spokesman for the City Treasurer's Department, Mr Neville Olivier.

Johannesburg was able to cushion the Escom tariff increase because it only buys half its power from Escom, said Mr Barnard.

He said most Reef municipalities would have to pass on the full 10 percent increase in January because they bought all their electricity from Escom.

'Don't knock Escom over price rise'

Escom is getting unfair criticism over the power price rises.

That's the charge by the past president of the Johannesburg Chamber of Commerce, Mr S K Ash. He is also the Association of Chambers of Commerce representative on the National Electricity Users' Forum.

"Escom is a victim of inflation and low electricity prices in the past.

"There have been artificial constraints on prices for years which tended to be politically inspired.

"I believe the criticism of the increases should be at least balanced and there is little evidence of that. In my experience Escom is one of the better public bodies in this country with highly competent people.

"While one doesn't grandly accept big price increases the situation facing Escom is unusual, particularly when you consider 25 percent of their capital purchases come from overseas and that planning of a power station from start to finish is a 15-year exercise."

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Beat the boycotts with oil-from-gas

EXCLUSIVE

DR FRANZ QUASS (left), an internationally-recognised energy expert and the first managing director of Soekor — the State-run oil exploration organisation — writes exclusively for The Sunday Star on plans to develop an offshore gas industry in South Africa.

OIL is the soft under-belly of South Africa's economy and defence — and will remain so for many decades.

The country will be vulnerable until oil — or its petroleum stablemates — is manufactured from indigenous sources.

The Sunday Star reported two weeks ago that Sasol's oil-from-coal production was estimated to be meeting about half the country's oil needs.

The mention of the production figure was in conflict with restrictions laid down by the Petroleum Products Act of 1977.

But The Sunday Star was in this respect in the company of Ministers of State, senior government officials and representatives of the oil industry who have often published data contrary to this Act. In any case, I do not agree with the figure.

In September 1981 the Director-General of the Department of Mineral and Energy Affairs, Mr Darel du Plessis, referred to the building of "another eight giant Sasol-type plants... during the next few decades".

Assuming these eight plants would be more efficient than the present three Sasols, we may deduce that at their completion South Africa would be producing about four times today's production of liquid fuels from coal — twice the nation's present requirement.

Thus, with eight more Sasols in the "next few" decades, South Africa will have some measure of comfort in that further oil-from-coal production could meet future liquid fuel demands. But the investment required would be astronomical.

Of the estimated 59 billion tons of mineable coal in South Africa, 51 billion tons are located in the coalfields of the Transvaal. No giant Sasol-type of oil-from-coal plant can be built anywhere other than the Transvaal.

Hence the fuelless coastal areas will be more and more dependent on imported crude oil or oil-from-coal from the Transvaal in the next few decades. This is logistically and strategically a very undesireable situation.

The development of available offshore gas sources (and their conversion to liquid fuels) is imperative before another wave of oil embargoes.

The present-day phrase that "the markets are awash with oil" aggravates me intensely. It probably comes from the same local "experts" who as late as 1978 were predicting a world-wide oil famine by 1985.

During the first years of the oil boycott — 1973 and 1974 — the world produced 56 million barrels of oil a day. The figure increased to 63 in 1979, but gradually dropped to 53 by 1983.

But oil was two dollars a barrel in 1973, compared to 30 dollars (nearly R60) a barrel last year.

It can be agreed that coal replaced oil in some respects, but there are limits to those replacements.

When the medium-term future of the availability of crude oil imports to South Africa is considered, there are two deciding factors:

- How long will the present worldwide recession last?
- How long will the unceasing unrest in the country continue?

My answer to the first question is: another two years at the most. Then the oil consumption of the world will again increase, causing oil to be in short supply and more expensive.

If the answer to the second question is "a very long time", then oil boycotts against South Africa will be renewed and strengthened.

One paragraph in a letter from a good friend and competent oil man in Los Angeles illustrates the problem:

"The possibility of participation in... oil exploration in South Africa... seems unlikely now because... of the especially bad publicity South Africa now receives in our Press. The more progress you make toward social reform, the more outraged our liberals get."

If the offshore gas production and conversion project of Soekor were to be initiated in the near future, it would encourage overseas and local institutions to become involved with further offshore exploration.

The authorities should start developing the offshore gas production project — and the next few Sasol plants — speedily.

Let us not wait for another international oil crisis.

Sun Times 25/4/84 ~~[illegible]~~ 55

Secret of the Escom power failure

By FLEUR DE VILLIERS

SOUTH AFRICA could save R105 000-million over the next 20 years through more accurate forecasts of its electricity needs.

These forecasts, based on a lower expected growth rate and energy saving, are a key suggestion of the De Villiers Commission of Inquiry into Escom.

The report, which has been accepted "in toto" by the Government, could also shape the future of the other state monopolies, such as Iscor, South African Transport Services and the SABC.

The R105 000-million saving represents the difference in capital expenditure between Escom's projected growth rate of seven percent a year in electricity consumption between 1983 and 2003 and the commission's insistence that, through savings and more accurate forecasting, it can be reduced to to a more realistic level of five percent.

As Escom is now a virtual monopoly, providing South Africa with 93 percent of its power needs, and as its capital needs are financed either through tariff increases or hugely expensive loans, this will represent a direct saving to the South African consumer.

Hurriedly

The report, hurriedly released this week — two months ahead of time — in response to public fury over the latest Escom tariff increase, is more than a damning indictment of Escom's long-term planning, its growing share of the dwindling South African economic cake, its huge inroads into the capital market, and its contribution to this country's soaring inflation rate.

It also, by implication, condemns the non-accountability of all South African public corporations and parastatals. Observers believe that the Government may be persuaded by the report to reexamine the structure of the other bureaucratic monsters which dominate South Africa's corporate landscape and

— like nationalised British industries, with which they have much in common — can do exactly as they please.

The report points out that the "arms-length" principle which gives the parastatals their independence from government, and which requires that they operate according to free market principles, also make themn accountable only to the statute which created them, and which requires that they make neither a loss nor a profit.

The responsible cabinet minister has virtually no control over their tariff structures, and can only "ask" them to postpone or lower tariff hikes.

Cash flow

But, the report points out, while they are free of parliamentary or government control, neither are they subject to the final sanction of the private sector: going bankrupt.

The result has been to create enormous, structured bureaucracies with their own peculiar management systems.

Because cash flow comes either from tariffs or depreciation, return on capital is not used as a means of measuring efficiency or the creation of funds. These bureaucracies, therefore, enjoy untrammelled power — even while they are accountable to no one.

When Escom, SATS, Iscor or the SABC want to embark on huge capital projects they simply add the costs to their tariffs.

And they go on borrowing expeditions abroad.

From 1946 to 1960, the private sector attracted 87,7 percent of the foreign capital which flowed into South Africa, but the pendulum swung dramatically in the other direction from 1973 to 1976.

In this period, 96,7 percent of the total foreign capital inflow went to the public sector in the form of loans, and only 3,3 percent to the private sector.

As the report points out,

☐ To Page 2

Escom on the rack

☐ From Page 1

foreign capital has not flowed into productive investments, but into public sector spending.

And it warns that Escom's greed could squeeze out other demands for capital.

From 1971 to 1980, public sector spending accounted for 67,2 percent of total investment in South Africa.

And an even more shocking figure revealed by the report is that Escom's capital investment, as a percentage of gross national saving, less depreciation, was 41,8 percent in 1982, and diminished only slightly to 34,4 percent in 1983.

Millions added

- From its inception in the 1920s to 1982, Escom's fixed capital assets were R7 500-million. But work in progress on December 1 of that year added another R5 000 million. Escom's capital expenditure from 1983 to 1987 was an estimated R27 000 million — and all this at a time when South Africa's current and expected growth rate was the lowest in decades.
- Escom's annual capital expenditure grew from R642-million in 1976 to R2 732 million in 1983, and will increase even further over the next few years.
- Electricity prices in South Africa, which grew at 3,21 percent a year from 1967 to 1974, soared at an annual rate of 19,32 percent from 1974 to 1982, when they exceeded the inflation rate by five percent a year.
- Despite the increased capital spending, availability in Escom's coalfired power stations diminished, from 82,3 percent in 1973 to 73,1 percent in 1982.
- From 1974 to 1982, work in progress grew at an average rate of 40,9 percent a year.

And this at a time when, in response to the shake-up which the oil crisis induced in world economy, other Western countries had abandoned Escom's favoured "econometric" method of forecasting growth, had slashed their energy projects and introduced massive and long-lasting savings in their energy consumption.

In South Africa, forecasts were based on energy needs in the late 60s and early 70s when consumption grew by 10 percent a year. Because of the long lead times in power station construction, Escom was trapped into a major expansion programme.

Thus, while the rest of the western world was engaged in tailoring its energy needs to lower growth rates and energy saving, Escom went on a massive building spree.

In America, 1981 electricity consumption was 32 perecent lower than had been estimated in 1974 — the equivalent of 200 1 000-megawatt plants, each costing three billion dollars.

Expansion

The result of Escom's forecasts — and the fact that it serves no master but itself — have been enormous capital expansion, an over-supply of power, escalating tariffs and high inflation.

South Africa's high energy and transport costs since the mid-70s have, in turn, undercut the international competitiveness of key South African exports such as high-energy-using ferrochrome and ferromanganese.

It was these exports which, benefiting from low energy and transport costs in the early 70s, protected South Africa from the full effects of the oil crisis.

Now that advantage has disappeared — partly because of Escom's ambitious expansion programme based on inaccurate forecasts of South Africa's power needs at a time of diminishing growth, and the fact that South Africa did not join the rest of the world in reducing its energy needs.

With the publication and the acceptance of the De Villiers Commission's recommendations, that has come to an end, and observers believe that the writing is also on the wall for other big-spending state corporations who have added so substantially to South Africa's inflation rate.

Recommended

The major recommendations accepted by the Government are:

- The replacement of Escom's board with a two-tier structure embracing an electricity council and a management board.
- The electricity council, which will be a policy-formulating body, will include the Directors General of Finance and Mineral and Energy Affairs, five independent experts, and five representatives from major private sector organisations such as the Afrikaanse Handelsinstituut, FCI, Assocom, the Chamber of Mines and organised agriculture.

AND TIDES

NATAL: Partly cloudy and cool with light rain in places.

	High/Low	High/Low
Cape Town	0441/1043	1649/2307
Mossel Bay	0455/1043	17032314
Knysna	0514/1058	1723/2328
Port Elizabeth	0449/1046	1657/2318
East London	0455/1049	1704/2317
Durban	0454/1052	1703/2318
Walvis Bay	0452/1039	1706/2258

SUN TIMES 25/11/84

55

280

185

Escom increases to fuel inflation

By Don Robertson

ESCOM'S tariff increases are symptomatic of inflationary forces and should be accompanied by a Government statement that they are in line with the overall inflationary policy, say economists.

They believe that increases of this nature will keep inflationary expectations high and make it more difficult to achieve the 10% hoped for in 1985.

The 10% increase in electricity prices announced for January 1 came as a shock. Depending on economic conditions, Escom says a rise of "similar magnitude" is possible in the middle of the year.

Vital

This does not include a possible further 2% rise which could be caused by a rise in the price of coal.

Johan Cloete, chief economist at Barclays Bank, says the January price rise is in line with Government inflationary policy and should not be seen as excessive. However, if there should be a second increase mid-year, it would indicate that the monetary authorities and the fiscal authorities were at odds with one another.

He says it is vital that the electricity price increase does not push up the price of other government-controlled services and commodities.

"It is strange that Escom should make a statement like this, without an accompanying statement from the Minister of Finance on wages and prices policy," says Dr Cloete.

Bolster

Louis Geldenhuys, chief economist at Senbank, says the Escom announcement will bolster inflationary expectations and will make it more difficult to contain.

However, weak consumer demand which is expected next year will make it difficult to pass on price rises resulting from the electricity price increase in spite of cost pressures. As a result, "inflation is unlikely to change much from present levels".

He believes that it is better to have small increases spread over time.

Farmers hit

The agricultural community has criticised the tariff increases.

Kobus Jooste, president of the SA Agriculutural Union, says farmers are in an unfavourable position to absorb increased production costs because of the hardships imposed by several years of drought.

The prospects for increases in 1985 are also disturbing, he says.

The union looks forward to the publication of the De Villiers Commission of Inquiry report into electricity supplies.

The union has strong reservations about the structure and implication of the tariff policy followed by Escom.

STAR 26/11/84 (55)

Promise of oil detection from air misled SA Government

Plane fraud crashed after PM resigned

By James Tomlins,
The Star Bureau

PARIS — A plot to defraud the South African Government of R22 million ended after Mr B J Vorster resigned as Prime Minister, a parliamentary commission revealed here.

Despite the total failure of two "inventors" to find oil in Zululand, the South African Government agreed to pay them a deposit to drill elsewhere in the country.

It is not known whether this sum was paid or whether the work was started, but the fraud collapsed shortly afterwards in 1979.

The national assembly commission issued its hefty 644-page report last Wednesday after a six-month inquiry into the so-called "sniffer plane" oil scandal which rocked France.

The French state-run ELF-ERAP company lost R42 million when it fell for a device "invented" by Belgian Count Alain de Villegas and Italian "scientist" Aldo Bonassoli which they claimed could detect oil from the air.

Not one single drop of oil was ever found when the device was tested in the late 1970s in South Africa, West Africa and southern France.

The South African Government dealt with the Omnium Oil and Mining Company which was a front for the fraud.

Former French Premier Mr Antoine Pinay and French lawyer Jean Violet, who dealt with the South African Government, were members of the board.

Drilling in Zululand started on May 10 1977 and ended on December 3 1978 without finding oil.

Only a fortnight before work stopped in Zululand, the Omnium directors met in Paris to hear Mr Violet suggest that Pretoria be asked to pay a further R9 million.

PRETORIA

The board agreed and Mr Pinay was asked to put the suggestion to the SA Government.

Mr Pinay and Mr Violet reported on the negotiations with Pretoria at a dramatic series of meetings held from February 10 to 16 1979.

They said South Africa had agreed to renew the contract on the same terms until June 30 1980 on the understanding that new drilling would start before October 1 1979.


Mr B J Vorster — the oil fraud collapsed after he resigned office.

They reported that "as far as the sum of R22 million which the South African Government must pay Omnium is concerned, the change of government (Mr P W Botha became Prime Minister on September 28 1978) means we will have to start negotiations from scratch.

"Our proposals met with bitter opposition from the South African company, Soekor, and prudence from the Ministry of Mines."

The Omnium board held only one more meeting, on June 28, 1979 at Wolfsberg Castle, Switzerland, by which time the fraud had been detected by French scientist Mr Julian Horowitz.

From reading the report, which runs to more than 50 000 words, it is clear that the commission was deprived of many key documents, especially company and government accounts.

It was also hampered by the fact that some key witnesses, including former President Valery Giscard d'Estaing, refused to appear.

The report sometimes reads like an incredible spy novel. Senior State officials described Count de Villegas as "a mystic verging on madness, sickly, suspicious and suffering from a sort of megalomania."

Bonassoli, the "scientist", possessed no more than a technical diploma in television and was described as "absurd, incoherent, a grotesque clown, a conjuror of genius and a kind of madman who cheated with every conviction of being right."

GUIDING HAND

But the commission decided that the soul and guiding hand of the plot to defraud was Maitre Violet, whom a former secret-service chief, Alexandre de Maranches, described as "belonging to the breed of crooked intelligence agents".

Many important witnesses underlined Violet's ties with extreme right-wing organisations in several countries, including South Africa.

● The South African Government has said previously that R7 million was lost in the swindle.

Fewer rural babies die

Grave robbers strike

Remote arid areas of country 'ideal'

SA may be world nuclear dustbin

STAR 29/11/84

(55)

Pretoria Correspondent

Nuclear authorities in South Africa are considering making remote areas of the country international "burial sites" for radioactive waste.

They believe South Africa's large open spaces and arid conditions are ideal for an atomic dumping ground.

This emerged at a Press conference at Vaalputs — the area zoned to be the burial site for Koeberg's atomic waste. It is in Bushmanland, about 100 km from Springbok.

Dr J P Hugo, managing director of the Nuclear Development Corporation of South Africa (Nucor), said South Africa's low rainfall and large, arid, sparsely populated areas spared the country the problems faced by many others when it came to disposing of waste products.

Other nuclear countries were highly populated and had to set aside valuable and urgently needed land for dumping.

In those with high rainfall, there is the added risk of waterborne radioactive contamination and a higher possibility that metal containers used as nuclear coffins could rust.

Foreign exchange

It was pointed out that if South Africa were to allow an international burial ground it would earn the country billions in foreign exchange.

But Dr Hugo said that while carrying the world's atomic waste could earn billions, he did not think South Africans would accept the idea. It could have the country tagged as the nuclear dustbin of the world.

At present, all South Africa's high-level radioactive waste products from Koeberg are being exported to be reprocessed, and the country doing the reprocessing is responsible for the final waste product.

But eventually South Africa will have to consider the disposal of its own waste.

It was said at the Press conference that South Africa was as technically capable as any other country of storing atomic waste.

Dr Hugo said that while there were no statistics at present on the different aspects involved in such a dumping project, Nucor was keeping its fingers on all the options.

Were it ever decided to accept nuclear waste from other countries, he added, it would be a reasonable "milk cow" for South Africa.

Legacy of fear for generations to come

Atom waste can be active for centuries

STAR 30/11/84 55

By Garner Thomson, The Star Bureau

LONDON — If South Africa goes ahead with plans to make isolated parts of the country an international dumping ground for atomic waste, it could be laying up a legacy of fear for centuries to come.

For, despite the reassurances of governments committed to atom power, the latest theory of European experts is that a country may still be handling radioactive waste 250 years after the last power station is switched off.

Dr Ronald Flowers, a member of the directorate of the Nuclear Industry Radioactive Waste Executive (Nirex) told the recent Sizewell public inquiry here that the management of radioactive waste could last well into the 23rd century.

The timescale depended on the length of the time restriction that would have to be put on the re-use of waste-dumping sites and former nuclear power station sites after reactors had been decommissioned.

The warning comes late — perhaps even too late — in Britain's history as a willing nuclear dumping ground for foreign waste. For South Africa there is still time.

Britain's willingness to take waste means earnings over the next 10 years of something like R3 000 million.

It comes from all over the world and is processed by the government agency, British Nuclear Fuels.

Most of the waste is in the form of spent rods.

BNF processes them, extracts reusable elements which are shipped back to the country of origin — and is left with three percent of the rods in the form of a highly dangerous, thick, yellowish liquid whose lifespan could exceed even Dr Flowers's estimation by hundreds of years.

Nobody really knows what to do with it.

At the moment, it is turned into glass blocks and stored in lead and concrete containers, waiting for the invention of a waste disposal system good enough to carry a manufacturer's guarantee of 1 000 years.

There was some optimism recently with the US announcement that a new kind of borosilicate glass may provide the answer.

Said to be 1 000 times less subject to corrosion than existing materials developed in Europe, it could provide a stable, trouble-free means of storage. But will even that be enough?

Scientists at the moment are cautious. Dr Flowers and his colleagues find early reports about the new glass "interesting" and hope to assist in devising new tests.

But even if it is everything its developers say it is, the basic problem still remains.

The "hot" waste may be safe this year and next. It might be all right until next century.

But which scientist alive truly believes he can speak with absolute authority on behalf of 50 generations to come?

Much anger in UK over the transportation routes

LONDON — There is much anger in Britain over the actual transportation of nuclear waste — by road and rail and often through densely populated, built-up areas, including London.

The bulk of the waste arrives at Barrow docks in special containers. These have to be transported to Sellafield in Cumbria, the only place where processing can take place.

The rods are locked into 60-ton steel and concrete containers, solid enough to stand the head-on impact of a railway engine in full steam — as was recently demonstrated in a controversial test by British Rail. That accounts for 90 percent of the spent rods.

The remaining 10 percent comes over from Holland to Harwich on roll-on roll-off container ships alongside regular shipments of food, drink and other imports.

Lorry drivers and BR engine drivers are specially trained for the job. Their progress is constantly monitored by radio and safety measures are meticulous. But nothing — especially that which depends on humans for its execution — is foolproof, as the recent low-level leaks at Sellafield have shown.

STAR
29/11/84

No Sasol workers yet re-employed

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Labour Reporter

Thousands of dismissed Sasol employees had applied for their jobs back but none had so far been re-employed, a spokesman for the corporation said yesterday.

Since the company had changed its policy and agreed to consider applications from nearly 6 000 employees dismissed from Sasol 2 and 3 after the two-day regional stayaway on November 5 and 6, there had been a "marked increase" in applications from these ex-employees, said the spokesman.

After the mass firing, nearly 2 000 new workers were recruited to work at the two oil-from-coal plants in Secunda.

Sasol maintains it can keep the two plants running at full production for as long as it takes to recruit a new workforce.

The 5 100 workers who lost their jobs for their participation in the stayaway constitute just under half of the total Secunda workforce.

Earlier this week Chief Gatsha Buthelezi, Chief Minister of kwaZulu, met Sasol managers to urge them to re-employ dismissed workers.

He asked that if former employees were prepared to sign a declaration that they were not organisers of the stayaway, and did not participate in intimidating fellow workers, they could be recruited.

He asked that workers' positions as new employees be reviewed after three months when management could decide whether to reinstate them in former positions.

Smoking row ends up in court

CAPE TOWN — A man who complained that a pipe smoker in a restuarant was bothering him was attacked by the man's companion, the Cape Town Magistrate's Court heard today.

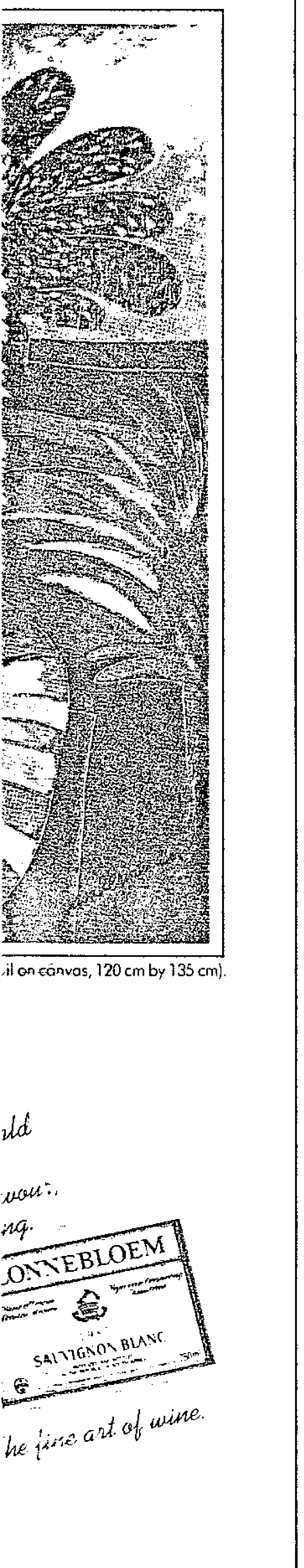
Mr Henry van Embden was giving evidence in the trial of Americans Mr John Harvey Vidal (30), of Oakland in the US, and Mr Howard Richard Gordon, (49) of California.

They have pleaded not guilty to charges of assault with intent to do grievous bodily harm, common assault and crimen injuria after an incident last week.

It is alleged that they hit and kicked Mr van Embden, tried to gouge Mr Harold Leibowitz's eyes out and slapped and hit Mrs Gillian van Embden.

Mr van Embden said that when he complained to Mr Gordon for a second time, he (Mr Gordon) pushed the pipe under his nose and said it was unlit. Mr van Embden pushed the pipe away and was then attacked by Mr Vidal.

The hearing continues. — Own Correspondent.



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members at the four plants. They returned to work after four days without winning any gains in response to a management ultimatum to return or be dismissed.

Both AECI and Sacwu have declined to comment on the progress of the talks. Saawu could not be contacted.

In other developments in end-of-year wage negotiations:

☐ The Commercial, Catering and Allied Workers' Union of SA (Ccawusa) has declared disputes with 3M and Checkers. At 3M the union has rejected an across-the-board offer of R61/month and is demanding increases ranging from R100 to R150. A 3M spokesman says the company is still willing to negotiate provided the union reduces its demand to more "realistic" levels.

A Ccawusa spokesman argues that the US parent company pays a minimum $4/hour and that the local subsidiary is "taking advantage of cheap black labour" in SA. The dispute, which involves 280 employees, is being referred to mediation.

The Checkers dispute has also been referred to mediation which is due to begin this week.

☐ The Paper, Wood and Allied Workers' Union (PWAWU) is to negotiate wages at plant level with Mondi and Sappi after rejecting an employer offer for an 18c/hour increase at the Industrial Council for the Pulp and Paper Manufacturing Industry.

Breakthrough

According to PWAWU, this constitutes a breakthrough as previous efforts to convince the two companies to negotiate outside the council have been unsuccessful. The irony is that PWAWU, an affiliate of the Federation of SA Trade Unions, has been a vociferous critic of the industrial council system. It only joined the council after Sappi and Mondi refused to negotiate at plant level.

There has been speculation that the reason the two companies agreed to this step, after resisting it for so long, is that they could not agree on whether to increase the wage offer at the council. Spokesmen for both Sappi and Mondi declined to comment. The two other major companies in the industry, Nampak and Carlton Paper, have already granted PWAWU this concession.

☐ Industrial council negotiations in the troubled eastern Cape motor industry are in progress. The parties are tight-lipped about developments, although one employer source says some clarity about whether any agreement is imminent should emerge this week after a further meeting between the parties.

The decline in the motor vehicle market has led to thousands of retrenchments in recent months. There has also been unconfirmed speculation that the amalgamation of Ford and Amcar will lead to a "rationalisation" programme which will shrink the Ford plant and make up to 2 000 more workers redundant.

WAGE NEGOTIATIONS

55

Recession blues

The ~~annual~~ wage negotiations at African Explosives and Chemical Industries (AECI) have reached a critical point as unions report the company's latest offer back to their members. Twelve unions are negotiating on behalf of the 15 000 workers at AECI's Modderfontein, Somerset West, Midlands (Sasolburg) and Umbogintwini plants.

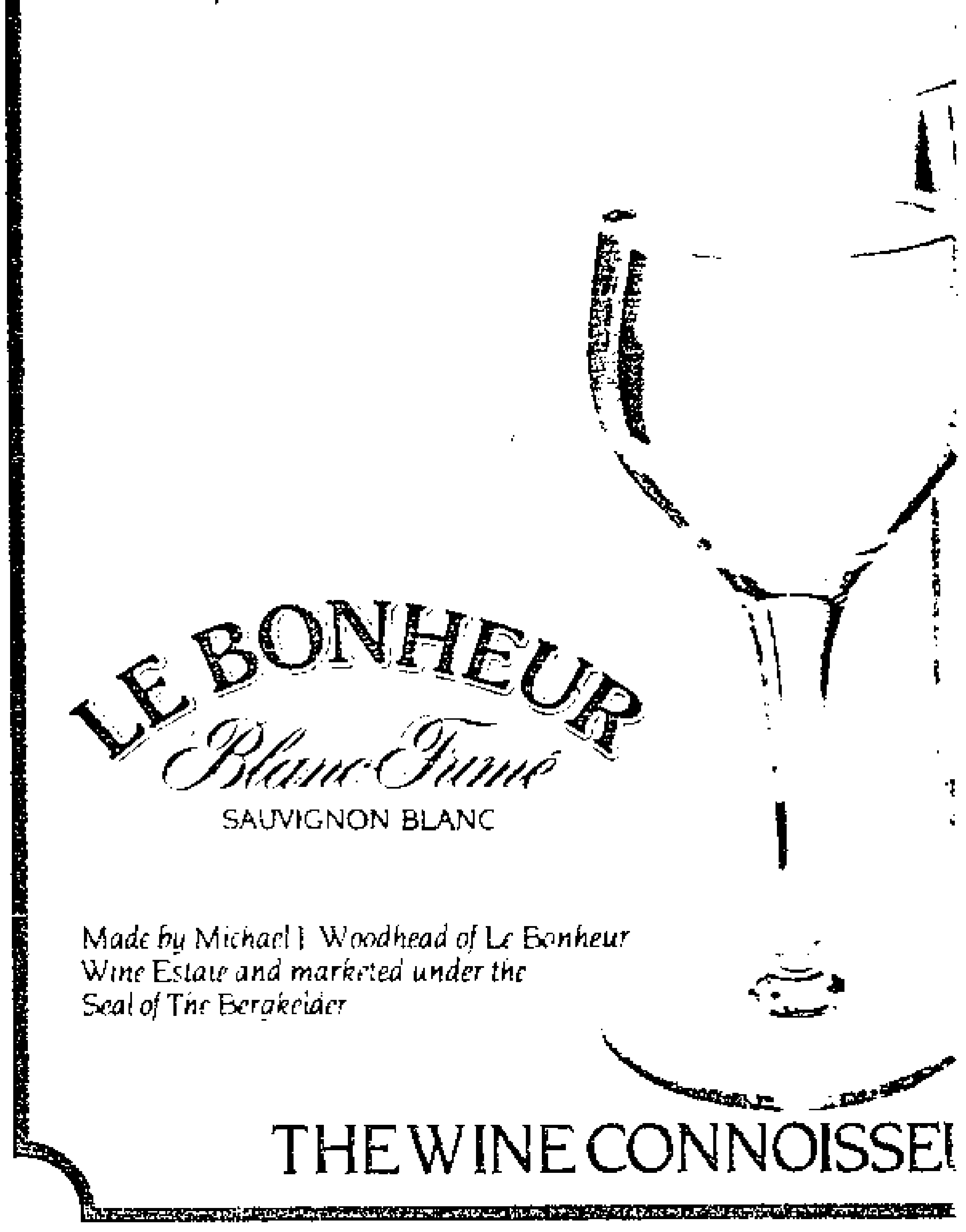
According to a union source, the company has rejected the unions' 20% demand and has made a counter offer of 13% for lower-paid workers and 10% for more skilled ones. AECI's offer will raise the minimum wage in the company to R408,90 a month.

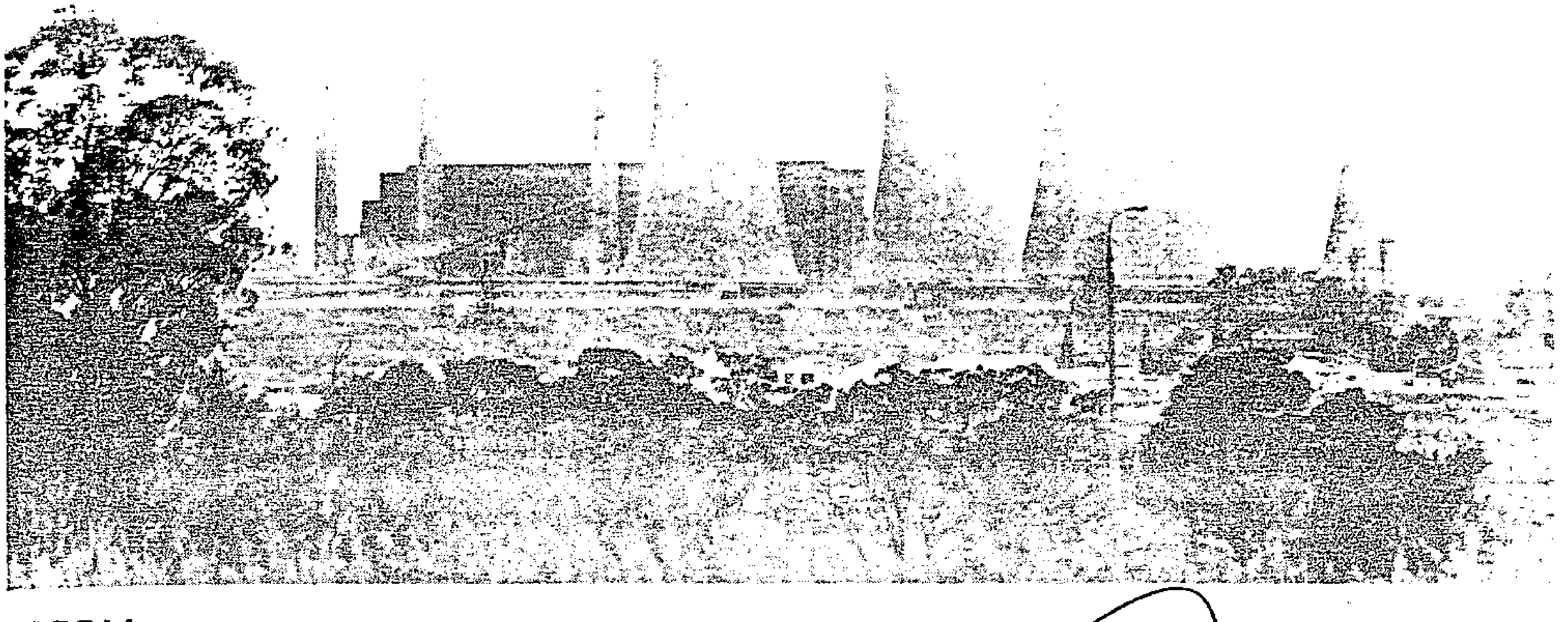
The SA Chemical Workers' Union (Sacwu), an affiliate of the Council of Unions of SA, represents the majority of black workers while the SA Allied Workers' Union (Saawu) represents a small portion. Other unions involved include the SA Boilermakers' Society, the Amalgamated Engineering Union, the SA Iron, Steel and Allied Industries Union, the SA Electrical and Allied Workers' Union, and five other all-white conservative unions.

Boilermakers' assistant general secretary Okkie Oosthuizen says he "doubts that the unions will accept the company's offer." He foresees the possibility of a dispute being declared with the support of most of the unions.

The black unions, though, are likely to tread cautiously this year. Last year's wage dispute led to the first-ever national legal strike by more than 8 000 Sacwu and Saawu

Continued on page 51





ESCOM

Dimming the lights

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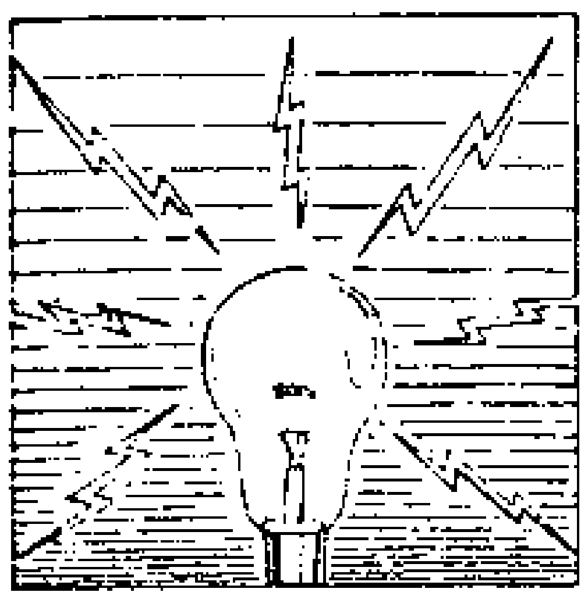
A specialist commission has recommended thoroughgoing structural changes at Escom. Management decisions will be democratised. Capex appetites will be curbed. Herein lie lessons for government.



It is tempting to read more into the De Villiers Commission report on electricity supply than meets the eye. But is it wise?

The alacrity with which government accepted the commission's recommendations *"in toto"* — without the customary White Paper or the usual polite invitation to the affected party (Escom's management committee) to comment — suggests an uncommon sense of urgency.

Something may well be afoot. In the Stygian corridors of government the faint swishing of a new broom is audible. An army of commissioners has been instructed to overhaul the tax system. An agency of the Cabinet has been established to determine public-sector spending priorities.

And now they are beginning to pull out plugs at Megawatt Park.

Such is public disillusionment with government agencies and utilities which operate in terms of outdated statutes, that bold predictions are beginning to emerge which foreshadow radical surgery for all classes of parastatals, quangos and the like. Some, it is suggested, may not even survive.

While this prospect is pleasing, it contains a strong element of wishful thinking. State monopolies (a single seller) and monopsonies (a single buyer), which provide "national" service at administered prices calculated to cover costs, are a way of life. To fragment them, let alone privatise them, would make terrific demands on the political will of government — and the resources of the private sector.

The De Villiers Commission has identified a reasonably acceptable alternative: the inclusion of user representatives in control structures. Imperfect as this may be, it does introduce a greater element of public accountability in the determination of capex priorities and tariff fixing. In the case of Escom, it introduces a vital element of joint responsibility in forecasting load growth.

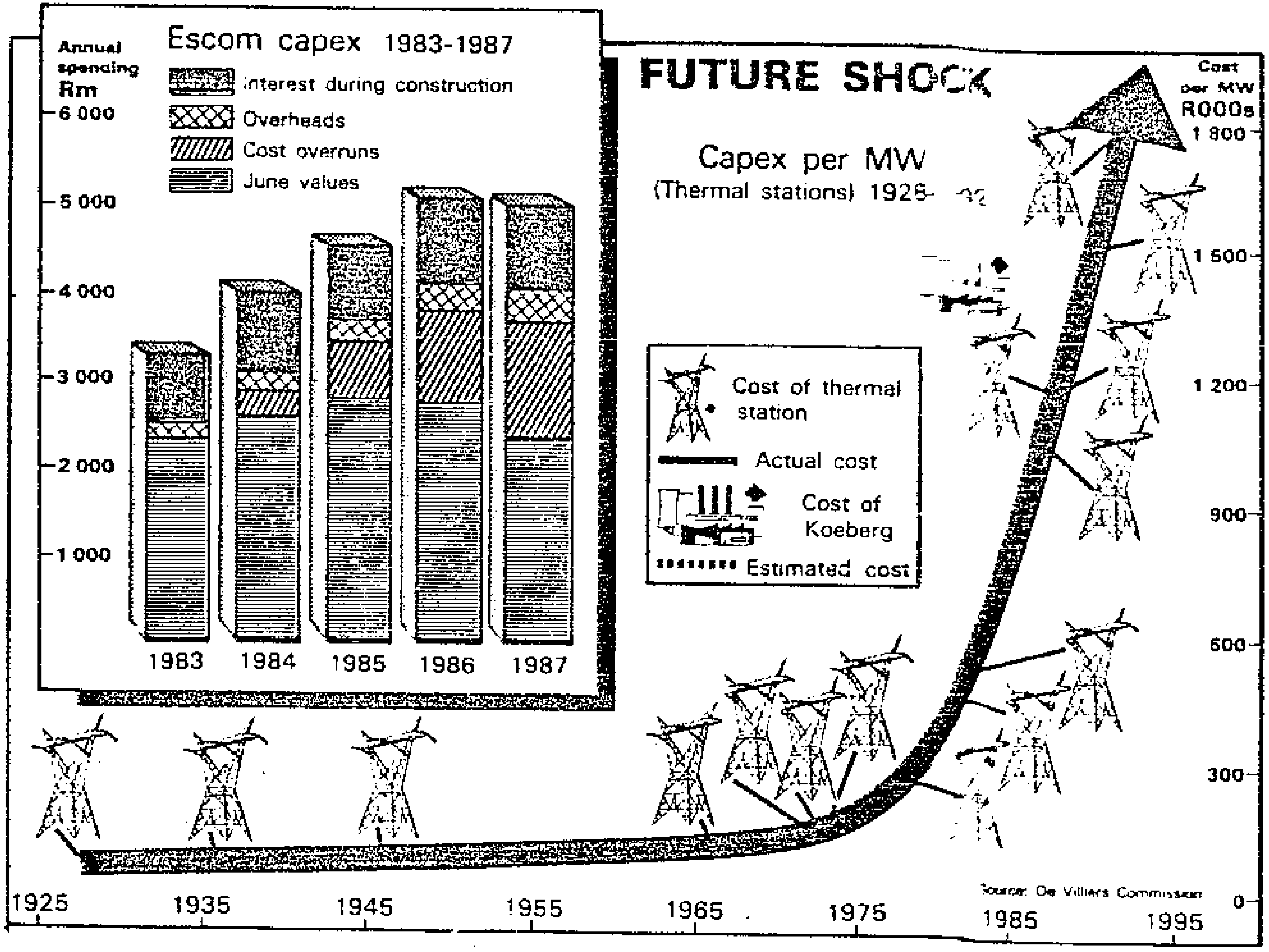
It is a modest advance on the road, hopefully, to less government and greater private-sector participation in decisions which affect economic behaviour. Government acceptance of this principle and, more important, its apparent eagerness to implement the policy shift, is therefore to be welcomed.

The De Villiers report is more than a chronicle of what was going wrong at Escom — its insatiable capital hunger to fulfil a mandate to provide electricity in abundance; and its failure to adapt to adverse conditions in the wake of the international oil crisis. At another level, the report could be a stern warning to government to reassess its own massive spending requirements in a changed world.

In the years after the 1973 oil crisis, says the report, a number of structural changes occurred which will continue to influence SA's economic growth rate. In the Fifties and Sixties, foreign capital inflows came in search of equity investment in the private sector. But since the mid-Seventies, it has entered the country in the form of loan capital for the public sector. In the period 1977-1982, there was a net outflow of R2 987m — R5 178m from the private sector, partly offset by an inflow of R2 281m to the public sector.

Of total net investment in the period 1971-1980, 67,2% was invested in the government sector and the public corporations (22,8% in public corporations alone). The

Cooling tower . . . the years of high growth are gone



Source: De Villiers Commission

percentage of total capital stock invested in public corporations increased from 4% in 1955 to 14,8% in 1982. Worse, the additional capital invested during 1973-1982 was utilised at less than 60% of the effectiveness of roughly the same amount of additional capital invested in the 27 years before 1973.

The commission is convinced that the fabulous years of high growth are gone. Changed investment patterns, inefficient allocation of labour and capital, and the persistent discontinuity of international economic growth wrought by the energy crisis have cut growth expectations. SA, it says, has probably entered a long-term phase of low growth at seasonally adjusted rates of 2,5%-3,5%. With conservation, sales of electricity should not exceed a band of 1,5% above the commission's estimated economic growth rates.

This contrasts sharply with Escom's own estimates of 7% offtake growth. The difference in capex requirement implicit in the two estimates of load growth is dramatic. For the period 1984-1988, given maximum postponement of existing projects in line with a 5% load growth, the cutback would be a fairly modest R3,5 billion. But after 1989, the saving would rise to over R2 billion/year and reach R3 billion/year by 1993, R6 billion in 1997, and about R10 billion by the year 2000. Cumulatively, the difference between the two estimates would be R15 625m by 1993, R41 345m in 1998, and R105 745m in 2003.

A major problem at Escom since the oil crisis has been its relentless fulfilment of the Electricity Act mandate to provide cheap power in abundance "without profit or loss." This, clearly, is to invite disequilibrium. In the 20 years before 1973, the directive worked like a dream. There was little inflation, market rates were low, coal was cheap. Energy-intensive industries bloomed and exports of ferro-alloys, aluminium, coal and steel comprised 40% of the country's non-gold foreign sales.

In 1976, the full extent of the international capital drought began to bite into Escom's financing system, which allows for a 35% content of capex self-financing and 65% loan capital. With foreign capital markets in turmoil, greater reliance had to be placed on self-financing. Projects commissioned but not yet taken into use increased from R244m in 1973 (12% of total assets) to R5 017m (35% of total assets), which includes R2,8 billion for Koeberg. Loan capital as a percentage of operating assets rose from 74% to 110%.

Annual accretions to fixed assets were running at R170m in 1973, but, by 1982, it was running at R2 662m as a result of inflation, Koeberg, longer construction periods for thermal units, high interest rates, anti-pollution stipulations and fuel costs. In the next five years, fixed assets are set to rise at between R3 284m and R5 042m.

After a long run of modest tariff increases, Escom shocked consumers with a hike of 15% in January 1976, and followed with 13% in September that year, 25% in January 1977 and 14,5% in January 1978. Contributions from revenue to the Capital Development Fund rose from 5,7% of gross income to 29,7% in 1982 after peaking at more than 35% in the middle of the period. Consumers were stretched on the rack as, ratchet-like, more and more "own finance" had to be derived from tariff income.

Critical report

This so alarmed the then Economic Affairs Minister Chris Heunis that he ordered a Board of Trade inquiry. The report was highly critical and suggested that Escom — and other capital-hungry utilities — be subjected to constraints by a Capital Projects Evaluation Group. This was because it found that Escom's planning and control system, as it existed before 1976, had serious deficiencies. It recommended abolition of the practice of building equity from profits after establishing that revenue appropriations for the fund (a practice followed by the Post Office and SATS) would amount to 40% of tariffs by 1985. Of course, nothing was done about the report.

Escom's massive capex programme proceeded at a time when savings went into sharp decline. As a percentage of gross domestic savings (less depreciation), it reached an amazing 41,8% in 1982 before dipping to 34,4% last year. The commission feels, quite rightly, that this is an unconscionable demand on available resources (particularly when viewed against government's own gargantuan appetite).

The De Villiers Commission questions the advisability of proceeding on the present tack. While thermal efficiency has improved greatly from 18,2% in 1950 to 30,5% in 1982, it has been achieved at the expense of lower average availability of

DE VILLIERS RECOMMENDS

The most important recommendations of the De Villiers Commission accepted by government are:

☐ That the present management structure of Escom be replaced with a two-tier mechanism comprising the electricity council (policy formulation) and a management council. The electricity council will comprise a chairman; the chief executive of the management council; the directors-general of Finance and of Mineral and Energy Affairs; a member nominated by SATS; five independent experts and representatives of the AHI, Assocom, FCI, Seifsa, Chamber of Mines, the SAAU and the Association of Municipal Electricity Undertakings. The council will be appointed as soon as possible;

☐ That the principle of operating neither at a profit nor loss be discarded "in favour of a sound assets and income structure" complying with: income cover of at least 1,05 and the maintenance of a 3:2 asset ratio; and

☐ That the concept of different undertakings within Escom be dropped and the tariff modified to distinguish between maximum demand and actual demand when allocating unit costs; and introduce the pooling of costs so that tariffs for individual groups of consumers may be calculated from mean pooled costs.

(55) FM 30/11/84

sets, which has declined from 87,1% for the older sets to 66,8% for the new high-pressure 600 MW sets. While the improvement of thermal efficiency has stabilised the cost of coal per MW, De Villiers reckons the stage has been reached where marginal improvements in efficiency can only be achieved at an exponential increase in capex.

So it is time to put on the brakes. Escom is not only an electricity monopolist, it is close to a coal monopsonist. It is the sole forecaster of power needs, but De Villiers suggests that its econometric methods ("forecast and build"), despite inordinately long lead times to commission new units, are too risky in times of economic discontinuity It should rather seek to emulate the US example of saving electricity. In 1981, electricity consumption in the US was 32% lower than had been estimated in 1974 — the equivalent of 200 generating plants of 1 000 MW capacity, each costing about $3 000m.

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FM 30/11/84

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SASOL SACKINGS

Conditional hiring

Dismissal of more than 6 000 Sasol workers in the wake of the recent 48-hour stayaway has created problems for the corporation — despite protestations that normal production is being maintained.

Last week Sasol announced that it had received numerous applications from former employees during its recruitment drive. It said their applications would be "sympathetically" considered provided they could satisfy the company that they were "not guilty of intimidation or incitement to participate in the stayaway and that they were victims of intimidation or incitement."

Mindful that discrimination against members of the Chemical Workers Industrial Union (CWIU) would bring charges of victimisation, Sasol was careful to state that union membership would not be taken into consideration.

Last Friday Sasol PRO Robin Hugo told the *FM* that nearly 2 000 workers who had not previously been employed by Sasol had started work in the Secunda plants and that a "few thousand" other return applications were being processed. He refused to divulge what methods Sasol would use to establish whether the dismissed workers complied with the company's criteria.

According to the CWIU's Chris Bonner, large numbers of workers have been streaming back to be interviewed, although it was not yet clear how many dismissed workers had been re-employed. She said former workers were being asked:

☐ Why they stayed out on November 5 and 6;

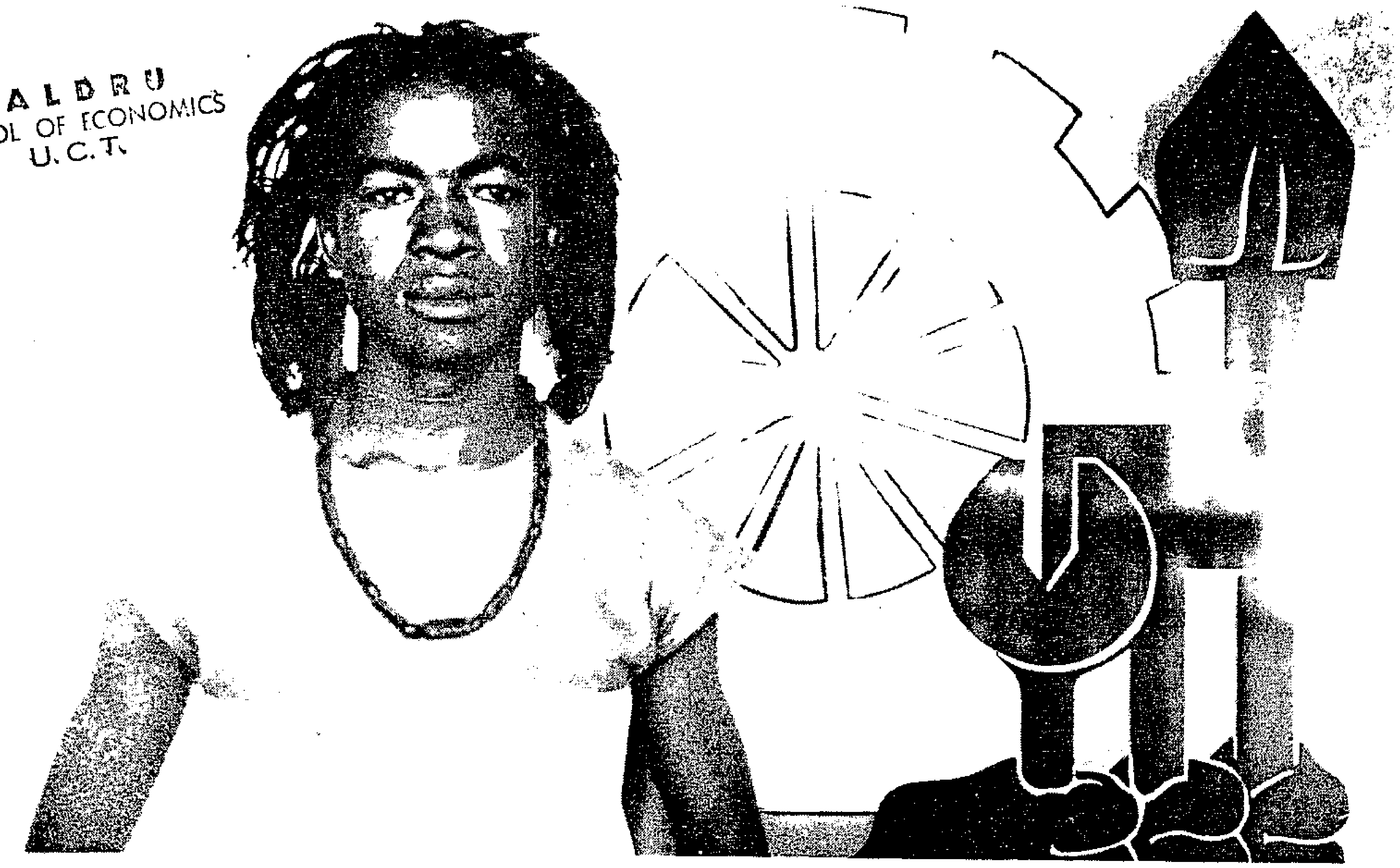
☐ Why they had not heeded management ultimatums to return to work;

☐ Whether they could name people responsible for causing the stayaway. Some workers have been told that if they name just one person they will get their jobs back. Shop stewards who gave negative replies to questions about whether they had led the stayaway were being asked to name people who had;

☐ Whether they would participate in further stayaways; and

☐ About their work records and their relationship with their seniors.

SASOL ORGANISER, TSIDISO MOTHUPI SPEAKS OUT



How did you come to be an organiser?

I was working in SASOL II. I met with CWIU shop stewards and organisers. I became one of the secret recruiters for the Union.

In May 1984, the Union was looking for another organiser. The SASOL workers elected me to that position. The BEC accepted the SASOL workers' suggestion.

What are conditions like at SASOL?

Bad. The plant and hostels have an atmosphere like a military camp. Workers feel very oppressed.

Working conditions are bad; many accidents occur; we are treated badly by the foremen; the pay is very low, about R1,50 per hour. When you try to challenge management, you are told 'you can go back to the homelands, there are thousands of unemployed workers wanting to take your place'.

Why did workers participate in the stay away even though they had been given an exemption.

They believed it was right to support other workers in their struggle. The issues being protested were their issues:-
the treatment of the schoolchildren; the use of the police and army to harass people in the townships; rents, busfares etc. etc......

They were feeling angry at many things at this time — the attitude of SASOL management; the United bus company which transports them to work.

You were detained — what exactly happened?

When the soldiers rushed, JJ (another CWIU organiser) and I jumped out of the window. We were on the 2nd floor. When I landed I injured myself, JJ got away.

They pointed machine guns at me and told me not to run.

I was put in a Hippo lying on my stomach so nobody could see me. At the police station they made sure no-one was looking when they took me out.

They told me they were holding me until they could get the situation under control — they would let me go once all the workers were out the hostels and had gone home.

I explained the legal position to them — that our lawyers had had an undertaking from SASOL not to unlawfully evict the people from the hostels.

Then I was interrogated and asked many questions. The SB who interrogated me tried to win my confidence and pretended to be my friend. I could see he wanted me to tell him everything.

All the time they were phoning the township for a report on what was going on and telling me how the workers were taking their pay and getting on the buses.

They asked me if I was aware that other organisations were trying to infiltrate the unions.

They asked what workers were doing being involved in student politics. I explained that those are our workers' children — also workers are trying to avoid confrontation and violence with students.

They asked if I got more pay in the union or when I worked at SASOL? They could not believe I left my job at SASOL for less pay in the union. These people could not understand commitment to the organisation.

Later when they were satisfied that most of the workers had been bussed back to the homelands they released me.

WHAT IS SASOL?

SASOL is a giant company — the largest construction project carried out in South Africa.

It produces oil from coal. This makes it very important as South Africa does not have to rely on oil from overseas.

SASOL says it is a private enterprise company. In fact, it was built with government money; government money is still invested there; and seven out of the eleven directors are appointed by the Government. Government money comes from the PAYE tax deducted from workers pay.

SASOL is the pride and joy of white South Africa. How dare black workers challenge such an institution.

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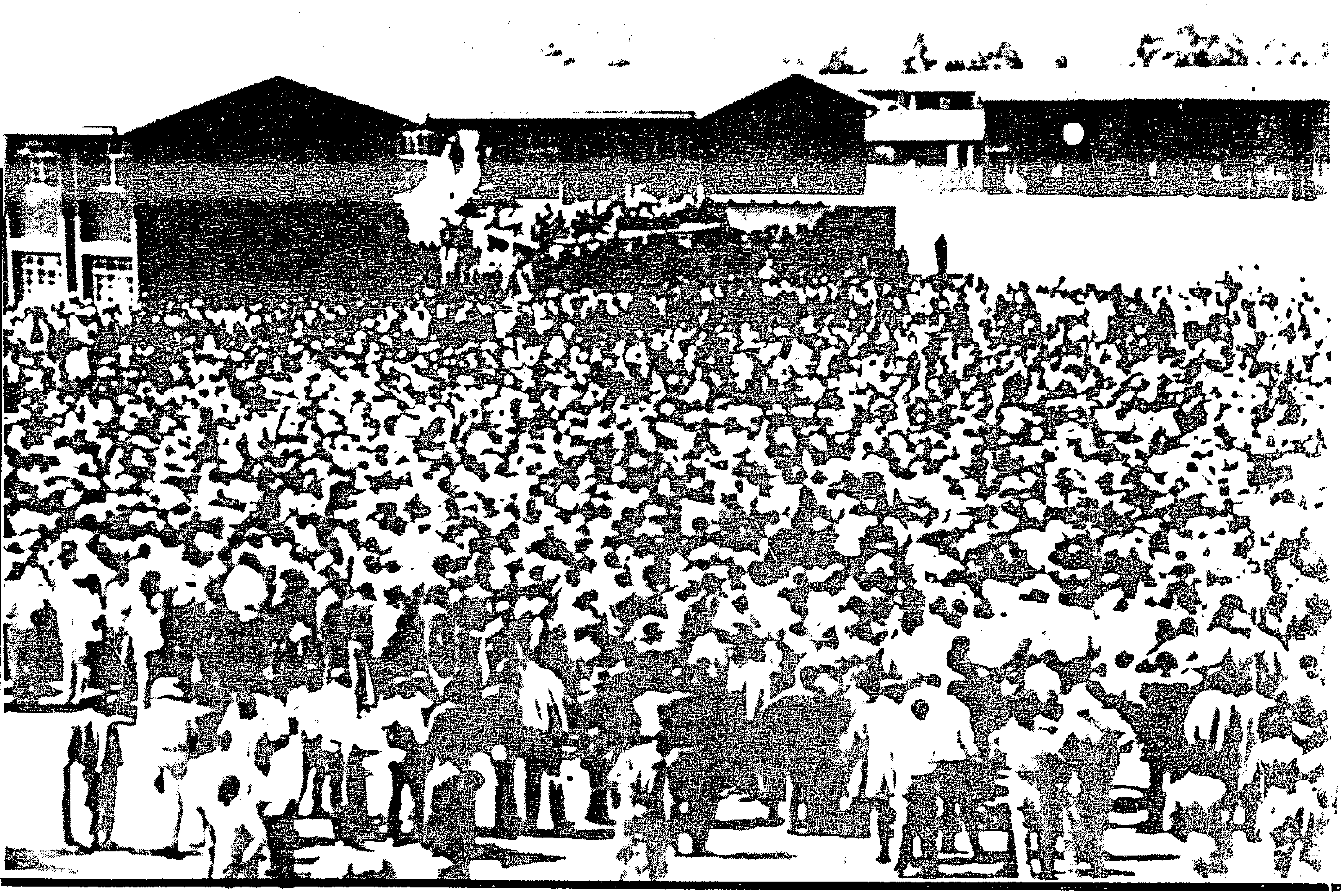

SASOL: THE REAL STORY

SASOL has dismissed 6 500 workers, most of them members of the Chemical Workers Industrial Union. This is over 90 per cent of SASOL's production workers.

SASOL workers decided to participate in the two day stay away in the Transvaal. The stay away in the hostels and surrounding township near Secunda was almost 100 per cent.

A large contingent of police were there, with 'hippos' and landrovers. Workers remained peacefully in the hostel grounds on Monday.

HELICOPTERS DROP PAMPHLETS

At 6 p.m. helicopters flew over the hostels and dropped thousands of pamphlets. The pamphlets threatened to dismiss workers if they did not retum to work by 10 a.m. on Tuesday.

At an all night meeting shop stewards and organisers decided to advise workers to return to work.

A general meeting of 6 000 workers was held at 6 a.m. inside the hostel grounds to discuss SASOL's pamphlet. Workers stood firm with their decision.

As the meeting took a break for a shop steward caucus, two 'hippos' drove into the hostel grounds and towards the workers. Workers scattered. Now they were totally determined not to return to work.

At the deadline time of 10 a.m. and again at 11.30 a.m. buses drew up outside the hostels ready to take workers to the plant. They left empty.

Management announced over the hostel intercom that workers were now dismissed.

Early on Wednesday morning about 5000 workers marched to the plant. They were turned away. They were accompanied all the way by 'hippos' and police vehicles.

POLICE IN HIPPOS ARRIVE

Workers then held a general meeting to decide on strategy. They decided:-

* they would not collect their pay
* they would not leave their hostel rooms or houses

However their decisions could not be carried out. Just as the meeting was coming to an end, a large contingent of police/army drove into the hostel grounds in 'hippos' and landrovers.

They circulated around the hostel complex. Workers say the soldiers were pointing their guns at them saying 'we'll be coming for you at 6 p.m.' 6 o'clock was the time management had put in their pamphlet for workers to be out of the hostels. In the meantime the union lawyers had compelled SASOL to extend the time by 2 hours.

At about 10 a.m. shop stewards gathered in a 2nd floor room.

Hippos and landrovers charged at the hostel. Shop stewards and organisers fled for their lives, jumping out of windows and scattering. One organiser, T. Mothupi was captured and detained. He was released later that evening.

The word was put out that the police were looking for the shop stewards and union leaders and they had to go into hiding.

Workers decided they were not prepared to be massacred. They began to pack their belongings and collect their pay.

Special pay offices had been set up outside the hostels, and over 40 buses were waiting to take workers back to their various homelands.

By evening all but a few hundred were gone.

Escom increase will cause more unrest — Tucsa

STAK 30/11/84

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By Carolyn Dempster,
Labour Reporter

Escom's proposed 20 percent-plus increase in electricity tariffs has been slated as "potentially disastrous" by the 460 000-member Trade Union Council of South Africa (Tucsa).

Tucsa's national executive this week condemned the timing and magnitude of the proposed increase and said it was a certain and dangerous way to fuel inflation.

"In a climate in which virtually no competitive organisation could hope to raise its prices by 20 percent and survive, this latest increase suggests uncaring and monopolistic attitudes," said the executive.

It has appealed to the authorities not to allow the increase because it is "liable to cause further economic hardship and provoke further civil unrest".

Tucsa has also noted with concern that retrenchments are increasing.

While employers did face severe problems as a result of the recession, the hardship and suffering faced by unemployed workers was massive.

"We recommend that wherever remotely possible, workers should be placed on short-time instead of being laid off or dismissed."

On the issue of disinvestment, Tucsa continues to swim against the tide of independent unions and has reiterated its support for investment by foreign companies in South Africa.

"Tucsa does not believe that the majority of black South Africans support a policy that must mean fewer jobs and opportunities for advancement."

Escom price hikes a rip off — charge

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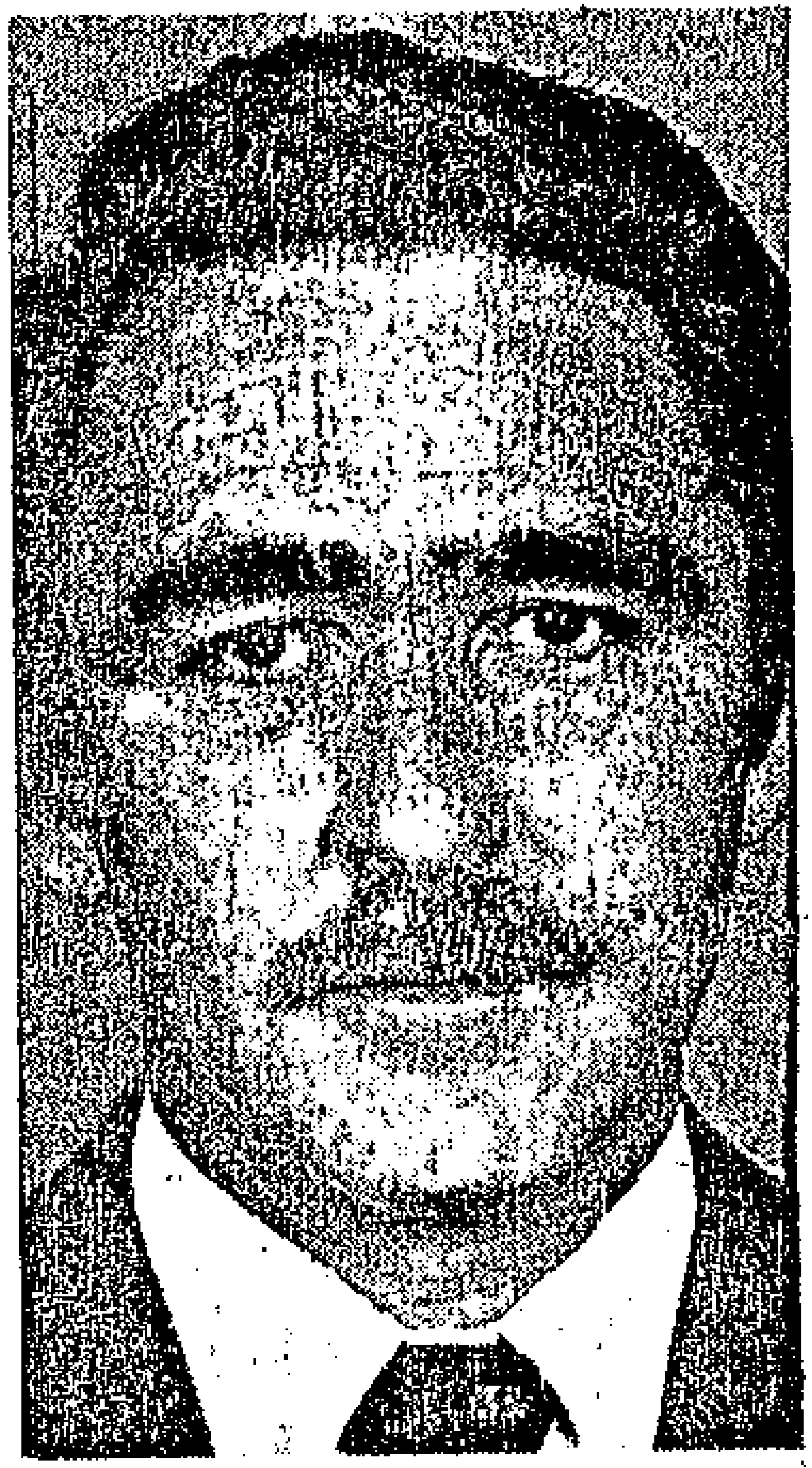
Star 1/12/84



Mr Ricky Valente ... Escom "bloated with cash".

by

Lucille McNamara

Escom has been accused of mismanaging its finances grossly and using its monopolistic and protected position to siphon off funds from consumers.

This was the harsh allegation of Sandton management committee chairman Mr Ricky Valente, who has called on the State to freeze further electricity rises until it has carried out a full investigation into Escom funding.

He was reacting to the recent announcement that Escom will increase the cost of electricity by 10 percent in January, and at least another 10 percent in June.

Basing his comments on statistics revealed in Escom's 1983 annual report, Mr Valente said that over the past 12 years its total annual income had increased by an "unbelievable" 1 198 percent. During the same period — from 1972 to 1983 — the amount of electricity supplied had increased by 136 percent, and income per unit had soared by 450 percent.

He said that at the end of last year, Escom's accumulated Statutory Funds amounted to a staggering R5 471 030 000.

Mr Valente said it was clear that after years of overcharging, Escom was "bloated with cash".

"Escom is now the fattest of fat cats, and all at the expense of ordinary South Africans."

Mr Valente said that as an elected representative of a local authority, he found it impossible to justify the electricity increase to his ratepayers.

He called on all other responsible local authorities to join Sandton and stand firm against the increase in the interests of residents and the country's economy.

"Escom's justification and reasoning about the increases is sketchy, to say the least, and a typical statement of an unbridled and non-accountable monopoly that has a strangehold on the economy."

Mr Valente said he did not want to speculate on what the increases would do to an already tattered economy, or the disastrous cumulative effect it would have on the man-in-the-street.

He described as "absolute nonsense" the defensive roles of various spokesmen.

Johannesburg's City Electrical Engineer, Mr Wessel Barnard, said the increases were reasonable, and critics deserved to be "hung up on the nearest tree".

Mr S K Ash, past president of the Johannesburg Chamber of Commerce, said Escom was the victim of inflation and past low electricity prices.

Said Mr Valente: "It must never be forgotten that ... Escom is a State organisation, and as such is funded by and answerable to all the people.

"The situation is a direct result of the Government's ineptitude, and it must immediately freeze all further electricity price rises and at the same time carry out a full investigation.

"We simply cannot afford to carry on finaning Escom in this manner."

'IT'S TOO HOT FOR US TO HANDLE!'

55

C. Pres 2/12/84

THE IKAGENG Village Council has admitted it's too scared to call a public meeting to brief residents about looming electricity charge increases.

This was disclosed this week at the IVC monthly meeting attended by Western Transvaal Development Board officials and Co-operation and Development assistant commissioner Danie Smith.

Mr Smith proposed that the IVC convene a public meeting at which it should urge residents to pay more if they expect better services.

Ikageng Deputy Mayor Gabriel Moraladi said: "We live in fear while you sleep peacefully in Pretoria.

"At this stage we cannot go to the people and talk about increases."

He added that it was not that their families were pressurising them to quit their posts for safety reasons.

Another burning issue at the meeting was the sale of the local beer hall.

CAPE Times

lnesday, December 5, 1984 ★ 55

9 000 Sasol workers join Fosatu union

Own Correspondent

JOHANNESBURG. — The attitude of Sasol to dealing with emerging unions is to be tested again — only weeks after it fired some 6 000 workers who took part in the recent Transvaal stayaway.

In a surprise development yesterday, Fosatu's Chemical Workers' Industrial Union (CWIU), which represented most workers fired during the stayaway, said it had recruited most of the 9 000-plus workers at four coal mine shafts owned by Sasol at Secunda.

It said it had asked Sasol for "stop order" facilities — automatic deduction of union dues by management — at the four mines and it is believed that this may lead to a demand for full recognition at the mines.

This means CWIU is likely to retain a strong presence in Secunda in spite of the firings, and could help it re-establish a foothold in the Sasol II and III plants. The two plants rely on the mines for the coal they use in Sasol's oil-from-coal process.

Before the mass firings, CWIU enjoyed "stop orders" at Sasol II and III and was about to be granted full negotiating rights. It claimed the sackings were designed to keep it out of the plants — which Sasol denied.

In a statement yesterday, CWIU suggested that its request for stop orders would again test Sasol's stance on dealing with it.

"It will be interesting to see whether or not Sasol management is sincere in its statements that the dismissal of workers was not aimed at ridding itself of the CWIU," the union said.

A union representative said a letter had been sent to Sasol last week asking for stop orders at the mines. No reply had been received yet.

A Sasol spokesman, Mr Robin Hugo, said yesterday that the company had no means of verifying what CWIU membership at the Secunda mines was, and implied that the company had not yet received the stop order request.

"If an application for stop order facilities is receieved from CWIU, it will be considered on its merits," he added.

The union's statement said workers at the mines had begun to join CWIU after it won recognition at the two Secunda Sasol plants. Since the sacking of workers taking part in the stayaway, membership had increased "dramatically", in spite of alleged managament harassment, it added.

• Meanwhile, Mr Hugo said yesterday that Sasol expected that the process of employing workers to replace those fired in the stayaway would be completed only in February next year.

He said the company had received 4 000 applications for jobs from new workers and a further 3 000 from fired workers. Each worker would be interviewed individually, he said.

Mossel Bay first choice for offshore gas refinery

Star (55)

5/12/84

GEORGE — The Mossel Bay area was the "number one candidate" for a multi-billion rand refinery to process offshore gas reserves, but feasibility studies which would take at least another six months had to be completed first, the Director-General of Mineral and Energy Affairs, Dr L Alberts, said yesterday.

However, Dr Alberts emphasised that the project would be given the go-ahead only if every single test result was positive, and that there would have to be "absolute certainty" of sufficient reserves to last about 30 years.

The Government would make its final decision known as soon as possible after the studies were finished so that the necessary planning could start, Dr Alberts told the annual congress of the Southern Cape Tourism and Development Association at George.

He warned that future planning for the area, involving property speculation and the establishment of infrastructure, for example, had to be approached with "ultra-cautiousness". — Sapa.

H, WEDNESDAY, DECEMBER 5, 1984

55 D. Dispatch

Electricity increase may be below 5 pc

EAST LONDON — Two amendments to the city's electricity tariffs will make the scheduled January increases possibly less than five per cent.

This emerged yesterday in an interview with the chief city electrical engineer, Mr Ken Robson, following the city council's acceptance of the recommendations of the increases.

The first amendment came with the amalgamation of the Border and Orange River Escom undertakings while the second came with the Escom announcement of increases for the various regions from next year.

The Escom announcement said tariffs in various parts of the country would increase by at least 20 per cent within the first six months of next year.

However, the announcement by the chairman of Escom, Mr Jan Smith, said the Cape Eastern Undertaking could expect a 5,33 per cent increase.

Mr Robson explained that the council had adjusted the tariffs to recover the additional money to pay to Escom.

"We have our own charges and are not looking for more money. We are only looking for the added amount to be paid to Escom," he said.

Following the Electricity Board's approval of the amalgamation of the two undertakings, Border and the Orange River, the tariffs of the two undertakings of Escom had to be adjusted.

"The revised tariff was designed to bring in some revenue for the six months but the overall increase in income was a negligible 0,008 per cent".

To meet the latest increase announced by Escom, the tariff would have to be increased by 4,5 per cent, which would be in the form of a surcharge.

The Cape Eastern increase is the least of the five Escom undertakings. Rand and OFS is 10,69 per cent, Eastern Transvaal 9,43, Natal 10,38 and Northern and Western Cape 10,67.

Mr Robson said it was interesting to note that the percentage increase for the Cape Eastern undertaking was substantially lower than the other undertakings.

This would reduce the percentage subsidy paid by the Decentralisation Board as it was calculated on the difference between the Cape Eastern undertaking and the Eastern Transvaal, which had now been narrowed.

Mr Robson said he did not know what the percentage subsidy — which was at present 16 per cent — would be. — DDR

FM 7/12/84

~~ganisation will meet on January 15 next year to reassess the situation and to decide how and when negotiations with SA should begin. "SA, Swapo and Angola could go on bickering over our independence for another decade. Namibia cannot afford that, nor can it afford SA bureaucratic rule for much longer," the spokesman said.~~

~~Namibian Administrator General (AG) Willie van Niekerk and the SA government have repeatedly indicated that they would seriously consider any proposals made by the MPC.~~

~~**Highly unlikely**~~

~~It seems highly unlikely, however, that SA would grant the MPC request for independence without UN and Swapo participation. What it wants to avoid at all costs is signing a ceasefire with Swapo with the latter's military force still intact.~~

~~There are many indications that SA would be prepared to allow the formation of an autonomous interim government with defence and foreign affairs excepted. It has been rumoured for some time now in Pretoria and Windhoek that the post of the AG will be scaled down and that Van Niekerk will be recalled towards the middle of next year. The party closest to SA, the DTA, has in the recent past repeatedly called for Van Niekerk to be "sent home" and his post to be scrapped.~~

~~Sources in Windhoek say the tentative plan is to form a "government of national unity" by April next year. Some Western observers see the plan for an interim government as a strategy to get the MPC into a position~~ where it would be a full partner in any independence talks or even where it could directly negotiate with Swapo over the independence issue. But it is also feared that it could cause Swapo to reorganise its forces and launch a new military offensive in the rainy season early next year.

NUCLEAR WASTE

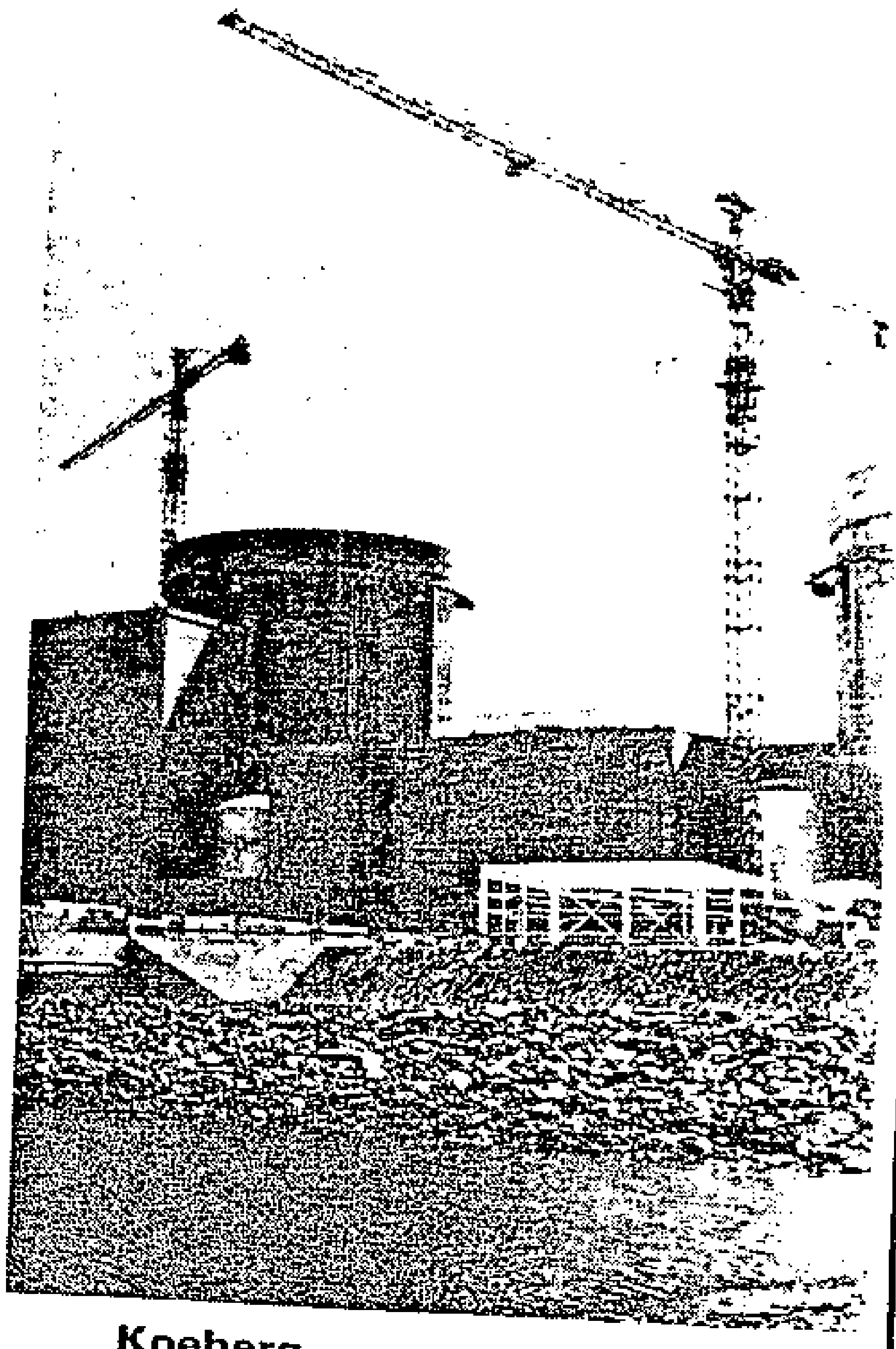
55

Storage at Vaalputs

The anti-nuclear debate in SA has pretty well fizzled out. Thus, the news that the Vaalputs nuclear waste dump site in Namaqualand is likely to be used to store used fuel from Koeberg, as well as low and intermediate waste, has caused barely a ripple.

It is difficult at the best of times to argue against scientific evidence, and there seemed no shortage of that during a media visit to the site as boffins argued that Vaalputs is perhaps the most suitable site in the world for the disposal of nuclear waste.

Indeed, Dr J P Hugo, managing director of Nucor, described Vaalputs as the international "Rolls-Royce of nuclear waste sites" and disclosed that SA had been approached by other countries to store their nuclear waste. Almost wistfully, Hugo conceded this would be politically unwise — although it would be worth millions to SA in foreign exchange.



Koeberg ... wastes to the world's best storage site

The media visit to Vaalputs was clearly aimed at dispelling many of the misgivings surrounding nuclear waste. There is no disputing the toxicity of high-level waste, nor the fact that it remains active for millions of years; but as Dr Dennis Toens, manager of Nucor's geology department, points out, even the most active radionuclides decay with time. Elements like mercury, arsenic and cadmium remain poisonous forever.

Moreover, safety rules for the disposal of nuclear waste are immeasurably stricter than for ordinary industrial materials, which in many cases are as toxic.

To illustrate, Hugo says he is prepared to drive the 600 km from Koeberg to Vaalputs on top of a load of nuclear waste containers. "But there is no way you will catch me in the cabin of a petrol tanker."

Small quantities

Perhaps the most reassuring argument of all is a twofold one. Firstly, SA has been handling small quantitities of nuclear waste for years at Pelindaba's radioactive waste-disposal plant without mishap. Secondly, whether the radical fringe likes it or not, the nuclear age has arrived, and waste disposal is no longer a cocktail party debate. It's a science.

With that in mind, the 10 000 ha Vaalputs site seems an eminently suitable dump. It is sparsely populated (the population within a radius of 25 km works out to one person every 400 km²). Extensive geological tests indicate no mineral deposits of any value. Agricultural potential is minimal; sheep-farming is the only activity (at the land-usage rate of one sheep per 9,5 ha) and that has virtually died out because of the prolonged drought. Rain last fell at Vaalputs some seven years ago.

55 FM 7/12/84

Inhospitable is almost too kind a word. Temperatures range from below freezing at night to 45°C during the day. Annual rainfall is around 74 mm (when it rains at all) and vegetation consists of little more than the shrubs, succulents and grass typical of semi-desert areas.

Months of testing revealed that the area has not been seismically active for the last 35m years, indicating that the basement rock level is suitable for the emplacement of high-level waste at depth. Low and intermediate wastes will be deposited in 7 m-deep trenches under a 2 m cap of compacted clay. The low-level waste will be stored in steel drums, while intermediate waste will be solidified inside special reinforced concrete bins before burial.

Waste generated will be negligible compared with thermal stations. Nucor has gone to some lengths to put it in human terms. To generate enough electricity for the lifetime of a single individual, a coal-fired station would need to produce more than 5 000 t of ash (enough to cover a rugby field to a depth of 1 m), while millions of tons of gases, some radioactive, others massively toxic, would be released into the atmosphere. In nuclear terms, the amount of high-level waste produced for the same exercise could be contained in a cylinder measuring 1 cm by 15 cm.

Koeberg will produce some 2 000 drums of low-level waste/year. High-level waste will run to 2-3 m³/year per 1 000 MW unit (at present one of Koeberg's two units is operational). Current technology is to solidify this waste to immobilise the radionuclides, then to store it in cooling ponds for anything up to seven years to allow the abundant short-lived radioactivity to subside, before either storing it permanently underground or transporting it overseas to a reprocessing plant. This means SA will not have to deal with any such waste until early in the next century.

The first low and intermediate waste will be transported by truck from Koeberg next year. Escom and Nucor are now investigating the interim storage of used nuclear fuel at Vaalputs. It would be stored dry, above ground, in licensed 100 t transport/storage casks before eventually being reprocessed overseas. That, of course, leaves SA with its options wide open — such as developing its own reprocessing plant.

RDM 15/12/84 ~~83~~ 55

Deadly poison is being used in SA

By MAURITZ MOOLMAN
and COLIN HOWELL

THE killer chemical that wiped out more than 2 600 people and left hundreds of thousands in hospital in India on December 3 is present in South Africa, but the Department of Health is not saying where.

And, according to a senior spokesman for the department in Pretoria, a similar accident to the one at the Union Carbide plant in Bhopal could happen in this country.

The spokesman, who asked not to be identified, told the Rand Daily Mail: "Yes, it could happen because we (the department) cannot be there at all times."

Where "there" is, remains a mystery — the spokesman refused to say which companies are importing the lethal chemical, methyl isocyanate, or in which products it is being used.

He said that information was "classified".

A Mail investigation has also found that SA Transport Services (SATS) could be moving the methyl isocyanate without knowing.

Meanwhile, the Johannesburg-based branch of Union Carbide has said it is not importing the chemical.

A spokesman for Union Carbide SA, which has a factory in Silverton, Pretoria, said company products, like Temik and Sevin, are imported into SA in their complete form.

The importation of methyl isocyanate, a reacting agent in the manufacturing process of both products, was therefore "unnecessary", he said.

The SATS, a major rail and road transporter of hazardous chemicals, does not transport chemicals under their technical names, but according to a "schedule number".

And, according to SATS general manager of "dangerous goods", Mr J A Pringle, this meant that the SATS, unknowingly, could have transported methyl isocyanate.

And, an official in the statistics section of the Department of Customs and Exise, Mr Roy Auret, told the Mail it was likely that methyl isocyanate was classified — for importation purposes — along with up to 50 other chemicals.

"We are only interested in the duty that has to be paid on it — not whether it is dangerous or not," Mr Auret said.

Asked whether methyl isocyanate was available in SA, the Department of Health spokesman said: "Yes, there would be."

Earlier this week, a Department of Agriculture spokesman told the Mail it was doubtful that methyl isocyanate was being imported because South Africa's pesticide market was too small to warrant the manufacture, locally, of pesticides and insecticides.

But, asked yesterday whether he was "certain" that the deadly poison was available in SA, the Department of Health spokesman said: "Yes, because it is being used in various products which I cannot identify because the information is actually classified."

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PARASTATALS

Cut to size

State utilities are about to unveil capex cuts and deferments running to billions of rands in the next year or two.

Escom has just opened negotiations with contractors for a year's deferment of work on the second half of the massive R2,7 billion Kendal power station, says senior GM Dave van der Walt.

The new move will hit at least 150 contractors on the eastern Transvaal project, who will be deprived of contracts running to half the projected capital cost of the project. All contracts already awarded carry postponement clauses allowing project completion to be put back years.

It follows the midyear decision to postpone the last two generating sets at both Lethabo and Tutuka and the more recent opening of negotiations to delay work on Majuba by two years. The postponed work at Kendal, Lethabo and Tutuka totals at least R3,2 billion.

The De Villiers Commission report, released last month, stresses the need for expenditure curbs and structural changes to the electricity supply.

But Van der Walt tells the *FM* that the latest deferment decisions were taken by the Escom board, uninfluenced by De Villiers.

He says: "The Kendal move means that generating sets four, five and six, due to have come on stream in 1990, 1991 and 1992, respectively, will now be put back almost a year.

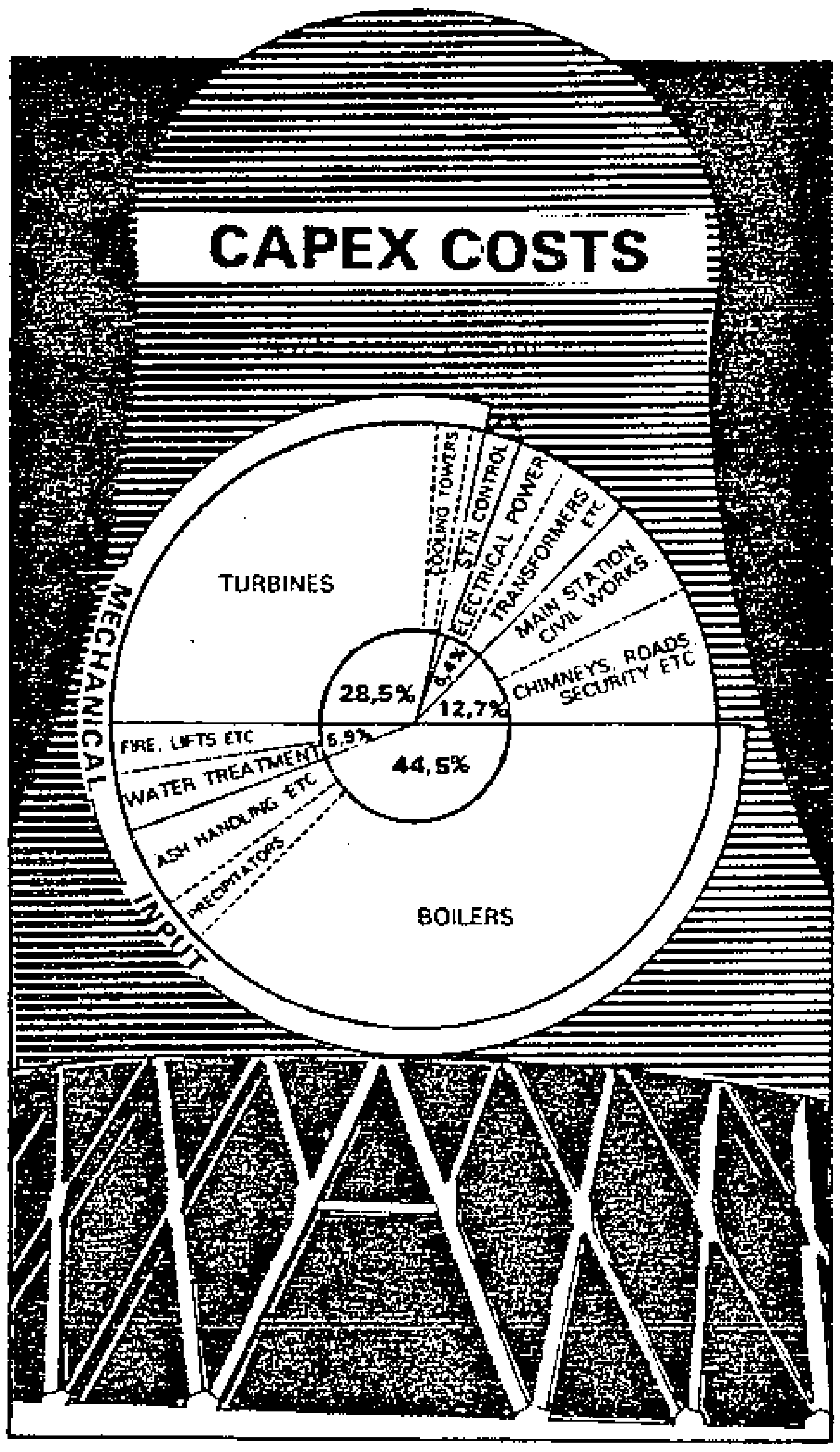
With most of Escom's annual R3,46 billion budget going towards the construction of Kendal — the world's biggest dry-cooled coal-fired power station — and six other coal-fired stations, with installed capacities ranging from 3 600 MW to 3 990 MW and costing about R2,7 billion each, postponement of major work at four power stations will be felt throughout thousands of ancillary and supply industries.

Van der Walt says that substantial expenditure will be deferred from nine months to two years on Kendal, Tutuka, Lethabo and Majuba power stations. "Escom has just lowered its annual load forecasts for additional electricity from 7% to 6%," he says. "As a result, talks have been initiated with the contractors to defer completion of Kendal. But the first of six 660 MW generating sets is still to be commissioned there in 1987."

He says discussions have recently taken place on the 1989 completion date of the first of six 600 MW generating sets at the Majuba power station, near Amersfoort, to be put back to 1991. "A final decision has not been taken on Majuba," he says. But a midyear ruling put back by nine months the commissioning of two sets at both the Lethabo and Tutuka power stations.

Van der Walt says Escom's spending curbs were not influenced by the De Villiers report or by the National Projects Committee on Capital Expenditure (NPCCE), headed by Director General of Finance Joop de Loor, which advises the Minister of Finance on the capex programmes of the parastatals.

He says that load forecasts are based on Escom estimates of consumers' needs over an eight to 12-year period. These are examined each month and updated annually. "When making our long-term load forecasts, it is impossible for us to follow short-term cyclical changes," he says.



Escom has also "slowed down" its recruitment programme, he adds, but this is partly due to a lower staff turnover.

De Loor tells the *FM* that the NPCCE, formed nearly five years ago, is "gradually refining its method of operation." Its role has been to make budget recommendations to the Minister of Finance. "We will concentrate more on smoothing out capex fluctuations in future," he says.

Earlier this year, the NPCCE had "recommended some postponement" of Escom expenditure. "We we were not happy with it in terms of the future demand for electricity," De Loor adds.

It was also responsible for deferring a start on the La Mercy airport, north of Durban. La Mercy will be resubmitted each year, he says.

More emphasis is being placed on streamlining operations in SA Transport Services (Sats), where cuts in capex will continue, says GM Bart Grové. Capital expansion has been running at about R1,8 billion/year, with interest accruing at the rate of R300m/year, but SATS aims to slash this to R1 645m in the 1985-1986 year.

Cuts in capex and operating costs and improvements in productivity were foremost in Sats' turnaround from its 1982-1983 deficit of R634m to a surplus of R70m at the end of 1983-1984.

Grové believes the growth rate in capital investment in the whole transport industry is slowing down. "The emphasis on development in transport should fall more on better utilisation of existing infrastructures which will assist in attaining these goals," he says.

How, then, does Sats make its cuts? According to Austen Williams, chief director of planning, Sats pruned its budget from R1 815,5m in 1981-1982 to R1 750m this year. He estimates the 1986-1987 budget will be 45%-48% lower in real terms than the spending in 1981-1982.

Among the measures were reductions and extensions on construction work, pruned rolling stock and the non-replacement of departing staff — cut from 279 000 in mid-1982 to the current 238 000. Productivity has been increased substantially by higher train loads and quicker turnaround times and deliveries.

Among the postponed contracts were the Richards Bay coal line, by far Sats' biggest capital project, the East London electrification project and the extension of the completion date of Port Elizabeth's electrification scheme.

Posts and Telecommunications (P & T) has saved about R100m on telecommunications capex, a spokesman says. "The automation and modernisation programme will be slowed down. Orders for some equipment could be postponed," he says.

With an annual capex budget of R1 120m, P & T has saved a further R6m on buildings and restoration so far this year, he says.

Iscor chairman Floors Kotzee says costs have been cut in recent years by staff reductions, curtailed purchases and by placing its buying operation on a generally sounder footing. Iscor's closure of old plants and the modernisation of operations has paid off, he says.

Escom shocks with two-step increase

22/12/84 (55) E Post

JOHANNESBURG — In a shock announcement yesterday, Escom indicated that its electricity charges could increase by 22% next year.

The increases will be applied in two steps — 10% in January, and a further 10% in the middle of the year.

In addition, adjustments to compensate for increases in the price of coal "could add a further 2% to the price of electricity".

"In January 1984 Escom increased its tariff by a modest 6% at the request of the Government in an effort to support the Government's fight against inflation," said Escom in its statement.

"Since then economic factors such as the increase in general sales tax and the fall in the value of the rand have forced Escom to consider an interim tariff increase.

The increase was held back pending the recommendations of the Commission of Inquiry into Electricity Supply in South Africa.

"Interest rates have subsequently increased considerably, and since Escom is regarded as a highly capital-intensive organisation whose costs are extremely sensitive to increases in the price of capital goods and interest rates and, in the case of overseas loans, to the value of the rand to other currencies, these increases are also supported by the Commission of Inquiry into Electricity in South Africa."

"Escom has been informed by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, that in view of the recommendations and the report of the commission which, together with a White Paper of the Department of Mineral and Energy Affairs, will be tabled in Parliament early in 1985, it is considered necessary now to effect a tariff increase of 10% as from January 1.

"Further increases will be considered in view of the prevailing circumstances and the tariff structure recommendations by the De Villiers Commission," the announcement said.

Escom said it had made substantial deferments in capital expenditure for future power stations.

It had also implemented "a successful cost-cutting programme on operating expenditure", with the increase in this respect in 1984 "less than 4% or lower than the prevailing inflation rate."

However, said Escom, despite these efforts to contain costs "external factors over which Escom has no control, have led to a situation which affords the commission no alternative but to increase tariffs by an average of 10% from January 1, 1985.

"This increase must be considered together with the 6% in total for 1984," Mr Smith said.

The announcement said concerted efforts would be made during 1985 to curtail costs and improve productivity.

Curtailments announced in respect of capital expenditure would only affect the tariff in the future.

Despite these increases, Escom's tariffs "remain the lowest in the world", the announcement said. — Sapa

PORT ELIZABETH

Huge fuel hike will drive inflation up

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E Post 29/12/84

By Louis Beckerling

Business Editor

A MASSIVE rise in the price of petrol — of between 15c and 20c a litre — is predicted within days.

And as the shockwaves of the increase ripple throughout the economy, the increase in general price levels as measured by the Consumer Price Index may be forced up in the next few months to above 14,5%.

Motor- and oil industry sources told BUSINESS POST this week an official announcement is expected on or about January 9, and informed opinion is that the price increase will be 18c per litre — or 31% on the present Port Elizabeth price of 98 octane fuel (currently 57,8c/litre).

At this level the price increase will almost match the 38% devaluation of the rand over the past 12 months — from 82,50 US cents at the beginning of the year to its current level of 50,50 US cents.

Reacting to the widespread rumours of imminent price increases, politicans, economists and motor industry spokesmen warned of crippling price increases rippling throughout the economy — and roundly blamed the Government for economic mismanagement.

"South Africans must realise that ultimately this is the price they are paying for allowing the Government to pursue its existing policies," said Mr John Malcomess, chief spokesman on energy affairs for the Progressive Federal Party.

"The devaluation of the rand, and the resultant need to increase the price of petrol in order to meet the higher import costs of crude oil directly reflects a lack of effective policy management by the Government," said a banking economist.

The anticipated increase has been awaited for some time, since the costs of importing oil for refining into liquid fuel has increased commensurately with the devaluation of the rand.

However, Mr Malcomess expressed shock at the rumoured extent of the increase, since, he pointed out, roughly half of the country's liquid fuel requirements were currently provided by Sasol 1, 2 and 3.

"Must we deduce from this that in the absence of such a contribution the price increase might have been 38c per litre?" he asked.

A banking economist told BUSINESS POST the immediate direct impact of such a price increase on the CPI would be of the order of 0,5%, while the indirect effect accumulating in the subsequent few months would push the CPI up by a further 2%.

"The argument advanced by some economists is that under present circumstances commerce and industry would not be able to pass the increase on in the form of higher prices because of consumer resistance to such increases.

"But I believe this is wrong. Pressure on cash flows and interest rates will simply force business to recover the costs in the form of increased prices."

A motor industry spokesman said he believed volume sales of fuel may drop some 5% as a result of the price increases, and where possible commuters may be tempted to use motorcycles or scooters for short-distance commuting.

R 1985

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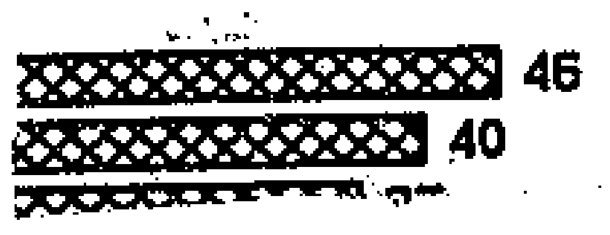

OVERALL EXPECTATIONS FOR NEXT YEAR

ENERGY - 1985
JAN - SEP

Power bill rise deferred

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2/1/85

S/w

Consumers suffering under the increasing cost of living will be given brief relief by Escom early this year.

An increase of up to 12 percent in the price of electricity will be deferred until the second quarter.

The first quarterly meter reading bills will be set at 1984 prices because they will include some electricity used last year. "The consumer will benefit from this leeway," said an Escom spokesman.

The increases will average 10 percent, varying slightly between areas and categories of consumer.

The price of coal is behind the variation. "The charges for coal used to produce electricity may increase by two percent or less.

"In 1984 there was a slight decrease in coal charges because it cost us less to burn it because of a more efficient system," the spokesman said.

ESCOM TO STAY

y in

(55) EAST LONDON

D. Dispatch

9/1/85

EAST LONDON — Escom has reversed its decision to move the headquarters for its Eastern Cape operation from East London to Port Elizabeth.

This was confirmed yesterday by Escom's regional manager in the Eastern Cape, Mr Eugene Otten, who said the urgency for a new headquarters building had decreased in the prevailing economic climate and it had consequently been decided to retain the present office in East London to serve the Eastern Cape.

The proposed move — announced in August last year only 11 months after Escom had disclosed plans for a major development at Beacon Bay — was opposed by civic and business leaders who said it was in conflict with the government's regional development plans for the Border area.

Escom said at the time that the administrative and technical base would be moved to Port Elizabeth from 1987 because existing premises in East London had become inadequate and "second thoughts" about the Beacon Bay development had led them to believe that Port Elizabeth, as the major load centre, was a more suitable and central site. After representations by the MP for East London City, Mr Peet de Pontes, to the Minister of Mineral and Energy Affairs, Mr Danie Steyn, and to the Minister of Constitutional Development and Planning, Mr Chris Heunis, Mr Steyn requested Escom to submit a full report on the planned move.

Announcing the decision to retain the East London office, Mr Otten said:

"Due to the prevailing adverse economic climate, Escom has not expanded as was previously anticipated and there has been minimal growth in staff numbers in the Eastern Cape.

"Consequently the urgency for a new headquarters building has decreased, especially as we have been able to accommodate some of our staff in an existing building at Beacon Bay.

"Escom is currently considering building additional facilities on the Beacon Bay site but these will complement the present East London offices instead of replacing them."

Mr De Pontes welcomed the reversal of the decision as a "postive step for East London."

"The move would have had a bad effect on confidence in the area. The retention of the Escom office here is a reaffirmation of the government's commitment to the area and of Escom's faith in the potential for development here.

"There is no cause for pessimism about the area. Purely on merit, East London has a good case to put as the number one development area with the highest number of approved applications for decentralisation concessions in 1984," Mr De Pontes said.

Escom's decision was a happy surprise for East London's Mayor, Mr Joe Yazbek. "What wonderful news. Escom will find it has made a wise decision and it will be a permanent one," he said.

Mr Yazbek said the city council had made representations for the retention of the Escom headquarters on the grounds that the high rate of development in Ciskei and Transkei made East London a convenient centre for catering for the increasing demand from these areas.

● Escom's decision was greeted with disappointment last night by Port Elizabeth officials already faced with the grim possibility of Ford moving from the area.

Mr P. K. Botha, Port Elizabeth's town clerk, said he would recommend that the city council "pursue the matter to the end even if it means representation to the State President. I am most upset. One must ask whether it was purely an economic decision," he said.

Mr Botha said that before Escom's proposed move to Port Elizabeth was announced last year, an Escom official had informed him that Escom had carried out "an in-depth study" into the viability of such a move.

The official had told him that Escom's decision to move had been based on the results of this study which had revealed that Escom would be able to render a more effective service by moving to Port Elizabeth and that the move would be in the interests of Escom and its consumers.

"I can't believe that all this has changed overnight," he said.

The mayor, Mr Ivan Krige, said he too was disappointed at Escom's change of plan, which he felt was probably "partially due to economic circumstances and partially due to the work of East London pressure groups".

"I am in favour of putting pressure on Escom if its reasons for transferring its headquarters to Port Elizabeth are not entirely economic," he said. — DDR-DDC.

Only slight rise in use of electricity

55 Star 10/1/85

By Stuart Flitton

The rise in electricity consumption in Johannesburg has slowed down over the past two years.

The latest annual report of the City Electrical Engineer, Mr Wessel Barnard, for the year to June 1984, says consumption was up 0,07 percent over the previous 12 months, during which consumption was 0,1 percent more consumption than in 1981/82.

MILD WINTERS

"This contrasts with increases of five percent and 3,7 percent for the previous two years and the fairly steady average annual increase of about seven percent before 1977," Mr Barnard said.

He said the reduction in electricity consumption was most pronounced from January to June 1984.

"This is indicative of the recent relatively mild winters, general adverse economic conditions, and the transfer by the West Rand Administration Board of portion of the load on the (Johannesburg) council's 6,6kV system in Soweto to their 11kV system."

Mr Barnard said a four percent increase in electricity tariffs had been necessary to meet the department's income requirements.

Electricity from Escom cost the council more than R89 million — an increase of 26 percent over the previous year. This was because the council was bought more electricity and Escom had increased its charges from January 1 1984.

Other points in the report included:

- It cost about R12 million to repair the Kelvin "B" power station after the huge fire in August 1983.
- There were 64 218 Johannesburg street lights on June 30 1984 after an extra 1 600 had been installed.

Star

Sasol: conciliation board sought

11/1/85

By Carolyn Dempster
Labour Reporter

The Sasol saga took a new turn yesterday with an announcement that the Chemical Workers' Industrial Union had asked the Minister of Manpower to appoint a conciliation board in an attempt to resolve the dispute.

At the same time Sasol had already reinstated 1 500 former employees and agreed to re-employ before the end of this month as many as possible of the 5 100 fired after last November's stayaway.

If the Minister refuses to appoint the board, national legal industrial action by the 24 unions involved in union unity talks, including the chemical workers, will become possible.

The unions, representing some 300 000 workers countrywide, submitted a letter of demand to Sasol demanding reinstatement of the workers and negotiations with the Chemical Workers' Industrial Union after the November mass firing.

The union says two long meetings were held after the letter was submitted.

Union general secretary Mr Rod Crompton said:"In spite of the meetings no settlement could be reached in particular on the criteria for reinstatement.

"However a loose understanding was reached ... including an undertaking by the union not to proceed with industrial action before the end of January 1985, during which time Sasol undertook to reinstate as many dismissed workers as possible."

Only applications from dismissed workers will be considered until the end of January, and further negotiations have been scheduled for the end of the month.

A spokesman for Sasol said more than 4 000 applications from dismissed Sasol 2 and 3 workers had been received over the past seven weeks.

Appointments would be based on merit, reliability, loyalty, competence and a stable record of employment, he added.

Initially, Sasol stated it was not considering re-employing any of the 5 100 dismissed.

However, Sasol stated on November 20 that it would consider applications provided former employees complied with certain criteria and satisfied Sasol they were not guilty of intimidation or incitement to participate in the two-day stayaway.

By November 28 none of the ex-employees had been re-employed.

After the meetings with the Chemical Workers' Industrial Union, at which Sasol stated an understanding was reached, news of the re-employment of dismissed workers was made known.

A spokesman for Sasol said they were not re-employing former employees under pressure or threat of industrial action from the Chemical Workers' Industrial Union or any of the unions involved in the union unity talks as implied in an article in *The Star* yesterday.

Sasol stated that the re-employment process began well before the Chemical Workers' Industrial Union began discussions with them.

Former employees who are re-employed will receive the same wage as applicable at their dismissal.

They will also retain full pension benefits accumulated until November 6 1984.

(55) Star 11/1/85

Oil man accused of R24-m SA swindle

The Star's Foreign News Service

HOUSTON — The story of how a Houston businessman tricked South African financiers into lending him $12 million (R24 million) for the supertanker Salem, after boasting he had $200 million (R400 million) worth of oil to sell, was told at the trial of Mr Frederick Ed Soudan and his cousin Mr Abdul Wahab Al Ghazou in Houston yesterday.

Mr Daniël Fourie, a former Johannesburg commodities broker, who told the court of his contacts with Mr Soudan, was the first of a string of South African witnesses expected to testify during the trial.

Lebanese-born Mr Soudan, who formerly operated a car dealership in Houston, is charged on a 22 count indictment arising from his purchase of the 219 000 ton supertanker, the alleged theft and secret sale of its R112 million cargo to South Africa and the sinking of the ship to conceal that theft.

If convicted, Mr Soudan could face a prison sentence of up to 111 years. His cousin is accused of helping him hide the R8 million) profits on his deal through international bank transfers.

Mr Fourie told the court he met Mr Soudan in Johannesburg in November 1979, having been introduced by Mr James Hillary Shorrock, a South African oil broker. Mr Shorrock, who has already pleaded guilty to one count of the indictment and is expected to give evidence later against Mr Soudan, is now in South Africa.

Mr Fourie said he arranged a meeting between Mr Soudan and a group of Johannesburg bankers after being told that Mr Soudan had R400 million worth of oil which he was going to deliver to South Africa. He said his trading firm, Mon Repos Group of Companies, was to make R200 000 as an intermediary.

Later, however, Mr Fourie claimed he had trouble collecting his broker's fee which was eventually paid by the South African Government's oil procurement agency through Mr Soudan's bank.

Mr Fourie said he once asked Mr Soudan why he needed "a measly R24 million" to purchase a boat when he owned so much oil.

Soudan told him, he said, that the ship had to be bought from someone else so the oil sale to South Africa could be concealed.

(55) S. Times 13/1/85

Salem man is accused of planning to rob SA companies of millions

By PATRICIA CHENEY: Washington

LAWYERS for Mr Frederick Soudan, the American businessmen indicted on 23 counts of fraud in connection with the notorious scuttling of the Salem oil tanker off the west coast of Africa in January 1980, entered a plea of not guilty to all counts this week at the start of the trial in Houston, Texas.

Among the charges, Mr Soudan is accused of planning to defraud a South African Government-owned oil purchasing firm, SSF Association Ltd, the Mercabank of Johannesburg, Lloyd's of London and several oil companies of $56-million (R116-million).

The defence is basing its case on the position that Mr Soudan was merely acting as a broker in a transaction with SSF and was, in fact, tricked by a Dutch ship broker, Mr Anton Reidel, who arranged the charter of the Salem for Mr Soudan.

The Salem adventure was Mr Soudan's first and last sortie into the oil business.

Huge loan

A Lebanese-born US citizen, he was working as a life-insurance salesman in Houston when he decided to break into oil-dealing.

He learnt of a newly-formed South African company, Haven International, which was interested in bolstering oil supplies by buying crude oil on the spot market.

With the help of a $12,5-million (R26-million) loan from the Mercabank of Johannesburg, Mr Soudan arranged to buy a supertanker called South Sun for $11,5-million (R24-million). He later changed her name to Salem.

The Salem was immediately chartered with the help of Mr Reidel to a Liberian company, Shipomex.

Shipomex's director, Mr Bert Stein, later identified as a West German, Mr Thomas Juergen Locks, arranged for the Salem to pick up 193 000 tons of crude oil from Kuwait on behalf of an Italian trading company, Pontoil, and transport it to Genoa.

After picking up the oil in Kuwait, the Salem sailed for Italy. Four days later the oil was purchased by Shell International for $56-million (R116-million).

On December 27 1979, the Salem made an unscheduled stop in Durban. Her name had been changed to Lema and she discharged 173 000 tons of her oil into waiting storage tanks in Durban harbour.

Before she reached her official destination, the Salem sank under mysterious circumstances off the coast of Senegal.

This week, Mr Soudan, charged by the US Government of being a prime mover in the scheme, pleaded that he was merely manipulated, not just by Mr Reidel but also by Mr Locks and the Salem's crew.

Two Mercabank employees, Mr Hermanus du Plessis and a Mr Fourie, were called to testify by the prosecution.

Mr du Plessis claimed that Mr Soudan gained a $12,5-million (R26-million) loan from Mercabank under false pretences.

Mr Soudan's attorney, Mr Bruce Locke, said Mercabank must have been involved with SSF because it gave Mr Soudan the money without checking his background.

Indicted

The trial is expected to last about five weeks. Pretoria has consented to allow an SSF employee, Mr S P Naude, to testify despite the Oil Procurement Act, which prohibits people from divulging details of oil shipments and financial transactions.

He will be appearing in two weeks.

Mr Reidel; the Salem captain, Mr Dimitrios Georgoulis; and Mr Locks have all been indicted and will be tried in Holland, Greece and West Germany respectively.

In the Greek port of Piraeus, near Athens, the Salem charge sheet says the South African Government paid $44-million (R91-million) into a Swiss bank account for the ship's crude oil cargo.

The court confirmed this week that there was Greek government pressure to ensure that the Salem trial went ahead to blunt international criticism that Greece was hesitant in fighting shipping piracy.

ARGUS 17/1/85 65

Escom's millions: Man named

Argus Correspondent

JOHANNESBURG. — The Electricity Supply Commission has named the man they are looking for in connection with the R8 350 000 missing from its accounts department funds.

Escom also said today it has succeeded in freezing a Swiss bank account into which the money had been transferred.

A spokesman said police would like to interview Dr Gert Johannes Rademeyer, 49, until recently in service as assistant chief accountant for Escom.

An official confirmed that the money had been traced to a bank in Zurich. Indications are that the bulk of the money is still available in the account.

The missing cash was in the form of 3,6 million US dollars illegally transferred to the Zurich account.

Escom confirmed that the money was missing in a brief statement yesterday announcing that investigations had been launched and that "all necessaary steps" were being taken to recover it .

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PETROL PRICES

Refuelling inflation

It may not be long before 93 octane petrol goes to R1/*l* on the Reef. What can only be described as "the crash of the rand" is having a serious impact on the cost of imported crude. And as lengthy discussions at Cabinet level come to a close, an announcement of a price increase is expected very soon, certainly before the end of the month.

The enormous inflationary consequences of higher fuel prices have not been lost on government officials who will no doubt initiate a compromise for the time being. This suggests a rise of 18c/*l*, bringing Reef 93 octane to 81,5c/*l*. The price change and its multiplier effect will play havoc with the current inflation rate of 13,8%. Unavoidably the rate seems set to rise to some 20% by the year end.

But this will not be all. Even if the rand averages around $0,45 for the remainder of 1985, there will have to be at least one more oil price rise — two if gst is increased again in the March Budget.

Appalling as the prognosis may seem, the ineluctable fact is that the rand has lost 49% of its external purchasing power in little over 16 months, when it was around $0,89. And it is this historic rate, according to a spokesman for the Department of Mineral and Energy Affairs, upon which the current pump price of petrol is based.

As can be seen from the accompanying graph, the landed cost of 93 octane motorgas (the benchmark fuel used for price determinations) is about 35,6c/*l*. Increasingly, however, it has become described as the "theoretical landed cost as recovered in the pump price." Therefore, if the current exchange rate were to be reflected accurately, the landed cost should be more like 70c/*l*. The fact that it is not, indicates an enormous degree of subsidisation on the part of government. But as one official has now put it, "there's no more cash in the kitty to subsidise the consumer at unrealistic prices."

There are some dozen components to be considered in the pricing structure of Reef fuel, from the landed cost and customs duty to the National Road Fund and the combating of pollution. All are up for review. Indeed, as the department's chief director of energy, Dirk Neethling, explained: "The various ministers and officials responsible for the various components of the pricing structure are busy putting their case."

Neethling admits that he doesn't expect his department will ever "sell the price increase, but we'll at least have done our best to justify it."

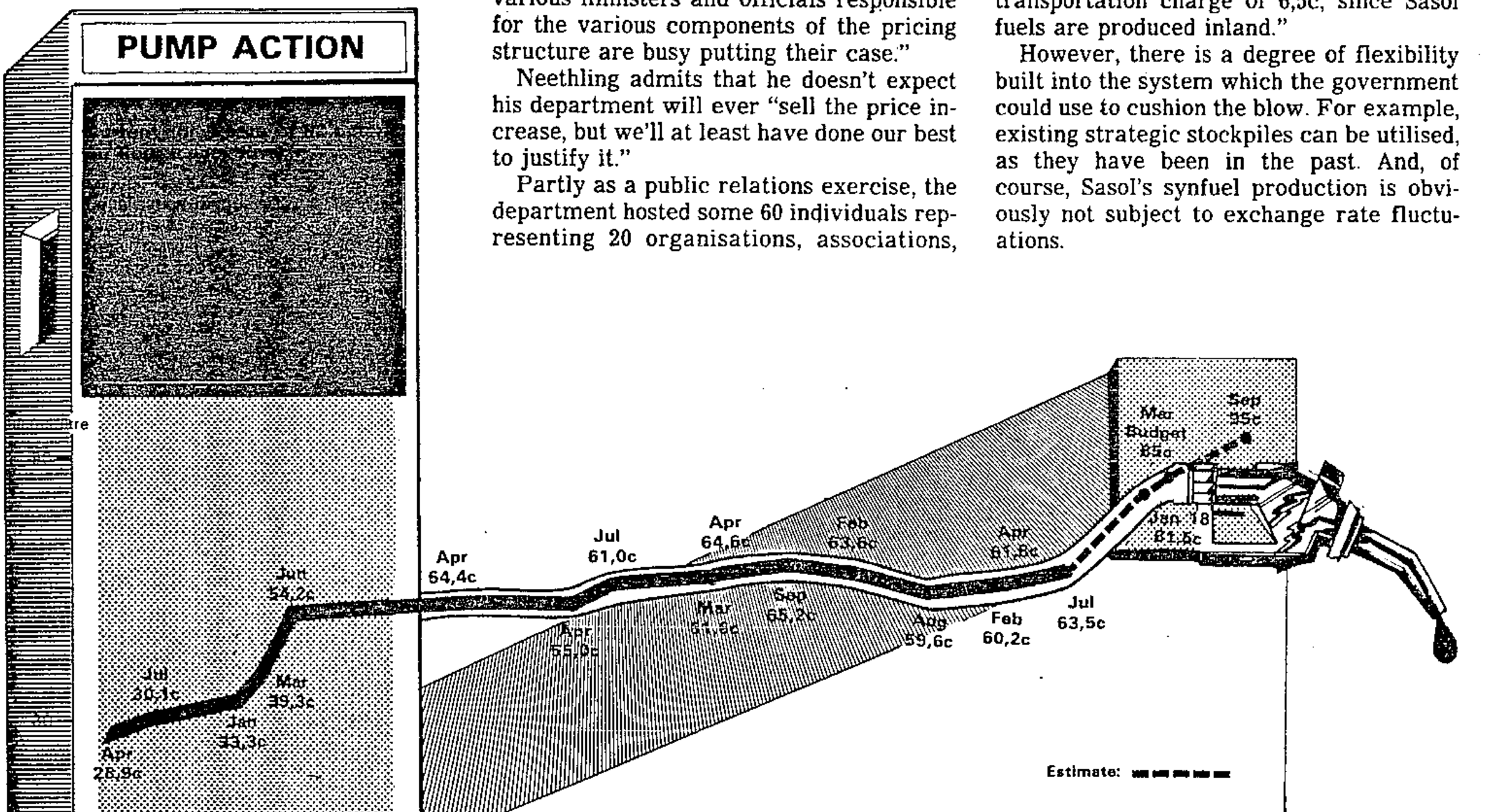
Partly as a public relations exercise, the department hosted some 60 individuals representing 20 organisations, associations, trade unions and businesses last December to hear private sector views on the effect of a "substantial increase" in the price of fuel. Delegates arrived in droves for a series of one-hour meetings at which they expressed their mostly dire views on the subject.

The Consumer Council's Bernard Hellberg told officials that it would make life unbearable for the consumer with untold ripple effects. To him, farmers and food prices were proving his greatest concern.

The most common cry from the visitors apparently was for consistency in pricing, and that increases should be made when due. Many have criticised the government for its *ad hoc* price changes. Why reduce the price in 1983, only to increase it later on, and then wait six months while the rand continued to depreciate before taking action? Criticism was also levelled at various components of the pump price. Why have a tax on a tax, for example?

Denzyl Vermooten, public affairs executive of the AA, says: "Our figures suggest a 16c increase in the price of fuel is justifiable. But I would certainly quibble with a higher increase if nothing is done about the transportation charge of 6,5c, since Sasol fuels are produced inland."

However, there is a degree of flexibility built into the system which the government could use to cushion the blow. For example, existing strategic stockpiles can be utilised, as they have been in the past. And, of course, Sasol's synfuel production is obviously not subject to exchange rate fluctuations.



PUMP ACTION

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On the other hand, there will probably be another cent for retailers, taking this to 5c/*l*, and another two cents for the road fund. And, as Neethling said: "We are going through all the permutations, first looking at the existing structure to see what we can achieve before finally deciding on an overall price increase."

Apart from the variables within the existing pricing structure, not least of which is the question of taxation, are, of course the two major external variables: the rand/dollar exchange rate and the dollar price of a barrel of crude oil.

As Tony Twine, director of Marketing Environments, says: "I think 16c-18c is extremely optimistic. Our recent research shows that, on the basis that 24c of the current pump price is exposed to fluctuations in the exchange rate, the rand cost of crude between the last big shake-up in mid-1979 and December 1984 has increased by 120%. This means there could be room for another 28,8c/*l* without taking possible changes in gst into account.

"But," adds Twine, "I doubt if they'll put the whole increase through in one go." As a precedent he points to the period, January 1979 to April 1980, when the total increase in the price of petrol amounted to almost 81% to 54,4c/*l* through four changes.

Vermooten adds that perhaps things are not so bad if price changes are compared in real terms. For example, in terms of 1975 prices the current price of fuel is 21,5c/*l*. And if a 16c increase were to be put through now, again in 1975 prices, this would bring the pump price to 27c/*l*. Yet on the same basis in 1979, the price was 35c. But, added to this, says Vermooten, there will certainly be further ripple effects on inflation which we estimate will total four to five percentage points.

Twine says his research shows that the indirect effect on the economy of a rise in the fuel price is between two and three times the direct effect, though taking a nine-month lag to follow through. After this period, says Twine, even assuming no other major price changes in the economy, a 28c increase to 91,5c/*l* will translate into an inflation rate of almost 24%.

Only through continued subsidisation can government avoid increasing petrol prices by this amount, though this will not necessarily avoid the same impact on inflation.

The increase is likely to be in two phases, three if gst is increased too. So we could see an 18c increase announced by the end of this week, another 3,5c if gst is increased to 15% in March, and then a further 10c will have to come, say, in September, bringing the Reef price to 95c/*l*, almost a 50% increase.

No doubt government will be hoping that its seemingly impossible task of combating inflation will be eased by an improvement in external factors. But, as Twine points out, to limit the rise in the price of petrol to, say, 16c in total, as suggested by several sources, one of two things would need to occur: either a crash in the crude oil price to about $13,50 a barrel, or a rapid appreciation in rand exchange rate to US82,5c — both unlikely.

Marketing Environments' Twine ... several increases on the way

So if perks tax doesn't kill off the big corporate car, perhaps higher petrol prices will. Lower fuel consumption will be the only means of reducing the impact on inflation of the higher petrol prices.

PRIME RATE

Up again?

Bankers are poised to raise prime by another 1% to a record 26% a year. The only factor holding them back is the Governor of the Reserve Bank, Gerhard de Kock, who appears to be attempting a holding operation aimed at maintaining the present rate. Yet like King Canute, he is being faced by the inevitable it seems, as the rand plunges to new record lows (see *Markets*).

Early this week De Kock made it clear that rates were at correct levels. It is obvious that he wishes to prevent a rise in prime because of the psychological damage it would do to an economy reeling from a number of body blows dealt out in the past few months.

It is believed bankers have been pressing for the rise for a number of days in their negotiations with the Reserve Bank as money market rates have crept steadily higher. Early this week the BA rate had risen to 23,65% from last week's 21,85%.

Money market sources say, however, that this week has seen a high demand for money which has further tightened liquidity after last week's move in the prime rate back to 25%. This means deposit rates were already bumping lending rates again, thus sqeezing banks' margins.

One market source says that unless the Reserve Bank either accommodates the market or supports the exchange rate, another rise is inevitable. But the current performance of the rand, which plunged to an all-time low of US42,30c last Tuesday at the time of writing, is a clear indication that the currency is incapable of being supported. So another jump in prime seems unavoidable.

The logic behind the Reserve Bank's resistance appears to be that the present squeeze on liquidity is seen as a temporary one since usually there is less pressure on liquidity during January. However, the situation could change dramatically in February and March because of disturbances caused by the normal year-end tax payments.

But in the meantime, if the exchange rate drops to, say, US41c, as now seems highly likely, De Kock, like King Canute, will have to stand aside and bow to natural forces.

MONEY SUPPLY

Inventory boost

To the acute chagrin of the monetary authorities, and the dismay of most economists, money supply continues to soar.

In November, the narrowly defined M1 advanced by over R1 billion to a total of R24,8 billion, making an annual increase of 39,6%, the second highest of the year. M1 consists of coins, banknotes and the demand deposits of the non-bank private sector.

M2, which consists of M1 plus short- and medium-term deposits, increased by almost R1,3 billion, making an annual rise of 28,9%, while M3, which consists of M2 plus all other deposits, rose by R1,45 billion to produce a growth over the year of 24,7%.

The M3 measure, according to the governor of the Reserve Bank, Gerhard de Kock, is the most significant. Since April last year, except for a hiccup in June and September, M3 has risen from a 15% growth to the current 24,7%.

According to Ernie van der Merwe of the Reserve Bank's economics department, the November increase is merely part of the adjustment process. "The increase itself reflects continued high company borrowing from the banks. But this should be a temporary situation, with companies starting to rationalise their inventories so that overall demand for credit will eventually fall off.

"But the sharpness in the increase came as a shock to us too. I anticipate that it could be as late as May before we see an improvement in the money supply figures. This would allow for a lag of nine months after the implementation of the August austerity measures."

Although other economists agree there will be a lag before the growth in the money stock starts to slow down, some are more sceptical. Says Louis Geldenhuys of Senbank: "We have entered a very difficult stage, one in which we will have to rethink very thoroughly the way we have gone about things in the past.

"Going on previous experience it is a

Escom millions: Accountant's wife in court

CAPE TIMES
21/1/85

55

Argus Correspondent

PRETORIA. — Mrs Familia Rademeyer, wife of the Escom official who allegedly defrauded the corporation of more than R8-million, appeared in secret before a Deputy-Master of the Supreme Court today in connection with her husband's provisionally sequestrated estate.

Meanwhile Interpol has been alerted to watch for her accountant husband, Mr Gert Rademeyer, who fled South Africa after transferring large amounts of Escom money to a Swiss bank account.

It was also learnt today that some of the money may now be in an Austrian account.

Wearing white and looking composed, Mrs Rademeyer dodged Press photographers.

On Friday night she was prevented from leaving for France, where she hoped to join her husband. His estate was provisionally sequestrated on Friday.

The couple married in community of property.

Mrs Rademeyer's legal adviser, Mr Dawid Maartens, said that in terms of the Insolvency Act the hearing had to be held in secret. Certain sensitive information about Escom was involved, he said.

Mr Maartens said the Rademeyers' daughter, Sandra, 21, and Mr Rademeyer's brother, Mr M C Rademeyer, would both be questioned during the hearing before Mr P B van Rooyen.

The provisional trustee of Mr Rademeyer's estate, Mr G S de Wet, said he did not know how long the hearing would continue.

Mr C Fuchs, senior legal adviser to Escom, said a Swiss judge had frozen millions placed in a Swiss bank by Mr Rademeyer.

US Govt probes Koeberg workers

Cape Times
~~21/1/84~~
21/1/85

53

From SIMON BARBER

WASHINGTON. — The Reagan Administration was investigating whether American nuclear power plant operators were illegally helping to run South Africa's Koeberg facility, the State Department confirmed yesterday.

The US Energy and State departments believe Escom may have recruited up to 40 technicians from government-owned and private plants in the US.

Since February 3, 1983, US citizens wishing to work for South Africa's nuclear industry have been required, on penalty of up to 10 years' imprisonment and a $10 000 (about R23 200) fine, to seek special authorization from the Secretary of Energy to ensure that their skills would not be put to weapons-related use.

"We've got a problem," a well-placed State Department official said yesterday. "We want to know what these people are doing, and whether they started working after the law came into effect."

The US had contacted the South African Government on the matter, and some Americans working at Koeberg had already come forward, the official said.

He emphasized that even though Koeberg was subject to safeguards administered by the International Atomic Energy Agency, US citizens still needed Energy Department permission to work there.

The issue first arose at the end of last year when the US Embassy in Cape Town reported that unauthorized Americans were working at Koeberg.

At the same time, the Energy Department began hearing rumours that technicians at two US utility companies, one in North Carolina, the other in California, were considering moves to South Africa.

The rumours were confirmed and the technicians involved were warned about the legal requirement.

A spokesman for the Tennessee Valley Authority, a government-owned electricity producer, told the Washington Post last week: "I understand that some of our operators have left for South Africa, but I have no idea how many."

Last week Congressman Ed Markey, a Massachusetts Democrat, wrote to Energy Secretary Mr Donald Hodel demanding a full accounting of the affair.

"It is my understanding that officials at the Energy Department, and possibly the Department of State, may have known of the activities of US citizens in South Africa for as long as a year and failed to take action to correct this situation."

An Energy Department spokesman flatly denied the allegation.

Congressional sources said they believed the Americans were being paid up to $100 000 (R232 000) a year and were receiving free housing and transport.

The State Department official emphasized that the investigation did not cover Americans working for Westinghouse, Fluor and other US companies involved with Koeberg. "These companies went about it the right way and got the necessary licences."

Americans 'earn R200 000'

Koeberg men could face jail

(55)

Star

21/1/85

The Star Bureau

WASHINGTON — Americans believed to be working for the Koeberg nuclear power plant near Cape Town for salaries up to R200 000 a year may be breaking American nuclear non-proliferation laws and could be prosecuted, reports the *Washington Post*..

The newspaper quoted American Department of Energy and State Department officials as saying they were investigating.

The maximum penalty is 10 years' jail and a R20 000 fine.

Officials said they were not certain whether the Americans were recruited directly by Escom or whether the South Africans violated laws by hiring them.

A spokesman for the South African Embassy in Washington had no comment.

In a front page report the *Washington Post* said Escom was suspected of having recruited as many as 40 skilled American operators.

"The operators," it added, "apparently were hired by Escom with promises of tax—free salaries, free housing, free transportation to South Africa and guarantees of Monday-through-Friday day shifts at the nuclear plant near Cape Town, according to one Congressional source."

The newspaper said American law required authorisation from the Secretary of Energy before any American citizen directly or indirectly helped certain nations, including South Africa, to produce plutonium, a reactor by-product that could be used to fashion nuclear weapons.

It noted that the plant operators did not produce nuclear weapons but simply controlled systems.

The newspaper quoted a State Department official as saying: "We don't know exactly what all the Americans are doing.

"We don't have a fix on the numbers, but we are in touch with the South African Government.

"We don't have any evidence of a wilful violation of law."

A State Department official told the newspaper that American officials obviously could not go into South African plants and point out the Americans.

But the word had gone out through Escom and some of the American operators had come forward.

In addition to trying to identify the Americans and their duties, American officials are trying to establish when the operators began working in South Africa.

The law requiring official authorisation was enacted in February 1983 and anyone working in South Africa earlier might be excluded.

"However," said the *Washington Post*, "one Congressional source said at least 11 of the operators are thought to have gone to South Africa within the last year."

The newspaper added that the issue had surfaced in November.

Officials of the American Energy Department's politico-military affairs security division are expected to brief members of Congress on the issue this week.

Last Friday Congressman Edward Markey of Massachusetts wrote to Energy Secretary Mr Donald Hodel asking for complete information, including classified departmental cables.

A senior Energy Department official has flatly denied an assertion by Mr Markey that American officials may have known about the activities of the American operators in South Africa for as long as a year but failed to take action.

In an analysis of South Africa's ability to produce nuclear weapons, the *Washington Post* quoted nuclear engineering Professor Warren Witzig at Pennsylvania State University as saying: "Nuclear power for the production of electricity and nuclear weapons has about as much in common as the Marx Brothers have with Karl Marx."

ARGUS 22/1/85 (55)

Nuclear waste on roads in 1986

Argus Correspondent

JOHANNESBURG. — Radioactive nuclear waste material will soon be transported on South African roads, starting next year with low-level waste, according to Mr Peter Spencer, manager of Escom's nuclear division.

Mr Spencer said the first would be the regular transportation of low-level and intermediate radioactive waste from Koeberg to the Vaalputs nuclear disposal area in Bushmanland.

Low-level waste in steel drums and medium-active waste in concrete drums will be conveyed by road in a flat-bed vehicle which has built-in saddles into which the drums are strapped.

It can carry three concrete drums and 12 metal drums — about 17 tons.

"These barrels are robust and there is virtually no risk of release of material," said Mr Spencer.

Mr Spencer said consignments of radioactive material would be clearly marked similar to trucks containing other hazardous materials.

About 500 concrete and 1 500 metal drums will be received at Vaalputs each year, with the first delivery being made in mid-1986.

The second movement involves the transportation (about four times a year) of irradiated fuel elements from Koeberg to Pelindaba in the Transvaal for examination.

"The Nuclear Development Corporation is building a hot-cell facility at Pelinda and it is expected to be completed in the middle of 1986," said Mr Spencer. "This is a building into which we can take fuel-element flasks, remove the elements and examine them," he explained.

The flasks into which the highly radioactive fuel elemements will be placed weigh almost 80 tons.

Mr Spencer said routes, stop-over points and emergency procedures had to be licensed by the Atomic Energy Corporation in accordance with International Atomic Energy Agency rules.

The route from Koeberg to Pelinda had been surveyed and approved, said Mr Spencer, although a vehicle had not been bought. "We don't need it for 18 months."

Mr Spencer said the third type of nuclear waste movement would not begin before the end of the century and only if the Atomic Energy Corporation found Vaalputs — a site originally zoned for low-level and intermediate waste — suitable for the storage of used nuclear fuel (high-level waste).

An investigation is being carried out.

CAPE TIMES 22/1/85 55

Rademeyer swindle: Missing millions traced

Own Correspondent

JOHANNESBURG. — Escom lawyers have succeeded in tracing the missing $1-million (about R2,3-million) unaccounted for out of the $3,6-million (more than R8-million) they were swindled out of by their former employee, "Dr" Gert Rademeyer.

The lawyers, who left for Vienna and Bangkok at the weekend, also established that their former assistant chief accountant had used $55 000 (about R128 000) of Escom's money to rent an apartment in Monte Carlo. Moves to have his Bangkok and Vienna bank accounts frozen are to follow.

A spokesman for Escom said yesterday that the missing amount, added to that which had been frozen at the Volksbank in Berne, Switzerland, on January 18, constituted virtually all of the R8-million which Mr Rademeyer had transferred illegally.

The Swiss judge who had ordered the account to be frozen had also issued a warrant for Mr Rademeyer's arrest.

Meanwhile, a major chain of fashion stores disclosed yesterday that Mr Rademeyer had applied for a similar position with the chain, but had been turned down as his qualifications were found to be suspect.

He was found to have a false degree and to have unsatisfactory references in Australia.

Shortly after his return to South Africa in 1978, "Dr" Rademeyer applied for a position as a financial manager at Edgars, but his application was rejected when it was found that his Sussex College of Technology doctorate was not bona fide.

A spokesman for Edgars said yesterday that the company had become suspicious because they thought it "highly unusual for a college of technology to issue a doctor of philosophy degree". They checked it and found it to be false.

The spokesman said the checks were routine for any senior applicant and would have been done by any good personnel manager.

Escom's chief public relations officer, Mr Ettienne du Plessis, said the company had not checked Mr Rademeyer's employment record at his previous employer as "it would have embarrassed him".

They had decided not to check the bona fides of his Sussex doctorate "because a doctor's degree makes no difference" and was irrelevant as he "complied with the qualifications needed".

Asked whether Escom's vetting procedure for its employees was adequate, Mr Du Plessis said: "We have definite procedures depending on the level at which someone is employed, but if someone wants to mislead you he will be able to do it.

"In this case we did spot-checks and caught up with him quickly. We informed the public immediately."

Mr Du Plessis also said "very little" of the R8,3-milllion stolen had not been recovered, but he could not say how much.

According to an article in an Afrikaans Sunday newspaper, Mr Rademeyer worked for Toyota for two years before taking up his senior post at Escom. However, a spokesman for Toyota, Mr Bert Wessels, said they had no record of Mr Rademeyer having worked there.

According to the report, Mr Rademeyer had a long history of criminal activity.

In 1965, while he was owner of a Cape Town debt-collecting company, Cape Credit Control, Mr Rademeyer had fled to Australia with about R500 000 belonging to people who had paid their debts to him monthly. He was to have then paid their creditors.

In Australia, he is alleged to have embezzled about R100 000 from an electronics company, according to the report.

The chief investigation officer on the case, Lieutenant-Colonel J A Hulme, said police were aware that the activities of Cape Credit Control had been investigated.

He said he did not know how Mr Rademeyer had been able to get back into the country in 1978 without being arrested.

● Meanwhile, Mr Rademeyer's wife, Mrs Familia Rademeyer, was interrogated in the offices of the Master of the Supreme Court in Pretoria yesterday by the provisional trustee of Mr Rademeyer's estate, Mr B G S de Wet.

She appeared tense and was comforted by her 19-year-old daughter Sandra.

Officials barred the press on the grounds that Mrs Rademeyer was being interrogated in secret in terms o Section 152 of the Insolvency Act.

There was speculation that Mrs Rademeyer was being quizzed abou some R70 000 which had been deposited into her bank account.

Escom: More claims of fraud

CAPE TIMES 23/1/85

SC

Own Correspondent

JOHANNESBURG. — Fraud is rife all over Escom.

This was said by Escom's first insurance officer, Mr Norman Maher, in an article entitled: "No nonsense from the chancers in future."

The article was published in Escom's in-house magazine published this week.

The R8,3-million allegedly stolen by Escom's assistant chief accountant, Mr Gert Rademeyer, may be recouped, but the company nevertheless expects to pay out R10-million in insurance claims this year — many of the claims being fraudulent.

The company runs the insurance scheme as a fringe benefit for employees, the premiums being substantially lower than those offered by outside companies, Mr Maher says.

He said the practice of sending in fraudulent claims "was rife all over Escom".

He said employees who "padded their insurance claims or fabricated claims" would be prosecuted.

Meanwhile police and Escom officials are keeping tight-lipped over Mr Rademeyer's whereabouts.

The investigating officer on the case, Lieutenant-Colonel J A Hulme, said they could not say which country Mr Rademeyer was in, while an Escom spokesman said giving information on his possible whereabouts "could be detrimental to the search".

Virtually no risk, says Escom man

Koeberg's nuclear waste will go by road

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Star 23/1/85

Low, intermediate and highly radioactive nuclear waste material is to be transported on South African roads starting next year with low-level waste, says Mr Peter Spencer, manager of Escom's nuclear division.

Mr Spencer says there will be three types of nuclear waste movement.

● The first will be the regular transportation of low-level and intermediate radioactive waste from Koeberg nuclear power station near Cape Town to the Vaalputs nuclear disposal in Bushmanland.

Low-active waste in steel drums and medium-active waste in concrete drums will be conveyed by road in a flatbed vehicle which has built-in saddles into which the drums are strapped.

It has the capacity to carry three concrete drums and 12 metal drums ... a weight of about 17 tons.

"These barrels are robust and there is virtually no risk of release of material," said Mr Spencer.

Trained drivers will be assigned for each 13-hour journey.

By Zenaide Vendeiro, Transport Reporter

In the event of an accident a stand-by crew will be sent to the site to recover the drums.

Among the crew will be a member of the health physics department to check for leaks.

Mr Spencer said consignments of radioactive material would be clearly marked much in the same way as trucks containing other hazardous materials were marked.

About 500 concrete and 1 500 metal drums will be received at Vaalputs each year with the first delivery in mid-1986.

● The second movement involves the transportation about four times a year of irradiated fuel elements from Koeberg to Pelindaba in the Transvaal for examination.

"The Nuclear Development Corporation is building a hot cell facility at Pelinda," said Mr Spencer, "and it is expected to be completed in the middle of 1986.

"This is a building into which we can take fuel element flasks and remove the elements and examine them."

The flasks into which the highly radioactive fuel elements will be placed weigh almost 80 tons.

Mr Spencer said routes, stopover points and emergency procedures had to be licensed by the Atomic Energy Corporation under International Atomic Energy Agency rules for packing and transporting such materials.

The route from Koeberg to Pelindaba had been surveyed and approved, he added, although a vehicle had not been bought.

"We don't need it for 18 months," he said.

"Quite a substantial amount of traffic of this sort has been going on in Europe and Northern America for a number of years."

Spent fuel elements from Pelindaba have been sent to South African ports in the past.

● The third type of nuclear waste movement, said Mr Spencer, would not begin before the end of the century and only if the Atomic Energy Corporation found Vaalputs, a site originally zoned for low-level and intermediate waste, suitable for the storage of used nuclear fuel (high-level waste).

An in-depth investigation is being carried out.

Irradiated fuel elements, said Mr Spencer, would be stored in pools at Koeberg for at least four years before being placed in 125-ton storage flasks for transfer to Vaalputs.

Each flask can hold 24 irradiated fuel elements and as 50 elements are removed from each reactor at Koeberg there will be about four movements a year.

The spent nuclear fuel will be stored at Vaalputs for quite lengthy periods, 20 to 30 years or more, said Mr Spencer.

The longer-term options of either permanent disposal of the fuel elements or reprocessing had not yet been decided, he added.

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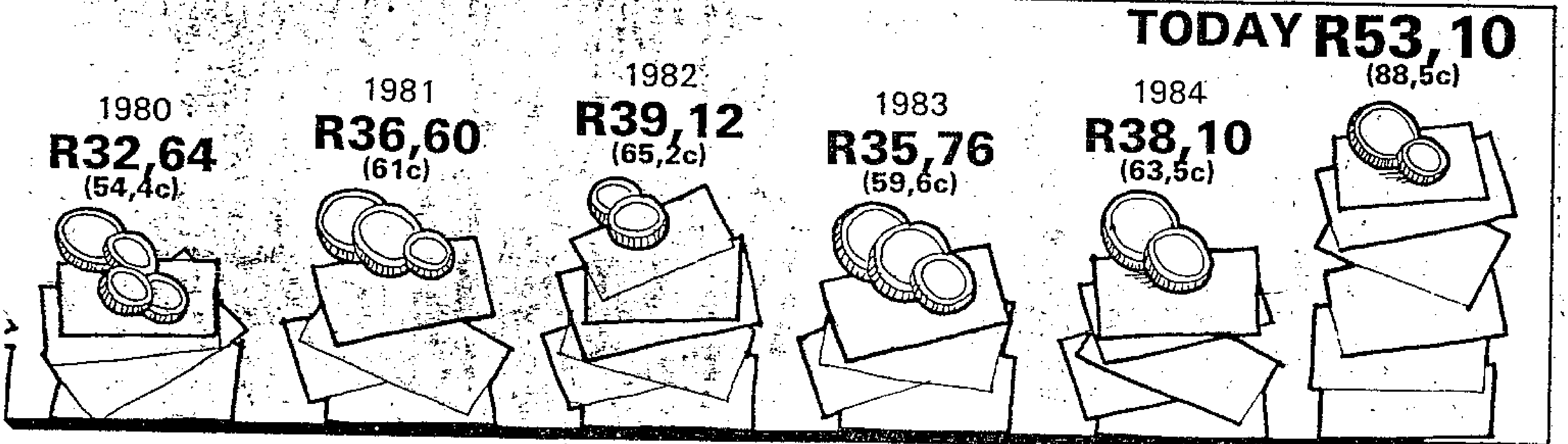
24/1/85

55

. . UP, UP, UP goes the fuel price



AOS HITS REEF

'Cost to the user R3 500m'

Mail Correspondent

DURBAN. — The effect of the radical fuel price increase was equivalent to the motor industry deciding on January 1 this year to increase prices by between 25 and 30%, the president of the National Association of Automobile Manufacturers of South Africa, Mr Colin Adcock, said yesterday.

"This would be to recover their total potential losses caused by the rand devaluation. It would obviously have been a very irresponsible act on their part," Mr Adcock said.

"The increase will take R3 500-million out of the consumer's pocket over the next 12 months," he claimed.

"A one-time-out price increase of this magnitude comes as a great shock to the industry which is already in a beleagured state," said Mr Adcock, who suggested a more "prudent" step would have been a series of small petrol price increases.

Inflation rate 'is set for a 3% jump'

By CHRIS FREIMOND
Political Correspondent

CAPE TOWN. — The massive increase in petrol prices could push up the inflation rate by about 3% and have serious implications for socio-political stability in South Africa, Opposition spokesmen warned last night.

The ripple effect of the increases would hit all sectors of the economy, the Progressive Federal Party's finance spokesman, Mr Harry Schwarz, said.

The increases could cause further unemployment and contribute to the consequent instability in the country, he said.

The PFP's spokesman on Mineral and Energy Affairs, Mr Brian Goodall, said the increases were the price that the average South African consumer had to pay for the Government's mismanagement of the economy.

He accused the Government of excessive expenditure and an inability to control the money supply.

The Conservative Party leader, Dr Andries Treurnicht, said the increase was disastrous for the economy, consumers and farmers.

He demanded that the Government resign immediately.

Air fares to take off next?

Mail Reporter

AIR fares may now have to be up.

Last night the South African Transport Services were examining the overall effect of the fuel price increases, a spokesman said.

Jet fuel has increased by 17.8 cents a litre and accounts for a large portion of airline expenditiure. Between April and December last year the falling rand had accounted for an extra R50-million being spent on domestic flights by SAA.

Any increases in air fares would be announced by the Minister of Transport, Mr Hendrik Schoeman, "probably within a few days," the Sats spokesman said.

GAu

PETROL CHAOS

Mail Reporters

THERE was chaos at petrol stations across Johannesburg late yesterday as motorists dashed to fill up before the big 25c/l increase came into effect at midnight — but many filling stations closed shop early so they could start selling stocks today at the new prices.

As dusk settled, thousands of motorists made a mad scramble for fuel at the "old" price and many enraged drivers — their cars blocking through roads at stations across the city — argued heatedly with garage owners as pumps shut down.

South Africans were staggered by the announcment that:

- Prices on the Reef will go up by nearly 40% from 63,5c to 88,5c/l for 93 octane;
- At the coast, 98 octane is to rise by 27,1c to 84,9c/l;

More reports — See Page 2

- 87 octane is up by 23,4c;
- The pump price of diesel fuel is up by 25,3c;
- Agricultural diesel is up by 12c;
- Diesel for wholesale road users is up by about 20c;
- Illuminating paraffin goes up 5c/l, power paraffin 19,3c and jet fuel 17,8c.

And the shock was worsened with the warning by Mr Steyn that the petrol price could rise again by 4c/l in June.

This massive increase comes on top of the severe fringe benefits tax which is due to take effect from March 1.

The petrol increase and the new fringe benefits tax represent a double blow to the motor industry, already hard hit by 10% general sales tax and punitive 32% interest on hire purchase agreements.

In Johannesburg, it was like the Last Great Gold Rush last night as hundreds of motorists tried to beat the petrol price deadline — only to be told by some garage owners that "power failures" had closed down the pumps.

In Hillbrow, a garage at the corner of Caroline and Twist Streets was besieged by anxious motorists. Traffic was held up in Twist Street — one of the city's main arteries — as cars stretched across the road.

Reports were received from all over the Reef of garages claiming to have no petrol available for drivers anxious to cash in on the last few hours of cheaper petrol.

Some motorists reported that Sasol pumps were the only ones working at garages, and that supplies from these pumps had been cut to a maximum of R10 a car.

Irate motorists described the power fail-

To Page 2

The last straw . . . medical aid worker Ms Rene Booysen, 31, reflects the gloomy mood o as the implications of the giant leap in the petrol price sink in.

RDM 24/1/85 55

Business warns of inflation rise

By GERALD REILLY
Pretoria Bureau

ORGANISED commerce and industry last night stressed the devastating impact of the huge fuel price increase on the country's already high inflation rate.

Both the Association of Chambers of Commerce (Assocom) and the Afrikaanse Handels Instituut (AHI) said the immediate impact would be a 1½% boost to inflation.

Assocom also claimed the indirect impact over the next nine to 12 months could be another 5%.

Assocom said in a statement last night the business sector was shocked by the 40% rise in the petrol price.

It stressed the strong ripple effect on all sections of the economy.

There was an urgent need for the authorities to act firmly in the management of the economy if South Africa was to withstand any further attack on the already strained rand and control inflation.

"It is critical that any consequential adjustments to Government-administered prices and tariffs of para-statal bodies be kept to a minimum."

Assocom welcomed the additional contribution to the National Road Fund as long overdue.

The infrastructure had been adversely affected in the past by insufficient funds.

The president of the Transvaal Chamber of Industries, Mr Joe Annegarn, said the fuel price increase would have a spiral effect on all prices.

"Of major concern to the TCI is the effect of the higher fuel prices on our already depressed industries.

"In the present economic climate the effects in these increases could do uncountable harm to the industrial sector which is struggling to survive."

The increase could also slow an export-led recovery.

The Automobile Association said in a statement last night the National Road Fund's income should improve by R115-million to about R290-million a year because of the increased contribution from the fuel price increase.

"While the timing is unfortunate, an increase in the resources of the fund is overdue and we urge the Government to implement much-needed roadbuilding and maintenance programmes as soon as possible."

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hits Reef

□ From Page 1

ure as "advantageous" and that it had taken place minutes after a 4pm television news bulletin which announced the new petrol prices.

Business sources yesterday warned that the massive increase could send inflation soaring, with some predicting it could go as high as 20% by the end of the year.

This is how motorists can expect to be hit by the new petrol price:

- The owner of a 1,5*l* to 1,8*l* car travelling 18 000km a year will spend about R1 458 on petrol — an increase of R486.
- The owner of a 2,5*l* or 3*l* car will pay about R1 807 for 18 000km — an increase of R565.
- It will cost R53,10 to fill up a 60*l* petrol tank — an increase of R15.

In a statement, the Automobile Association slammed the increase as "an extremely severe blow" to motoring in South Africa.

"It is not only regrettable but indeed cause for concern that the increase is far in excess of that mentioned by the Minister in private

3 Escom frauds investigated

CAPE TIMES 24/1/85

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Own Correspondent

JOHANNESBURG. — Police and auditors are independently investigating three separate frauds which have hit Escom and the company which provides its insurance.

Colonel "Nollie" Hulme, head of the Witwatersrand Commercial Branch, confirmed last night that police were investigating allegations of corruption against seven Escom employees, some of whom had already been dismissed.

And Escom's insurance company said last night that 20 allegedly fraudulent insurance claims were also being investigated.

Secrecy clauses

Escom has meanwhile called in its auditors to examine the commission's entire system of payment and its computer operations in the wake of Mr Gert Rademeyer's alleged fraud of R8 400 000.

Escom officials declined to say whether Mr Rademeyer's money transfer overseas had been made easier by government secrecy clauses for the purchase of strategic materials.

Colonel Hulme said yesterday that police investigations into allegations of corruption against the seven employees dated back to October last year and involved R140 000.

"The investigation involves allegations that provisions of the Prevention of Corruption Act have been contravened."

It is understood the alleged corruption involves a contractor to Escom. However, Colonel Hulme would not elaborate on this.

Investigations were continuing and nobody had been arrested so far, he said, although Escom had dismissed some of the employees since the start of investigations.

There have also been allegations concerning a spate of insurance frauds since August last year at the giant commission.

A senior Escom official confirmed that 20 employees had put in false insurance claims.

The insurance company which has secured Escom's account says it is worth a total of R18-million a year — and it has already paid out R10-million.

'Hardships'

Escom's senior officer for insurance, Mr Danie Retief, said he believed financial hardships during a recessionary period had contributed to the number of dishonest claims filed.

Escom's senior general manager, Mr I D van der Walt, said in a letter to the Rand Daily Mail that:

- Escom's personnel insurance scheme, like all Escom's insurance, was put out to tender each year;
- Escom did not pay premiums or subsidize the personnel group scheme. Nor were claims made out from Escom funds.

A report in the Rand Daily Mail quoting Mr Retief as saying Escom expected to fork out R10-million in 1985 was therefore incorrect.

● **See leading article, page 10**

SOUTH AFRICA FACES

ces 20% inflation

ARGUS
24/1/85
55

Staff Reporters

AS announcements of more price increases followed the shock petrol price rise, big business warned today that inflation could rocket to 20 percent or more — the highest yet.

And there could be further increases in the petrol price and higher taxes.

Bus fares will rise next week.

To add to consumer woes, the price of liquefied petroleum gas (LPG) rose by 21 percent today.

Oil companies said the reason for the increase — the fourth in 11 months — was the poor performance of the rand against the dollar.

The 22,9c price-rise brings the cost of a kilogram of LPG from R1,04 to R1,27, further increasing the cost of living for domestic users and adding thousands to the gas bills of heavy-industry users.

The Association of Chambers of Commerce estimated the new petrol price would push the consumer price index from 13,5 percent to at least 15 percent immediately.

Consumer price index will rise — Assocom

The chain reactions in heavier transport bills for everyone from private motorists to farmers and business would push the rate up by at least another five percent in the next nine to 12 months.

And Senbank forecast an even higher general sales tax.

Mr Louis Geldenhuys, its senior economist, predicted the Government would be forced to increase taxation — most likely through GST — to bring in an additional R1 000-million to balance its books.

South Africans also face more expensive:

- Road, rail, sea and air transport;
- Agricultural products and all food which has

Details of new fuel costs

HIGHER coastal prices which come into force today:

Petrol, premium 98 octane, 84,9c a litre — up 27,1c.

Petrol, regular 93 octane, 81,4c— up 25c.

Diesel, 84,8c — up 25,3c.

Diesel, agricultural and other non-road users — up 12c a litre.

Diesel, wholesale road-users — up 20c a litre.

Illuminating paraffin, 55c — up 5c a litre.

Power paraffin up 19,3c a litre.

Jet fuel up 17,8c a litre.

The increases are based on a rand exchange rate of 46,5 US cents. Today the rand rate is about 43,40 cents.

From today it costs most motorists between R13 and R22 more to fill up their petrol tanks with premium octane fuel.

At midnight 98 octane petrol went up by 27,1c a litre and 93 octane by 25c a litre.

Based on a former price of 56.4c a litre for 93 octane petrol and 57,8c a litre for 98 octane in Cape Town, here is a selection of cars, their tank capacity, and recommended fuel rating, yesterday's cost to fill it, today's and the difference:

- Mercedes Benz 230E: 83ℓ tank (98) R47,97, R70.46 — up R22.49.
- Toyota Cressida 2ℓ GL sedan: 75ℓ tank (98) R43,35, R63,67 — plus R20,32.
- Toyota Corolla 1600 GL sedan 59ℓ tank (98) R34,10, R50.09 — plus R15,99
- Ford Sierra: 60ℓ tank (98) R34,68, R50.94 — plus R16.26.
- Ford Escort: 50ℓ tank (98) R28.90, R42,45 — plus R13,55.
- Citi Golf: 50 ℓ tank (93) R28.20. R40,70 — plus R12,50.
- Renault 5: 49ℓ tank (98) R28.32. R41,60 — plus R13,28

Prices of consumer goods set to soar . . . and soar

Argus Correspondent

JOHANNESBURG. — Prices of consumer goods are set to soar during the next two months — and the increases do not take the petrol-price rise into account.

There will be further price increases on consumer goods later to make good the petrol-price increase.

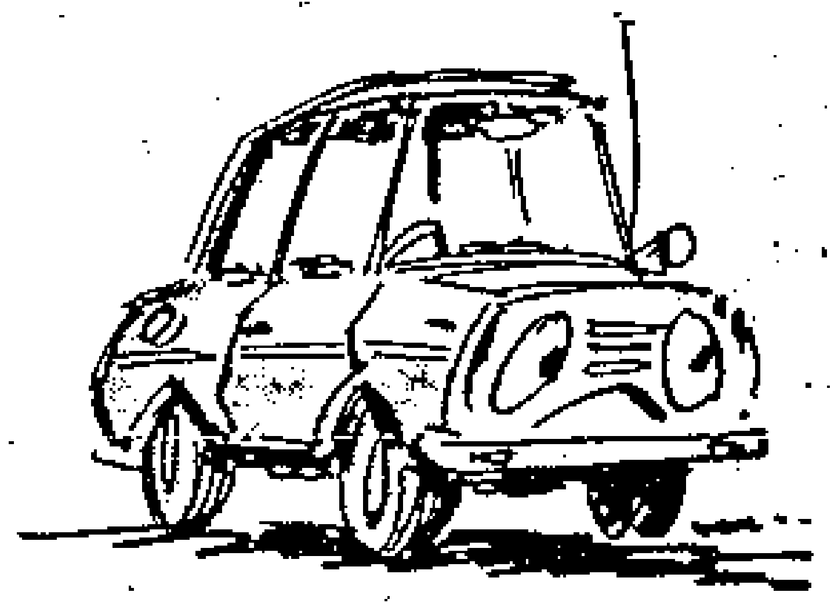
Wholesale prices of several items rose during December and January but have not yet filtered through to

- Cereals, 15 percent;
- Jellies and cordials, 10 percent;
- Canned meats, nine percent;
- Paper products, 10 percent;
- Toiletries, between nine and 12 percent;
- Detergents, 13 percent; and
- Household cleaners, about 12 percent.

Other goods set to rise in price include poultry, cooking-oil, cold meats the fourth in 11 months — was the poor performance of the rand against the dollar.

The 22,9c price-rise brings the cost of a kilogram of LPG from R1,04 to R1,27, further increasing the cost of living for domestic users and adding thousands to the gas bills of heavy-industry users.

The Association of Chambers of Commerce estimated the new petrol price would push the consumer price index from 13,5 percent to at least 15 percent immediately.



Consumer price index will rise — Assocom

The chain reactions in heavier transport bills for everyone from private motorists to farmers and business would push the rate up by at least another five percent in the next nine to 12 months.

And Senbank forecast an even higher general sales tax.

Mr Louis Geldenhuys, its senior economist, predicted the Government would be forced to increase taxation — most likely through GST — to bring in an additional R1 000-million to balance its books.

South Africans also face more expensive:

- Road, rail, sea and air transport;
- Agricultural products and all food which has to be transported;
- Municipal tariffs; and
- Consumer goods.

The general manager of SA Transport Services, Dr Bart Grové, said the effect of the fuel price on all transport would be far-reaching.

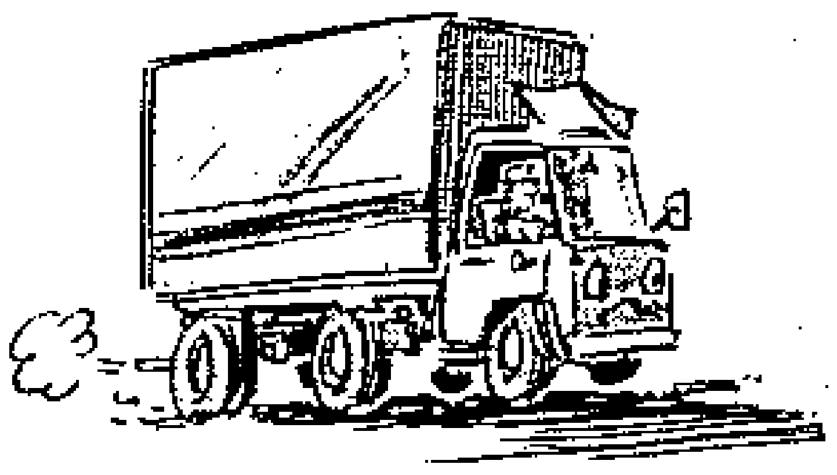
It is doubtful whether Sats can absorb the increase and the Minister of Transport, Mr Hendrik Schoeman, is expected to make a statement soon.

Taxi-owners and passenger transport company spokesmen said they too would have to pass the increase on to passengers.

There was also warning today that a steep climb in air fares was likely within days, with worse to come in April.

Mr Michael Menoff, joint managing director of Miller Weedon Travel, said an announcement by the Minister of Transport was imminent and he forecast that:

- Domestic air fares would rise by between 11 and 15 percent; and
- International fares would go up on a sliding scale from eight percent to as much as 25 percent on single tickets to the United States.



Petrol price could be raised another four cents a litre

He feared there would be widespread retrenchments throughout the travel industry and sharp cutbacks in private and business trips.

Petrol prices could be raised by at least another four cents a litre by June if the rand/dollar exchange rate did not improve, said the Minister of Mineral and Energy Affairs, Mr Danie Steyn.

If the rate declined more the Government would be forced to consider another fuel price increase.

Such an increase could be at least four cents a litre because the saving obtained by using stockpiled crude oil to offset further increases would, by then, no longer be in effect.

Another increase in petrol prices could also result from an increase in GST.

Replying to questions at a news conference, Mr Steyn said that if crude oil prices were to drop drastically the Government would consider a cut in the petrol price.

● Anger and despair — Page 3.

Illuminating paraffin, 55c — up 5c a litre.

Power paraffin up 19,3c a litre.

Jet fuel up 17,8c a litre.

The increases are based on a rand exchange rate of 46,5 US cents. Today the rand rate is about 43,40 cents.

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Prices of consumer goods set to soar . . . and soar

Argus Correspondent

JOHANNESBURG. — Prices of consumer goods are set to soar during the next two months — and the increases do not take the petrol-price rise into account.

There will be further price increases on consumer goods later to make good the petrol-price increase.

Wholesale prices of several items rose during December and January but have not yet filtered through to consumers, said a director of Pick 'n Pay, Mr Richard Cohen.

TEA, COFFEE

These increases — the result of the rampant dollar — are expected to affect consumer-prices in February and March.

Consumers can expect price increases in:

- Tea and coffee, up by between 12 percent and 15 percent;
- Rice, 25 percent;
- Cereals, 15 percent;
- Jellies and cordials, 10 percent;
- Canned meats, nine percent;
- Paper products, 10 percent;
- Toiletries, between nine and 12 percent;
- Detergents, 13 percent; and
- Household cleaners, about 12 percent.

Other goods set to rise in price include poultry, cooking-oil, cold meats and frozen vegetables.

"This bleak outlook does not take into account the increase in the petrol price and cost of distribution," Mr Cohen said.

The managing director of Checkers, Mr Gordon Utian, said: "While the low rand makes this fuel-price increase inevitable, the impact will rampage through the economy, hitting food prices and the consumer.

"Prices will inevitably go up," he added.

Now Sasol can pay off debts more quickly

(55) Star 24/1/85

CAPE TOWN — Sasol would be placed in a more favourable position by the effects of the petrol price increase and the unfavourable rand-dollar exchange rate, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said yesterday.

Increased profitability would allow the company to repay its debts to the government more quickly.

This money could then be used to finance projects to make South Africa independent of outside fuel supplies, he told a Press conference here.

Because of its favourable position, Sasol had, after negotiations with the government, agreed to forgo the 3,6 cents per litre incentive subsidy paid to it since 1979, Mr Steyn said.

The company's profit position would be monitored and if it improved in the future, further concessions by the company would have to be considered.

CAPITAL INTENSIVE

Mr Steyn said that Sasol, unlike other oil companies, was not affected by exchange rate fluctuations as it did not have to buy crude oil on the world markets.

However, Sasol was a very capital intensive operation and, as a public company, deserved a "reasonable" return on its high investment.

A return of about 15 percent was considered reasonable.

Mr Steyn said Sasol's profitability was "of cardinal importance" to South Africa.

If it achieved good profits, it could pay back its government loans more quickly and this money could be used to finance projects such as the exploitation of the Mossel Bay gas fields.

In this way, South Africa could become self-sufficient in fuel supplies and no further levies would have to be made on road users to finance projects such as the Mossel Bay scheme.

Mr Steyn said efforts to exploit the country's natural gas reserves had "never stopped" and viability studies were at present being conducted on the Mossel Bay fields.

A cabinet decision on their future would be taken once these studies were completed.

FUEL PROJECTS

The Minister said the governmentwas looking at ways to increase the country's self-sufficiency in fuel supplies because of factors such as the unfavourable exchange rate.

During his budget vote, he would supply a detailed programme of the country's efforts in this regard and of plans for the development of other synthetic fuel projects.

He added that the present petrol price increase would have been one cent a litre more had the 3,6 cents a litre incentive subsidy to Sasol not been dropped.

Commenting on the effect of lower world crude oil prices on the cost of South Africa's fuel, Mr Steyn said these decreases had already been reflected in the fuel equilisation fund used to offset major price increases.

South Africa was also paying a much lower premium on oil than previously in order to beat the oil embargo. — Sapa.

55

The agony and the ire . . . what they said at petrol pumps about Black Thursday

By Susan Pleming

There was an air of unhappy resignation and, for some, anger about the petrol price rise at Johannesburg garages as drivers rushed to fill tanks before the whopping rise today.

One person hit badly by the rise was the Rev Abdul Timol.

"I am a priest and so a lot of my social welfare work involves using my car," he said.

"I have to see my parishioners and so I will have to do without some things to afford petrol."

Mr Rob Stewart said the price increase had been predictable.

"I am not impressed by the increase," he added, "but there is nothing I can do about it and so I suppose I will just have to pay an extra R40 a month.

"We will have to learn to live with the price increases which are going to hit us in the next few month."

Mr Lowe Bosman said he had expected the price of petrol to rocket this year.

"The way this economy is going the petrol price was bound to rise," he went on.

"I don't like all of these rises, but I suppose we will have to learn to accept them."

Taxi owner Mr Fanie Makatu, of Soweto, said the increase would affect him very badly, adding:

"I am paying about R200 a week on petrol and because of this rise I will obviously have to increase my fares which will cause a drop in business."

Mrs Theresa Benton said her response to the increase was censored.

"I just give up," she declared.

"In the next few months everything will rise in price.

"I don't know how to cope any more."

Mr Israel Levy, visiting South Africa from Israel, said the price rise was acceptable and that it was time the Government realised the poor value of the rand.

Mrs Simone Aronje, who was filling up her car at a Braamfontein garage, said the increase had come at a bad time.

"After Christmas no one has any money," she added, "and this rise could not have come at a worse time.

"The sad aspect is that so many people are dependent on their cars and so they will just have to pay the new price."

Brixton garage owner Mr Andres Garcia said although the new price would affect many people, at least it was not as high as in many European countries.


The Rev Abdul Timol


Mr Rob Stewart


Mr Lowe Bosman


Mr Fanie Makatu


Mrs Theresa Benton


Mr Israel Levy


Mrs Simone Aronje


Mr Andres Garcia

Now for the big fuel gamble . . . that the rand will get stronger

By David Braun,
Political Correspondent

CAPE TOWN — In pegging the new petrol price the Government has gambled that the rand will strengthen against other currencies in the coming months.

Energy Minister Mr Danie Steyn yesterday announced that the Cabinet had decided to draw a large quantity from the nation's strategic oil stockpile so as to subsidise the petrol price slightly by cutting back on the amount of imported oil.

The effect of this is equal to keeping the petrol price 4c lower than the market and exchange rate of the rand demands, in the hope that the South African currency will firm on world markets.

The use of this reserve oil is intended to tide South Africa over until June.

And if the rand has not recovered to at least 46,5 American cents by then the petrol price will unavoidably have to be increased again.

The lower the rand goes between now and June, the higher will be the price of fuel that South Africans must pay at the pumps.

* * *

The massive increases in fuel prices announced by Mr Steyn yesterday were directly linked to the recent collapse of the rand against the dollar.

The Government had hoped that this would be temporary.

And in trying to stave off a huge increase in the petrol price for as long as possible it drew on crude oil reserves and spent R910 million of the Equalisation Fund, which was created to protect the domestic fuel price by absorbing fluctuations in currencies and oil prices.

But the slide of the rand was more sustained and deeper than expected.

And by yesterday, before the massive fuel price increases were announced, the South African consumer was being subsidised to the tune of close on 23c a litre.

In retrospect, Government sources admit, the fuel price strategy of the past two years has misfired badly.

When the Government announced a decrease in pump prices towards the end of 1983 (many political cynics claimed this was to influence the electorate before the constitutional referendum) the intention was to take advantage of the weakening international oil price.

The intention was also to create an internal expectation that inflation was winding down, that prices could be decreased and that the economy was on the upswing.

* * *

What was not foreseen, they now say, was the incredible strength of the American dollar, in which crude prices are fixed, and the rapid deterioration of the rand.

The Government agonised over what it should do.

A massive fuel price rise would fuel inflation and, worse, the national expectation that inflation was increasing rapidly.

An increase in the rate of inflation, boosted by a generally held belief that inflation would get worse, would seriously hurt an already reeling economy.

Hence the decision to buy time by dipping into the strategic reserves and the Equalisation Fund.

In taking its decision to raise the fuel price by close on 40 percent (47 percent at the coast), the Government was advised that the net result would be to increase inflation in the region of about two percent.

This, Mr Steyn said yesterday, should be completely eliminated as economic measures to reduce the price spiral took hold during the course of the year.

* * *

Official Opposition spokesman on finance Mr Harry Schwarz says, however, that increases of such magnitude will lift the inflation rate from the current official figure of about 13 percent to between 16 and 17 percent . . . a far cry from the 10 percent target the Government had set only a few months ago.

The effect of the increase will be to hamstring the motor industry (as people delay buying new cars and opt for smaller vehicles) and create more unemployment, says Mr Schwarz.

He maintains that the Government should have restricted the increase to 18c a litre and that by implementing the rise it decided on it was exempting itself from restrictions it was expecting of everyone else.

Official Opposition spokesman on energy Mr Brian Goodall says the new petrol price is the cost the consumer must pay for the National Party's mismanagement of the economy.

"The Government's inability to control its own expenditure and the money supply has led to the rapid depreciation of the value of the rand which in turn affects the price of all imports," he says.

* * *

It was widely believed that the Government would not implement the full fuel price rise warranted by the weak rand in one go, that it would allow only, say, 16c or 18c a litre now and the balance later in the year.

The decision to go the whole hog (apart from the small 4c a litre subsidy) was taken in an attempt to reduce the temptation for manufacturers and distributors to use fuel price rises as excuses to raise their own prices more than was justified.

In making its decision the Cabinet also took into consideration the plight of the millions of people who, generally of the lowest income levels, relied on paraffin for lighting, heating and cooking.

Instead of increasing this fuel by 20c a litre, as recommended, it was decided to restrict the raise to only 5c a litre.

The 17,8c a litre increase in jet fuel, quite apart from the rise in diesel and petrol prices, will however have a devastating effect on the country's transport services.

To this end Transport Services Minister Mr Hendrik Schoeman has already warned ominously that Transport Services (which include road, rail and air) as a heavy fuel consumer will have to study the implications of the increases carefully before making a further announcement.

* * *

Air and rail fares appear doomed to rise yet again.

The ramifications of last night's shock fuel price rises will be felt for a long time.

But for South Africans they are unfortunately probably only the first tangible effects of a battered economy which will be felt this year.

The Budget in March holds the threat of a further rise in GST (and consequently the fuel price) and the clamp on fringe benefits.

A more positive result of higher fuel prices will be renewed interest and drive in developing alternative indigenous sources of energy.

To this effect Mr Steyn has promised that he will be briefing Parliament this year on the full extent of efforts to develop synthetic fuels, off-shore gasfields and the possibility of another Sasol.

This latest round of fuel price rises is bound to spark another oil crisis-type reaction, similar to those of the 1970s (the Government believes that national consumption will be reduced by six percent as a result).

The end result may well be a more self-sufficient and rationalised economy.

Just stunned by the magnitude of it

By Zenaide Vendeiro
and Mike Siluma

Organisations in agriculture, commerce and industry are stunned by the magnitude of the rise in petrol and diesel prices, the largest single increase yet in South Africa.

Most organisations said an increase was inevitable because of the deteriorating value of the rand against the American dollar.

They would have preferred it to be implemented in three or four small steps over a nine-month to 12-month period.

And they asked that the fuel price be reduced when there was a significant improvement in the exchange rate.

Assocom and the Afrikaanse Handelsinstituut said the increase would have a drastic effect on the national economy, leading to at least a 1,5 percent rise in the inflation rate.

South African Transport Services general manager Dr Bart Grove said the effect of the fuel price rise on road, rail, sea and air transport would be far-reaching.

It is doubtful whether Transport Services can absorb the increase and Minister of Transport Mr Hendrik Schoeman is expected to make a statement soon.

Taxi owners and passenger transport companies said they would have to pass the increase on to passengers.

Putco, the largest private bus passenger operator in South Africa, is to apply for a fare rise from February 1.

The National Association of Automobile Manufacturers of South Africa estimated that the price rise would result in an annual additional cost to motorists of over R3 000 million which, in effect, translated into a reduction in disposable income for other goods and services.

Motorists should brace themselves for even gloomier prospects this year, the Automobile Association warned yesterday.

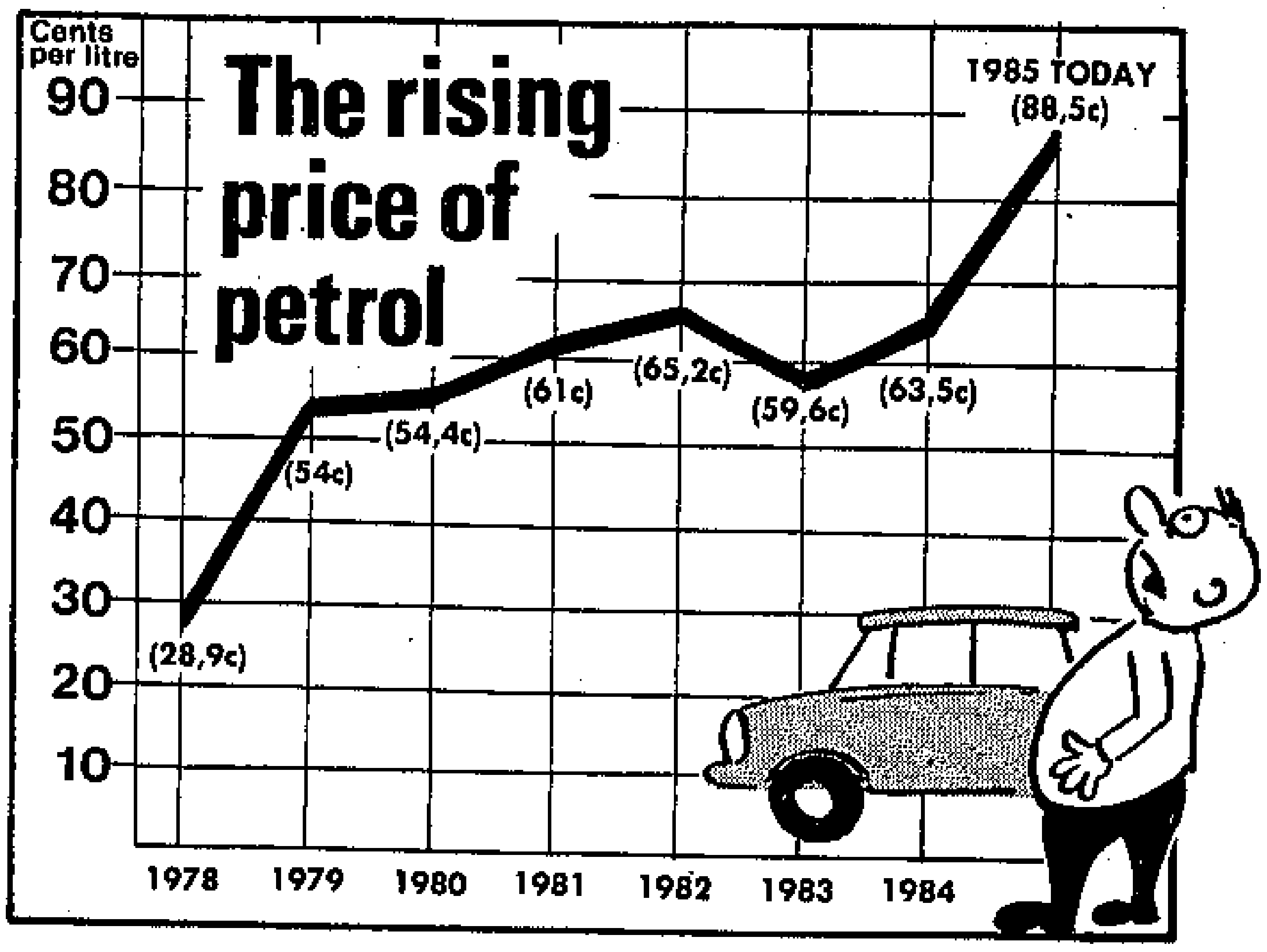
"There are indications of further increases in the price of fuel, tyres and General Sales Tax," it added, "and there is also the question of fringe benefit taxation."

Mr J H van Huyssteen, executive director of the Motor Industries Federation, said the rise would have an adverse effect on the industry because of over-reaction by consumers.

The chairman of the South African Motor Traders Association, Mr George Becknan, said he expected petrol sales in the coming months to drop by about 20 percent.

Mr Mike Norris, former chairman of the Public Carriers Association and managing director of a major transport operator, estimated that the cost of goods transport would increase by nine to 12 percent for both public carriers and businesses operating their own fleets.

A spokesman for the Chamber of Mines said the increase was likely to cost the gold and coal mines an extra R38 million a year.


The rising price of petrol

What farmers think, in anger and despair

Pretoria Bureau

[redacted]

Farmers have reacted with anger and despair to the fuel price rises, saying they would prove a serious setback to an already afflicted community.

South African Agricultural Union vice-president Mr Nico Kotze said the financial independence of farmers and the viability of agriculture as a whole were being totally undermined.

For every 1c increase in the price of diesel fuel, an additional expenditure of R13 million was added to annual production costs of agriculture.

Transvaal Agricultural Union secretary Mr Phillip du Plooy said just the increase in the price of diesel would add more than R15 million to the current annual production costs of agriculture.

"Farmers are not in any position to absorb 1c of the price rise," he went on, "so the increase will have a direct effect on food prices."

★ ★ ★

Political Staff

CAPE TOWN — The National Road Fund has picked up a R170 million-a-year bonus from the petrol price rise.

And as a result the repeatedly postponed road repair and building programme is to be revised.

The increase by 2c a litre that motorists will have to contribute for road construction has been strongly condemned by Progressive Federal Party finance spokesman Mr Harry Schwarz.

But National Transport Commission chairman Mr Adrian Eksteen, who is responsible for the road network, welcomed the extra finance, saying a number of important delayed projects could now be started.

Mr Schwarz said the decision to increase the contribution to the National Road Fund was inopportune.

In effect it would mean an increase in Government spending that would not be reflected in the budget.

And this came at a time when Government spending was being labelled as one of the main causes of the high inflation rate.

★ ★ ★

Political Staff

CAPE TOWN — The petrol price rise was beyond the Government's control and South Africans would just have to live with it for the time being, said Solidarity leader Dr J N Reddy.

It was obvious the increase would add to the inflation rate, but he appealed to all concerned to do their utmost to prevent spiralling price rises.

He also appealed to the Government to keep close tabs on the exchange rate and to adjust the fuel price downwards as soon as the rand improved against the dollar.

★ ★ ★

Own Correspondent

PRETORIA — The petrol price rise was an extremely severe blow to motoring in South Africa, said an Automobile Association spokesman.

"It is not only regrettable," he added, "but a cause for concern that the increase was far in excess of that mentioned by the Minister of Mineral and Energy Affairs in private talks between him and the Automobile Association last year.

"While an increase was inevitable in view of the decline in the rand-dollar exchange rate, it is regrettable that it has come about in the current depressed economic climate."

The spokesman said that this year the beleaguered motorist was faced with the prospect of further petrol price rises, as well as rises in tyres, insurance and general sales tax.

Many motorists would rationalise the present situation in the short term, he added, but the motoring community would insist on a reduction in the price of petrol when there was a significant improvement in the exchange rate.

A marked swing to light cars was expected, said a spokesman for Amcar Motor Holdings, the Pretoria-based motor manufacturer.

★ ★ ★

CAPE TOWN — The Conservative Party today called on the Government to resign immediately over what it described as the absolutely excessive rise in the petrol price.

The party stated that the rise displayed a lack of feeling by the Government for the position of the average citizen.

The party added that it would strike a destructive blow at farmers and consumers and could be attributed to poor administration and an inability by the Government to rectify the poor position of the economy. — Sapa.

ARGUS 24/1/85 (SS)

FUEL

Government goes all out for SA fuel independence

Political Staff

NEW projects could make South Africa self-sufficient in fuel.

A detailed programme of proposals will be announced by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, in Parliament.

At a news conference yesterday Mr Steyn said this move was being made because of factors such as the drop in value of the rand against the dollar.

PROPOSALS

He said that during his budget vote he would supply a detailed programme of the country's efforts in this regard.

A spokesman for the Department of Mineral and Energy Affairs said the proposals considered by the Government for new projects were not necessarily for Sasol-type fuel industries only.

Proposals for synthetic fuel projects to be undertaken with or without State aid had been invited from the private sector in 1979 and 1980.

GAS FIELDS

A number of proposals were submitted and had been considered at Cabinet level.

The spokesman said new projects were needed because existing Sasol projects had reached full capacity.

This meant that unless new projects were launched South Africa's measure of self-sufficiency in fuel supplies would diminish as fuel consumption increased.

Projects under consideration include the development of gas fields such as the one at Mossel Bay.

"VERY IMPORTANT"

Mr Steyn said at the conference that Sasol's profitability was of "cardinal importance" to South Africa. If it achieved good profits it could pay back its government loans more quickly and the money could be used to finance projects such as the exploitation of the Mossel Bay gas fields.

In this way South Africa could become more self-sufficient in fuel supplies and no further levies would have to be made on road-users to finance projects such as the Mossel Bay scheme.

Replying to a question, Mr Steyn said the Government had never considered reducing the efforts of Soekor to find natural gas.

Anger and despa steep rise in fuel

COMMERCE, industry and agriculture have reacted with anger and despair to the petrol and diesel price increases.

Dr J C van Zyl, chief executive director of the Federated Chamber of Industries, said the chamber realised the need for an increase but was still shocked at its size.

"A price increase of this magnitude cannot be absorbed and has to be passed on. It will cause major general price rises at a fragile stage in the country's economy."

He said the FCI had suggested a comprehensive review of the management system for South Africa's strategic fuel supplies and pricing structure to avoid sudden large shocks to the economy.

Inflation rate

● Assocom and the Afrikaanse Handelsinstituut said the increase would have a drastic effect on the economy — and the ripple effect would be reflected in the inflation rate.

Assocom said there was an urgent need for the authorities to take action in the management of the economy if South Africa was to withstand a further attack on the already strained rand and control the inflation rate.

● Farmers reacted with anger and despair, saying it would prove a "serious setback to the already afflicted farming community".

The vice-president of the South African Agricultural Union, Mr Nico Kotze, said the increases would further adversely affect farmers' financial recovery after the drought.

Production costs

For every 1c increase in the price of diesel, additional expenditure of R13-million was added to annual production costs of agriculture, he said.

"To this must be added the increase in transport and marketing costs, as well as the ripple effect of general cost increases."

Mr Hennie de Jager, chairman of the National Maize Producers' Organisation, said a fuel price increase of the magnitude announced yesterday could no longer be absorbed — a fact consumers had to accept.

● Automobile Association spokesman Mr Gideon van Oudtshoorn said the the increase was "really absurd, ridiculous and absolutely uncalled for".

Another AA spokesman said it was "regrettable" and "a cause for concern" that the price increase was far higher than the increase mentioned by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, in private dicussion between him and the AA last year.

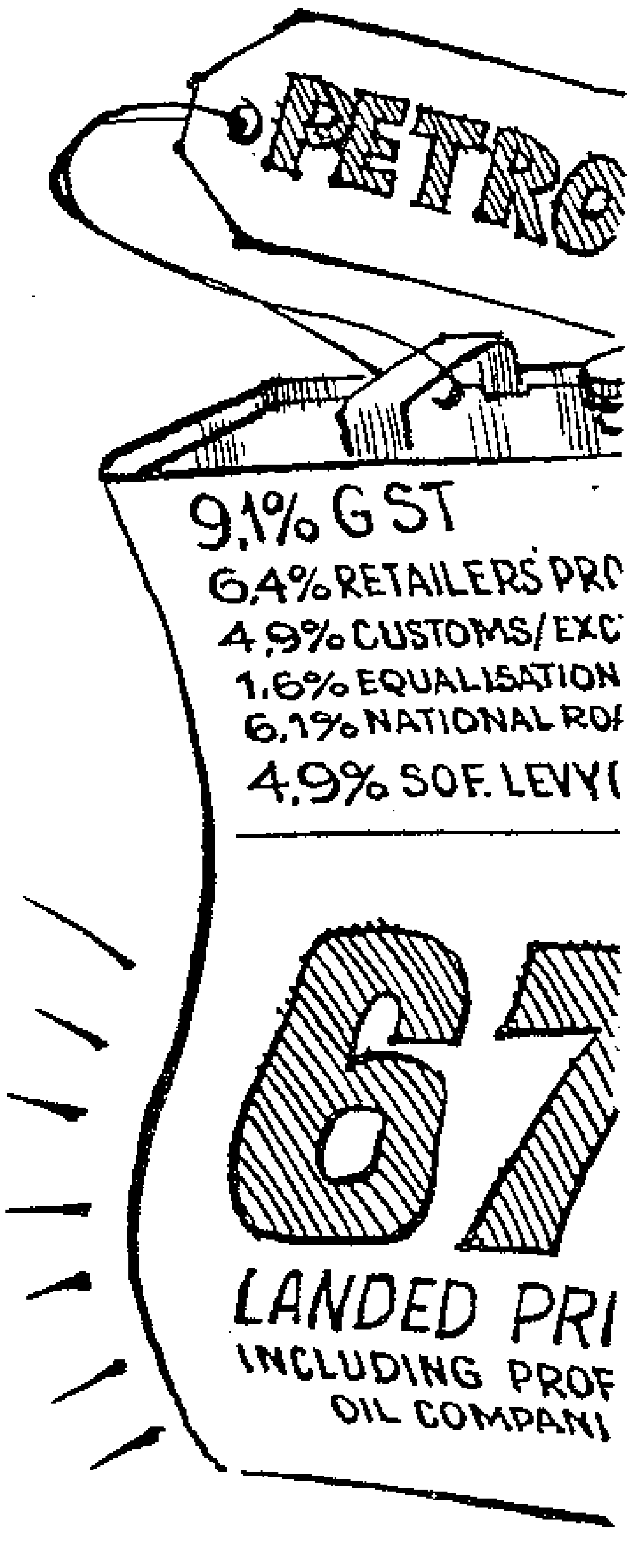
He said motorists faced further petrol price increases as well as rises in the cost of tyres, insurance and general sales tax.

● Mr Colin Adcock, president of the National Association of Automobile Manufacturers of South Africa (Naamsa), said Naamsa understood the difficulties arising from the decline in the value of the rand.

But an increase of the magnitude announced came as "a severe shock and a body blow to the motor industry which already finds itself in trouble".

"The dependence on personal transport in South Africa is high and Naamsa estimates that the announced increase in the price of petrol will result in an annual additional cost to motorists of more than R3 000-million". — Argus Correspondents and Staff Reporters.

Where your



Government sharply as motorists reel und

Staff Reporter

MONTHS of rumour of a heavy increase in the petrol price still left people unprepared for the staggering announcement on the new prices.

The news late yesterday sent fuming motorists in droves to filling stations to top up at old prices, and in places queues were more than a kilometre long.

But many garages either ran out of petrol — genuinely — or shut down their pumps early to conserve stocks for sale at higher prices today.

Dozens of people who called The Argus yesterday for news of the price-rise reacted with anger and disbelief at the magnitude of the increase.

Sharp criticism of the Government's handling of the economy followed the shock expressed by most callers.

A transport company owner who called held out little hope of his business surviving.

"Why is the Government squeezing the nation?" asked one irate caller. Another wondered whether a consumer boycott of petrol products could be organised to force down the petrol price.

"I think the Government must take a look at themselves," said another angry caller.

Few "24-hour" petrol stations seemed to stay open until midnight to serve motorists before the midnight increase took effect.

A kilometre-long queue built up at a Kommetjie filling station yesterday afternoon. At a

ARGUS 24/1/85 55

FUEL

Anger and despair at steep rise in fuel price

COMMERCE, industry and agriculture have reacted with anger and despair to the petrol and diesel price increases.

Dr J C van Zyl, chief executive director of the Federated Chamber of Industries, said the chamber realised the need for an increase but was still shocked at its size.

"A price increase of this magnitude cannot be absorbed and has to be passed on. It will cause major general price rises at a fragile stage in the country's economy."

He said the FCI had suggested a comprehensive review of the management system for South Africa's strategic fuel supplies and pricing structure to avoid sudden large shocks to the economy.

Inflation rate

● Assocom and the Afrikaanse Handelsinstituut said the increase would have a drastic effect on the economy — and the ripple effect would be reflected in the inflation rate.

Assocom said there was an urgent need for the authorities to take action in the management of the economy if South Africa was to withstand a further attack on the already strained rand and control the inflation rate.

● Farmers reacted with anger and despair, saying it would prove a "serious setback to the already afflicted farming community".

The vice-president of the South African Agricultural Union, Mr Nico Kotze, said the increases would further adversely affect farmers' financial recovery after the drought.

Production costs

For every 1c increase in the price of diesel, additional expenditure of R13-million was added to annual production costs of agriculture, he said.

"To this must be added the increase in transport and marketing costs, as well as the ripple effect of general cost increases."

Mr Hennie de Jager, chairman of the National Maize Producers' Organisation, said a fuel price increase of the magnitude announced yesterday could no longer be absorbed — a fact consumers had to accept.

● Automobile Association spokesman Mr Gideon van Oudtshoorn said the the increase was "really absurd, ridiculous and absolutely uncalled for".

Another AA spokesman said it was "regrettable" and "a cause for concern" that the price increase was far higher than the increase mentioned by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, in private dicussion between him and the AA last year.

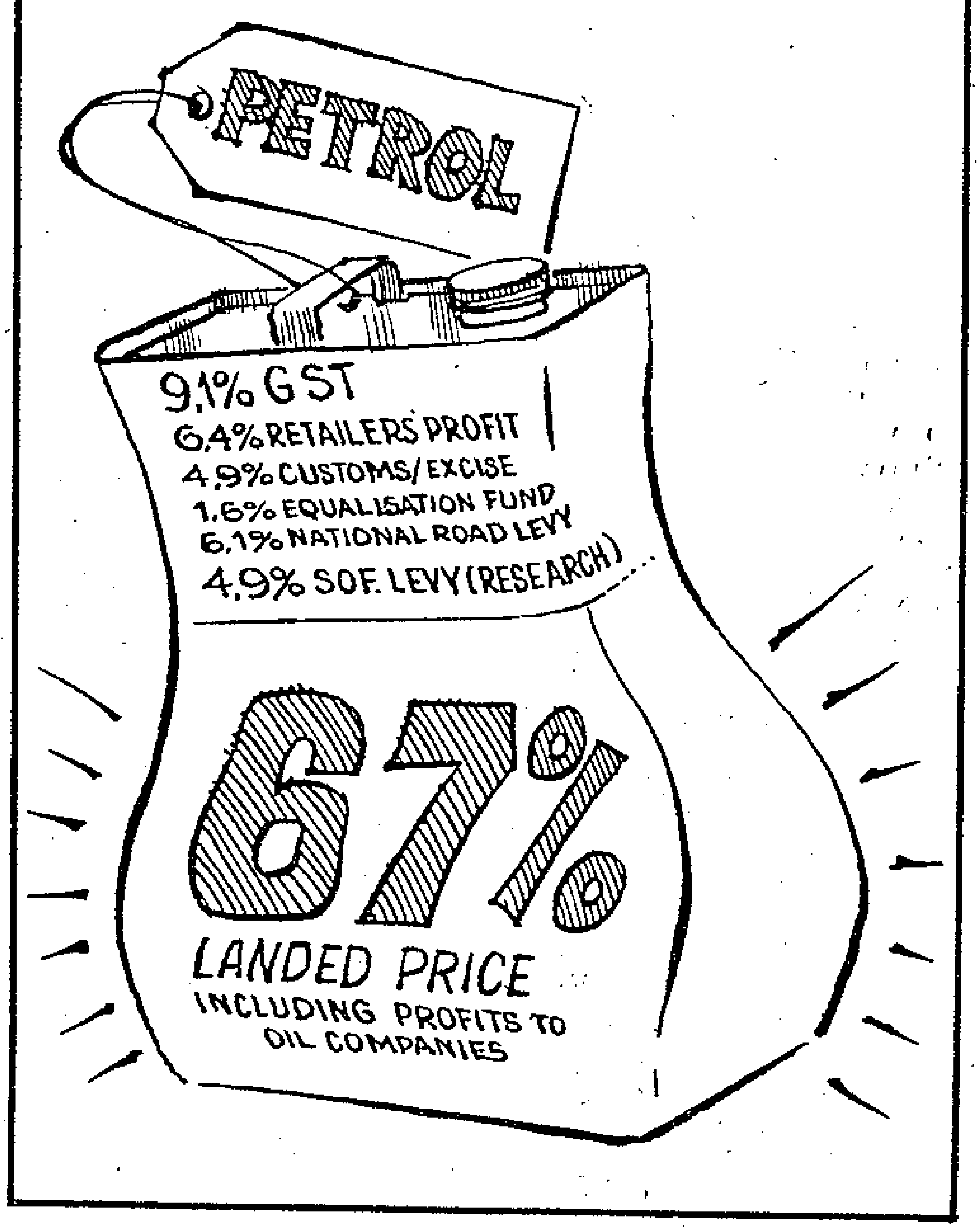
He said motorists faced further petrol price increases as well as rises in the cost of tyres, insurance and general sales tax.

● Mr Colin Adcock, president of the National Association of Automobile Manufacturers of South Africa (Naamsa), said Naamsa understood the difficulties arising from the decline in the value of the rand.

But an increase of the magnitude announced came as "a severe shock and a body blow to the motor industry which already finds itself in trouble".

"The dependence on personal transport in South Africa is high and Naamsa estimates that the announced increase in the price of petrol will result in an annual additional cost to motorists of more than R3 000-million". — Argus Correspondents and Staff Reporters.

Where your money goes



Government sharply criticised as motorists reel under increase

Staff Reporter

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"I think the Government must take a look at themselves," said another angry caller.

Few "24-hour" petrol stations seemed to stay open until midnight to serve motorists before the midnight increase took effect.

A kilometre-long queue built up at a Kommetjie filling station yesterday afternoon. At a garage in Ladies Mile Road, Bergvliet, up to 40 cars waited their turn at the pumps as 7pm approached. In Kloof Street traffic backed up as queues formed from two directions to get into a station's forecourt.

In the city centre and on the periphery queues stretched for hundreds of metres.

Many garages round the metropolitan area closed early. "Obviously other garages want to sell old petrol at new prices," said the manager of one that remained open.

A Wynberg resident complained that a garage in Main Road had closed during the afternoon with a "Sorry — we have no petrol" sign outside, although a delivery of petrol was made on Tuesday afternoon.

Petrol price 'havoc'

Cape Times 24/1/85

Cape Times 24/1/85 (55)

R13 more to fill the tank

Motoring Editor

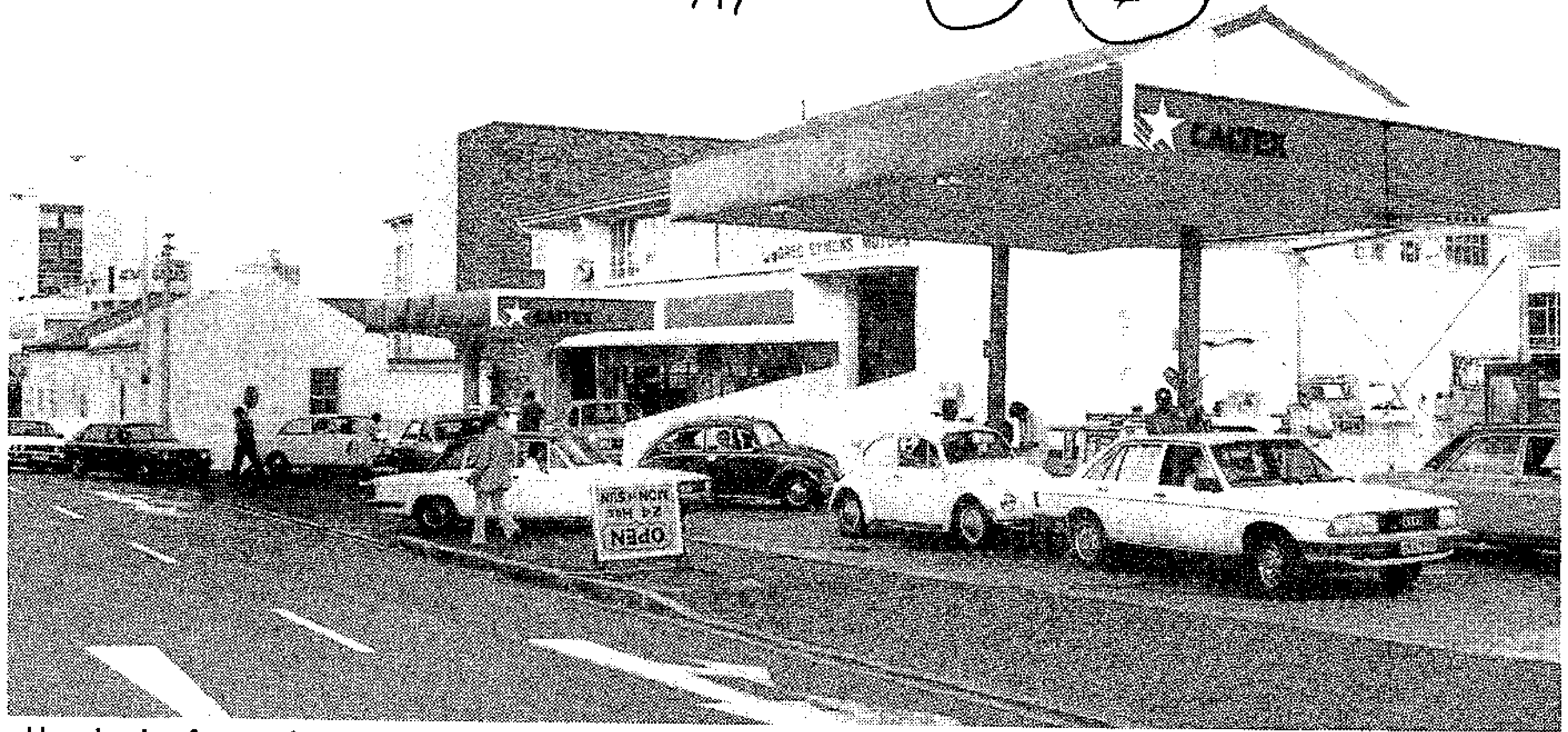
THE shock petrol price increase of 27,1 cents a litre for 98 octane and 25,0 c/ℓ for 93 octane which shook South African motorists yesterday means that the average motorist will have to pay about R13 to R15 more to fill up each time.

At the old price of 57,8 c/l for 98 octane it cost about R29 to put 50ℓ in a car. At the new price of 84,9 c/ℓ the cost will rise to R42,45.

Service station operators either stand to make or lose money today depending on the level of their tanks. Those with full tanks will immediately start selling at the new price and stand to make a profit on the new price times the number of litres in hand. Those with empty tanks will have to get stocks in at the new prices.

Those who make money will have it for only a short time and certainly not more than a week. Petrol is delivered on a weekly basis to each service station and is strictly on a cash basis.

According to operators I spoke to yesterday, a load of petrol usually consists of 22 500ℓ made up of 13 500ℓ of 98 octane and 9 000ℓ of 93. The cost of this used to be R6 547 and R4 248 for the respective octanes. But from next week the price will have almost doubled.



Hundreds of motorists queued outside service stations all over Cape Town yesterday to get their last tankful of petrol at the old price. Some garages closed at 6pm in spite of advertising as all-night garages, much to the ire of motorists who arrived after that hour.

Garages shut 'for profit'

Staff Reporter

CARS queued up at filling stations throughout the Peninsula yesterday as drivers waited patiently to fill their tanks with petrol at the relatively cheap old price.

However, not all garage managers were happy about the increased sales they were getting. A Wynberg filling-station manager closed his Main Road garage soon after 4pm yesterday — and admitted openly that it was to get "a cut of the profit".

"Don't you think we are entitled to a little something too?" asked Mr J Jacobs, the manager. "It's only fair. I have been trying to keep my tanks full for weeks now, in anticipation of this."

One of his customers, a very irate Mr Lionel Chambers of Plumstead, phoned to say that although he had driven all the way from town to Wynberg, he had not seen any problems at garages "until now. I usually fill up here, but he is not going to see my business again".

A Grassy Park garage owner, Mr Hassan Jaffer, said that although he could make a "lot of money by closing now", he would stay open as it was "better in the long run".

Meanwhile in Johannesburg, garage owners last night told motorists that electricity failures had closed petrol pumps — except for Sasol pumps. Irate motorists described the power failure as "advantageous" and said it had taken place minutes after a 4pm television news bulletin which announced the new petrol prices.

● Motorists telephoned the Cape Times last night to complain that all-night garages "all over Cape Town" had closed at 6pm, some with signs outside saying their storage tanks were "empty".

"It is absolutely disgusting," one of them said.

Political Staff and Own Correspondent

THE massive increase in fuel prices which came into effect at midnight could push up the inflation rate by about four percent and could undermine stability in South Africa, opposition spokesmen warned last night.

Commerce and industry were appalled at the extent of the increase.

The chief economist at Barclays Bank, Dr Johan Cloete, said: "They are playing havoc with the economy."

The direct and indirect effects of the huge increase could add 4 percent to the inflation rate which could rise above 16 percent by mid-year.

If GST were increased in the March Budget, "they'll kill the economy stone dead", Dr Cloete said.

'Body blow'

Volkskas economist Mr Adam Jacobs said: "The huge increase is the reflection of the battered rand. It will add greatly to the already severe pressures bearing down on the economy."

The Federated Chamber of Industries, Associated Chamber of Commerce and the Afrikaanse Handelsinstituut all warned last night that the increases would boost inflation.

Both the Motor Industries Federation and the National Association of Automobile Manufacturers of South Africa said the magnitude of the increase came as a a body blow to the motor industry which already found itself in desperate trouble. It would also increase unemployment.

Assocom said there was an urgent need for the authorities to take appropriate action in the management of the economy if South Africa was to withstand any further attack on the already strained rand.

The Progressive Federal Party spokesman on finance, Mr Harry Schwarz, said last night that the ripple effect of the "unjustifiably high" increases would eventually hit virtually every sector of the economy and could fuel unrest.

At a press conference in Cape Town yesterday, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, announced that from today the price of premium petrol would jump by 27,1c a litre, 93 octane by 25c a litre and 87 octane (available inland) by 23,4c a litre.

This means that the pump price of 93 octane fuel will rocket from 56,4c a litre to 81,4c — an increase of 44,3 percent.

Mr Steyn warned that the cabinet would have to consider another price rise of at least 4c a litre in June if the exchange rate did not improve.

He also announced that:

● The pump price for diesel would increase by 25,3c a litre. Diesel goes up by 12c a litre for agricultural and other non-road users and by 20c a litre for wholesale road users who have permits to transport manufactured goods and minerals.

● The price of power paraffin has been increased by 19,3c a litre and illuminating paraffin by 5c a litre.

● Jet fuel costs 17,8c more a litre.

Mr Steyn attributed the need for the increases to the rapidly deteriorating dollar-rand exchange rate but noted that the higher price included an additional 2c a litre for maintenance of the road network. Garage owners would also get 1,2c more for every litre sold.

He estimated the fuel rises would boost inflation by about 2 percent.

However, both Mr Schwarz and the PFP spokesman on mineral and energy affairs, Mr Brian Goodall, said an inflation rate of between 16 and 17 percent could be expected.

Mr Schwarz said that in view of the already poor state of the economy, the highly inflationary increases could spark higher wage demands, greater unemployment and increased socio-political instability.

Mr Goodall said the price increases were the cost South Africa was paying for government mismanagement of the economy.

The Conservative Party called the increases "absolutely excessive" and called on the government to resign.

In a statement issued last night on behalf of the party's joint caucus, the CP leader, Dr Andries Treurnicht, said the increase betrayed the government's lack of feeling for the average citizen.

● City Tramways announced yesterday that it would have to increase its fares from February 1 to cover an estimated R4,1-million increase in its fuel costs.

Tramways PRO Mr Bob Krause said the company had been "shocked" by the increase.

Turned down

Mr Krause said a number of pleas to the authorities to exempt bus companies from the increases or to increase subsidies for transport, had been turned down.

● A spokesman for South African Transport Services said last night they were examining the overall effect of the increases.

The effect of the 17,8 cents a litre increase in jet fuel on South African Airways was one aspect being examined.

Now those major road-building projects will be put into gear again

25/1/85 (55)
S10

By Colleen Ryan

Major road-building projects will soon be resumed following the rise in the petrol price levy which will boost the National Road Fund by about R160 million a year.

"Road projects have come to a standstill all around the country, but now we can look at building roads again," said Minister of Transport Affairs Mr Hendrik Schoeman.

The National Road Fund will collect about R400 million a year, but it is not clear whether extra money will be allocated to Johannesburg's neglected road projects.

Deputy Director-General of Transport Mr Ronnie Meyer said yesterday that the National Road Fund was used to finance national and not urban roads.

He added that local authorities would be expected to finance their road projects through business taxes which would be collected by the new regional councils.

But Mr Schoeman said he was sympathetic to Johannesburg's problems and would investigate whether it was possible to grant extra funds.

Johnnesburg management committee chairman Mr Francois Oberholzer said it was crazy to consider building other projects in the country before roads on the Witwatersrand were improved.

There are at least 28 priority road projects in the Johannesburg area worth about R300 million which have been shelved because of lack of finance.

Johannesburg City Council has repeatedly asked for a share of the petrol price levy.

Last year it invited Mr Schoeman and two other Cabinet Ministers to view the city's traffic chaos from the air.

Mr Meyer said the fund had been increased from 3c to 5c a litre. Major projects likely to go ahead included:

- Road maintenance in the George-Knysna area.
- Improvements to the Natal south coast-north road.
- Reconstruction and widening of the important Warden-Villiers road in the Orange Free State.
- Extending and improving roads in the Eastern Transvaal area.

Sasol making huge profits? No, no

Mr Steyn . . . Sasol must pay dividends and repay a huge debt.

By David Braun,
Political Correspondent

CAPE TOWN — Sasol is not reaping exorbitant windfall profits as a result of this week's massive increase in petrol and diesel prices, says the Department of Mineral and Energy Affairs.

Energy Minister Mr Danie Steyn says people should not lose sight of the fact that Sasol is a public company and must be in a position first to pay dividends to shareholders and second to repay billions of rands borrowed from the Government.

"If the State cannot get that money back from Sasol," says Mr Steyn, "it will have to go back to the public to raise the funds necessary to develop either another oil-from-coal operation or to exploit the gasfields at Mossel Bay."

There have been numerous complaints from the public that as Sasol did not import its oil it was not affected by the weak exchange rate of the rand and therefore the 40 percent increase in fuel prices, which also applied to Sasol, would generate exorbitant profits for the company.

Senior officials in the Department of Mineral and Energy Affairs say, however, that Sasol's profit margin after taking into account the new fuel prices was very reasonable and well within what was normally acceptable in the private sector generally.

"One should not forget that Sasol has much higher cost margins than the oil companies which refine imported crude," said an official.

"For years the State has had to subsidise Sasol.

"This latest price increase, in fact, has meant that the 3,6c subsidy on a litre of Sasol fuel will no longer be paid by the taxpayer.

"Sasol also did not get any benefit when the fuel price was decreased in 1983."

Criticism has been rejected by the department that a chart comparing the South African petrol price with the price in other countries was a distortion because the weak rand automatically made foreign prices appear very expensive in South African currency.

While it was true that the rand at, say, 45 American cents made foreign fuel prices dear in South African cents, it was also true that the weak rand had made the South African price very high, the department said yesterday.

"If the rand appreciates to, say 80c, then the prices on the chart would all come down in South African currency," said a senior spokesman.

"But then so would the South African fuel price as the cost of importing crude would be nearly halved."

The Government would in such circumstances reduce retail fuel prices accordingly, he added.

How you can save fuel and really drive well

By Zenaide Vendeiro, Transport Reporter

The petrol price rise is expected to bring an increase in sales of fuel-saving devices.

And experts have warned motorists of pitfalls concerning them.

Mr Fred Bothma, the Automobile Association's technical services executive, says fuel-savers such as exhaust extractors, spark intensifiers and fuel-line pressure regulators did not work on cars which were properly tuned.

He added: "They may achieve a fuel saving on vehicles that are not properly tuned because they are correcting an imbalance."

Car manufacturers, said Mr Bothma, spent millions of rands each year on research and development and over the years had achieved greater fuel efficiency.

Developments included reducing body mass, making engine components lighter, changing gear ratios and adding extra gears, improving the body's drag coefficient, introducing thermostatically-operated engine cooling fans and developing radial tyres and thinner oils.

Mr Bothma's fuel-saving tips:

- The car must be in good mechanical condition; otherwise you are throwing petrol away. Have it tuned properly.
- Take the car to a well-equipped garage and ask for a gas analysis. This will tell you whether the ratio of air and fuel flowing into the engine is correct.
- Check that the brakes are not binding.
- Check that the wheels are correctly aligned.
- If you have to replace tyres, buy radials. They are more flexible and reduce rolling resistance. Check that tyres are properly inflated.
- Use the thinnest oil recommended for your car ... one with the lowest viscosity.

Correct driving habits can save fuel, says Mr Bothma.

"You should have an exceptionally light foot and learn to anticipate traffic patterns," he says.

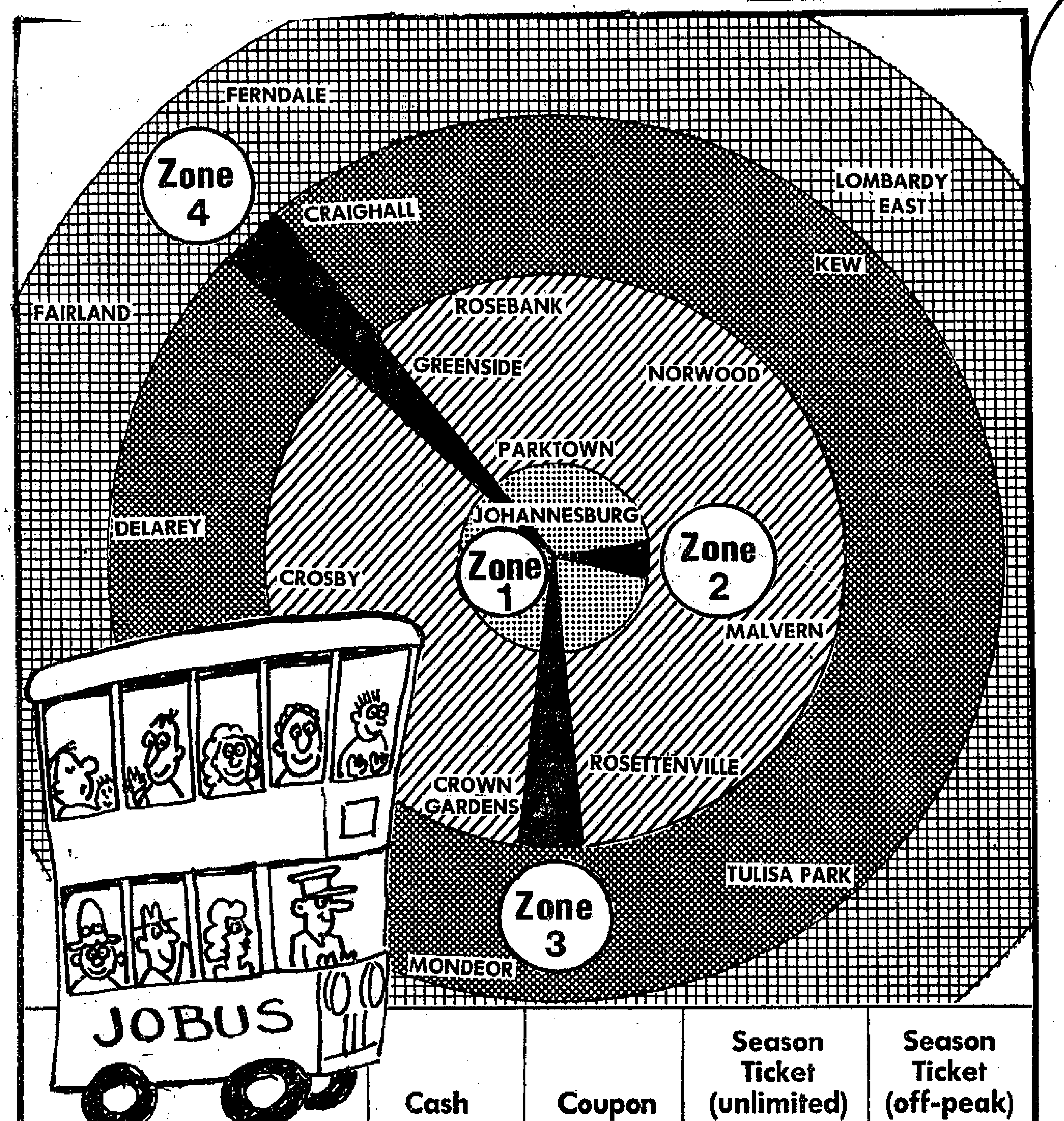
"It's no use going like hell for a few blocks and then having to brake suddenly at a red light. That wastes petrol.

"And some motorists don't realise the tremendous amount of fuel lost when they slow unnecessarily, perhaps to satisfy curiosity about a minor accident or a car pulled over on the side of the road.

"Remember that the faster you accelerate, the more fuel you use; and the faster you drive, the more fuel you use.

"Avoid short, unnecessary trips. The car can use up to three times more fuel in the first four or five kilometres.

"Being considerate and sensible saves fue for you and everybod else."



		Cash	Coupon	Season Ticket (unlimited)	Season Ticket (off-peak)
Zone 1	░	55c	35c	R15	R9
Zone 2	▨	75c	50c	R21	R13
Zone 3	▓	90c	60c	R27	R17
Zone 4	▦	R1	80c	R34	R21

What it costs to go on the bus

Patronage on Johannesburg buses dropped by almost two million passengers in the last six months of 1984 against the same period in 1983.

This represents a drop of 6,6 percent, but Johannesburg City Council hopes higher petrol prices will attract commuters back to buses.

Transportation committee chairman Mr Danie van Zyl said the council would maintain present fares until the end of the financial year in June.

Municipal Reporter

The transport department carried about 25,9 million passengers from July to December 1984, compared to 27,8 million in the previous year, said department spokesman Mr Gert Tighy.

He added that the decline was most evident during off-peak periods and was largely a result of unemployment and the recession.

"The most we can hope for in 1985 is to make up for the 6,6 percent loss," he went on.

Mr Tighy said the fuel price rise would add R600 000 to R700 000 to the Johannesburg transport department's fuel bill for the current financial year.

The total fuel bill for the year would be about R3,9 million.

Next year's fuel bill would total R4,5 million.

"Fuel accounts for about eight percent of our costs," said Mr Tighy, "but in the next financial year this will increase to 12 percent."

ARGUS 25/1/85 55

Higher fuel price puts Sasol shares on winning ticket

Argus Correspondent

DURBAN. — A bullish view of Sasol shares was evident in the market before and after this week's announcement of a 40 percent increase in petrol prices.

Sasol's share price peaked at 600c before dropping back to 575c at the close in Johannesburg yesterday as investors continued to believe the chemicals company will be a net gainer from the rise.

The move took Sasol shares to a historic dividend yield of 5,7 percent and a prospective yield estimated at 6,8 percent.

The usually reticent company was true to form yesterday, with nobody available to throw light on the impact of the price rise on profits.

However, at least two straws in the wind have indicated that Sasol stands to gain:

- Earlier this week Sasol said it had agreed to to forgo a 3,6c a litre levy rebate on fuels made from indigenous raw materials, with effect from January 1.

The rebate, it said, was more than compenstated for by a rise in producer prices due to the rand's fall against the dollar.

The rebate was introduced in 1979 as an incentive for the indigenous fuel industry. The industry and the Government had agreed on the possible circumstances under which it would be re-introduced in the future, but gave no details.

- The company has confirmed indirectly that the rise could lead to earlier repayments of debts and to the ability to look at further investment ventures.

Production costs and the precise pricing mechanism of Sasol fuels are not disclosed.

OPERATIONS MIX

Complicating assessment of prospects for shareholders is the involved "mix" of operations, with crude oil refining, oil-from-coal and various other chemical and fertiliser operations all having a say.

In the past, lower world crude oil prices have tended to squeeze Sasol profits but this has been compensated for over the past year or two by a relatively more rapid decrease in the value of the rand and by increased production on the oil-from-coals side (at the expense of crude oil refining).

In the 1984 annual report chairman H P de Villiers, for example, said: "Oil prices decreased by approximately 15 percent in the latter half of 1982/3 and had a significant impact on profits. However, a slightly weaker rand on average and materially higher production levels of the oil from coal division more than compensated for the lower international prices."

Sasol is likely to be on a winning wicket both as a supplier of fuel and in the chemicals and fertiliser markets where its competitors often face sharply increased import bills.

Prior to the latest increase, market watchers had been anticipating earnings of 86c a share and a total dividend of 39c a share for Sasol in the year to June 1985.

This target should now definitely be achieved and even exceeded — but, as indicated, much of the benefit could rather be channelled into investment and debt redemption rather than dividends. In this case shareholders will still reap the benefits, but over a longer period.

Multi-million rand retirement villages for city

CAPE TIMES 25/1/85

55

Escom theft: Bid to draw R8,4m spoils?

Own Correspondent

JOHANNESBURG. — "Dr" Gert Rademeyer, the man who allegedly stole R8,4-million from Escom, was still using electronic means to attempt to move the money out of Bangkok and Swiss accounts on Wednesday morning.

Escom confirmed yesterday that the man they initially thought was too highly qualified to employ was using a telex machine sourcing his messages in Los Angeles to move money from Bangkok and Swiss accounts which have been frozen by court order.

Escom officials also said they believed Mr Rademeyer was in California and they were confident he would be extradited to face criminal charges in South Africa.

It emerged at the press briefing that Mr Rademeyer may be in Los Angeles.

As a result of the Rademeyer affair, Escom has also asked the South African Police and "security authorities" to check personnel working in "security areas".

In a press conference yesterday Escom confirmed that:

- Mr Rademeyer had fled South Africa within hours of opening a bank account in Berne (Switzerland) at 3.05pm on December 3 last year and that he had persuaded a colleague to countersign cheques which he had simply initialled.
- He allegedly returned to South Africa on December 31 (after he had left the country supposedly on leave) and paid R96 000 in Swiss franc notes into an account allegedly held by his wife.
- The initial amount which it is alleged was stolen was moved from a New York bank account which the commission's lawyer, Mr B F Rheeder, said might have been used to pay overseas technicians.
- The only checks made on Mr Rademeyer's background were verbal by telephone, and no written proof was requested or required.
- It had brought a court action against Mrs Familia Rademeyer because the commission beieved it could recover money from her.
- The commission also believes Mr Rademeyer is overdrawn to the tune of R20 000 at his bank.

According to Dr George Lindique, who is in charge of personnel at Escom, "Dr" Rademeyer put in his application together with various documents and produced an Australian passport.

Mr Rademeyer had applied to the commission in the Eastern Transvaal in 1979 but the management there had thought that he was too highly qualified for the job and referred him to head office.

"It was decided that we would employ him and that he had the necessary qualifications.

"We spoke to the managing director of the company which employed him in Sydney (Australia) at the time and again since, and he says Dr Rademeyer is a very efficient and capable person."

FUEL GST

'STEALTHY
BONANZA
FOR GOVT'

CAPE TIMES
25/1/85

55

THE huge fuel increases announced this week represent "a tax bonanza by stealth" for government coffers, the Progressive Federal Party has charged.

This was because the government's increased receipts from GST on fuel sales would range between R160-million and R200-million a year, a PFP spokesman on mineral and energy affairs, Mr Roger Hulley, said in a statement yesterday.

The government's total income from GST on fuel during the 1983/84 financial year when GST was 6 and 7 percent was R241,6-million.

This figure would have increased with the rise in GST to 10 percent, and with the latest price increases, the government's annual receipts would jump to about R500-million.

Mr Hulley said this massive increase would accrue to the government at the expense of the consumer.

"The point is that the fuel-price increase which has been announced will not all go towards offsetting the increased cost of importing crude oil — a substantial slice will simply be paid over to this government through the 10 percent GST mechanism.

● Big rise in cost of boat fishing
● Govt must go, say angry callers
PAGE 11

"This is a further tax rip-off of the consumer."

Mr Hulley said the government should have applied this extra revenue towards reducing the huge extent of the latest price increase.

- The Transvaal Indian Congress (TIC) has warned that the petrol-price rise created a situation with all the potential for further social and political upheaval.

It urged commerce and industry to be cautious about passing on the increase to the consumer.

In a statement issued yesterday, the TIC said it viewed the massive rise with "the greatest shock and dismay".

The TIC said the blame lay not merely with "the government's grave mishandling of the economy" but was also the result of its desperate attempts to bolster the homelands policy, to meet the ever-escalating costs of apartheid and to provide for the "ruthless suppression" of SWA/Nambia.

Further rises

Meanwhile, South Africans yesterday braced themselves for a bombardment of further rises — including foods, public services and transport.

While shockwaves swept through all sectors of business and industry, South Africans were told:

- Food prices across a broad spectrum would go up — some almost immediately.
- South African Transport Services tariffs, including rail passenger and air fares, were to be raised.

The PFP's finance spokesman, Mr Harry Schwarz, emphasized the need for extreme caution in raising urban commuter rail and bus fares.

Referring to the violent reaction in the past to higher transport fares for black commuters, he said: "This is a highly-sensitive and disturbing aspect of the higher fuel prices — the effect on black workers' transport costs."

Gas also up

- The price of gas, oil and other petroleum-related products increased yesterday.

Liquified petroleum gas (LPG) went up by 21 percent, and popular grades of lubrication oil by a similar percentage.

Mr Chris Phillips, general manager of Easigas, said consumers would pay 23c more per kilogram of gas.

55

25/1/85 Star

Salem trial: 3 refuse to appear

The Star's Foreign News Service

HOUSTON — Three South African officials have refused to travel from London to Houston for the Salem oil tanker trial unless they are given prior assurance they will not be questioned about their country's secret dealings to obtain its oil supplies, lawyers said.

Defence lawyers, who claim those accused in a $56 million (R128 million) swindle against the South African Government and several private companies, were themselves the victims of international conmen, are opposing efforts to limit testimony.

The trial of Houston businessman Mr Frederick Soudan (41) and his cousin and brother-in-law, Mr Abdul Wahab Al Ghazou (47), resumed on Tuesday after a week's adjournment.

Lawyers representing the three South Africans — Mr D F Mostert, Mr Jan Bredenkamp and Mr Fanie Naude — say they will not come if they are to be questioned about South African oil transactions.

The prosecution wants the South African officials to give evidence about a 1979 deal allegedly made with Mr Soudan to purchase 1,4 million barrels of stolen Middle East oil which was then sold to South Africa.

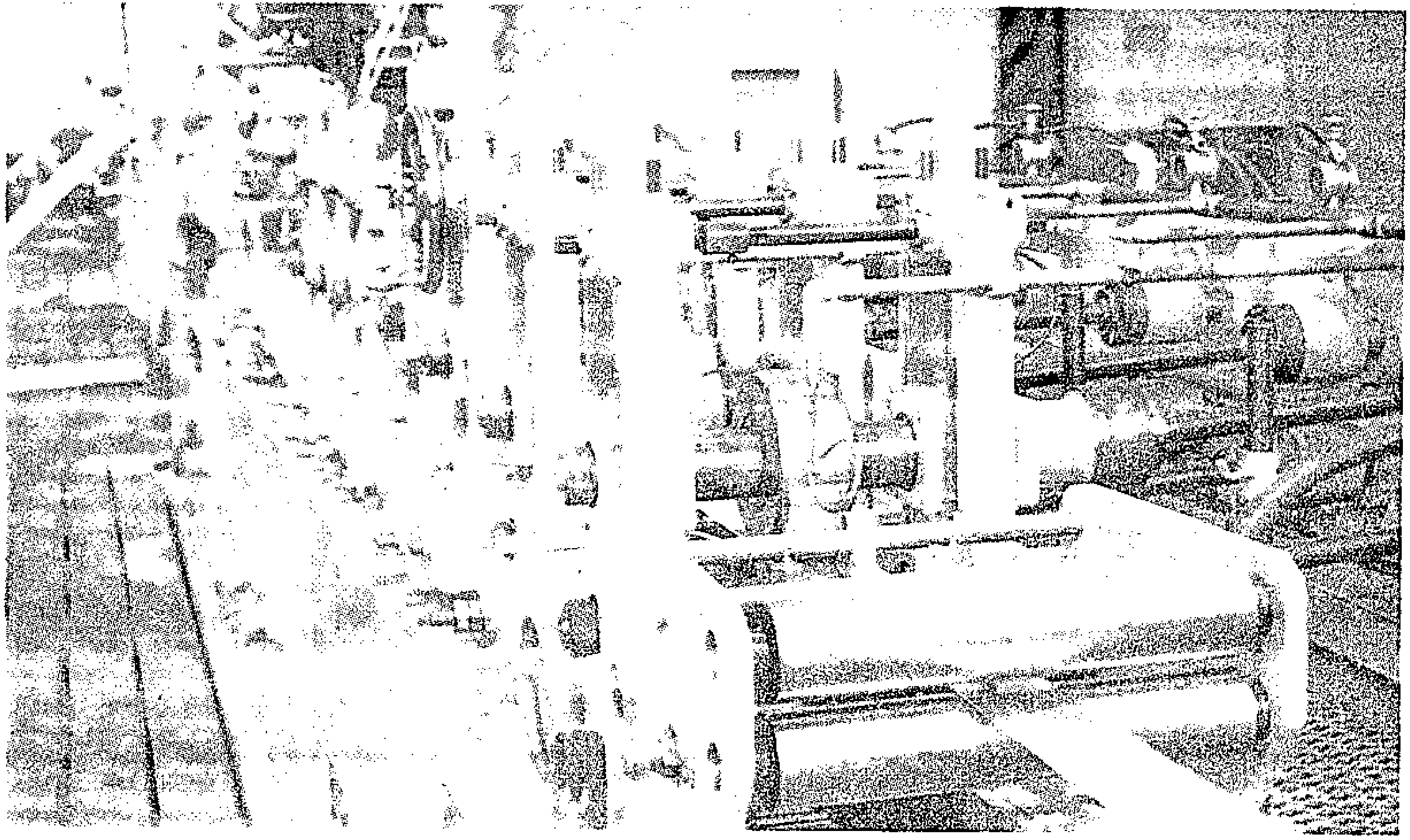
The oil was unloaded at Durban and the tanker Salem was later scuttled off the coast of Senegal to make it appear the oil had been lost at sea.

RDM 25/1/85 (55)

Quick decision needed on synthetic fuel

SA could make all its own oil within 5 years

By DAVID FURLONGER
Industrial Editor



Tosa, a leading hot rolled tubing producer, has launched a major drive for a share of the cold rolled tube industry following the commissioning of its R4m Vereeniging mill. The picture shows steel tube being manufactured at the new mill.

SOUTH AFRICA could be self-sufficient in liquid fuel within five years.

Analysts believe there are enough stocks of coal and natural gas to more than satisfy the country's fuel needs. But they say it needs decisive Government action to take advantage of them.

This week's sudden rise in petrol and diesel prices is expected to lead to soul-searching in both Government and private sectors on whether there should be further investment in synthetic fuel processes.

Although Sasol supplies an estimated one-third of South Africa's fuel needs with its oil-from-coal process, the latest price increases demonstrate the country's continued vulnerability to external forces such as the oil boycott and the strength of the dollar.

However, say the analysts, such vulnerability is unnecessary. There are enough natural resources both on land and around the coastline to more than satisfy SA's liquid fuel needs.

They estimate that the giant Kudu gas field, off the coast of South West Africa, is rich enough to provide between 40% and 50% of our fuel needs.

One analyst said yesterday: "Kudu could be up and going within three or four years. Then you add another year for the politicians to waste time, and you're still ready in five years."

Such swift development would be dependent on Kudu's gas being piped straight to existing refineries near Cape Town.

The analysts admit, however, that the Government and other potential Kudu investors are worried at the prospect of spending millions of rands on establishing the field, only to see it fall into others' hands when SWA becomes independent.

"You have to accept that SWA will go one day," said an analyst. "On the other hand, whoever becomes the government there will have to deal nicely with Kudu. Natural gas doesn't travel well, so the only real market for the field is South Africa."

The Mossel Bay field, off the Southern Cape coast, is also a potential source. With its resources alongside those of Sasol and Kudu, "we could create between 90% and 100% of our fuel needs in this country from known natural resources. And that is without taking into account the Mozambique gas fields south of Beira, which could be three times as big as those at Mossel Bay".

Turning gas to liquid fuel is already a proven process overseas, notably in Australia and New Zealand. The Mobil oil company is also understood to have developed such a process.

Experts point out, however, that any producer of liquid fuel from gas must find a market for chemicals arising from the process.

"Sasol makes fuel but it also markets a lot of chemicals arising from its operation. It would be very difficult to set up a fuel-from-gas operation without also finding a market for the chemicals."

Even so, natural gas as a source of liquid fuel still appears to hold the edge over oil-from-coal.

Besides Sasol, several other major corporations have explored the possibility of entering the oil-from-coal industry.

Gencor admitted some years ago it was looking into it but added: "This is a long-term project." Anglo American Coal Corporation (Amcoal) has also been involved in research with Shell and AECI.

Anglovaal is still keeping its options open in the US, where a Carolina coalfield is the base for continued research into creating methanol, a liquid fuel base.

Officials of these companies were not available yesterday but sources say they are still some way from a decision.

Any new synthetic fuel plant would cost billions of rands and take three or four years to reach the production stage, and there is no guarantee that the same economic conditions will exist then.

Sasol, too, is holding back from further expansion, despite a R180m streamlining programme that is expected to increase synthetic fuel production by 6% in the next two years.

With a R1,5bn debt outstanding for the purchase of Sasol Two from the Government, a senior spokesman stressed yesterday that there were no plans at present to build a fourth Sasol plant.

Sasol, in fact, is one of the few organisations benefiting from the latest round of fuel price increases.

Because its fuel is produced locally, it is unaffected by the rand-dollar rate so, in theory, has no need to raise its price.

However, under an agreement with fuel importers, it is required to raise its price to the same level as competitors.

Bid to extradite Rademeyer from California

W/E ARGUS 26/1/85 (55)

Escom cash — call to US

Dr Gert Rademeyer

Weekend Argus Correspondent

JOHANNESBURG. — Police here are seeking the extradition of runaway former Escom assistant chief accountant Dr Gert Johannes Rademeyer, believed to be in Los Angeles, California.

Dr Rademeyer's hideaway was discovered on Thursday when he tried to withdraw money from his frozen Bangkok bank account.

He disappeared last week shortly before Escom announced that one of its officials had transferred R8 350 000 of its cash illegally into a Zurich bank account.

Brigadier I van der Vyver, head of the police Commercial Branch, said late today: "There are negotiations and inquiries on the go. We have contacted people in the United States about the Rademeyer case.

Missing R200 000

"We are trying our utmost to locate him. Our inquiries must continue and we are getting co-operation from the Americans."

Most of the cash Dr Rademeyer allegedly transferred for his own pocket is now frozen, but more than R200 000 is not accounted for.

Dr Rademeyer started at Escom in October 1980 as assistant chief accountant.

On November 3 last year he opened a Swiss bank account. A month later, when his boss was abroad, Dr Rademeyer persuaded a senior accountant (Escom refuses to identify him) to co-sign a "secret and urgent" transfer of $3,64-million from an Escom account in New York to the private account in Berne.

Convictions

When Escom's worried personnel department researched Rademeyer this week it found a "person of that name" had convictions for fraud and theft.

But his previous employer in Sydney, like many South Africans, was stunned by the R8,4-million theft.

"I don't believe it," he said.

SA to step up fuel output as Sasol lags

(55) S. Times

27/1/85

Business Times Reporter

IN spite of the world oil glut and fears that crude might fall to $10 a barrel from the current $29 — South Africa is to increase its indigenous fuel production.

Louw Alberts, Director-General of Mineral and Energy Affairs, told Business Times yesterday that SA had a strategic policy to produce "above a certain fraction" of its fuel needs.

Mossel Bay

This, and the fuel stockpile, which was used for the first time last year, would protect SA from embargoes.

Fuel consumption, said Dr Alberts, had risen by 50% since Sasol 2 and 3 were planned. Sasol was now producing less than the required fraction of SA's fuel needs.

This meant that not only the Mossel Bay project but synthetic fuel schemes, including proposals by AECI, Anglovaal and Gencor, would receive serious consideration.

"We are looking at three proposals apart from Mossel Bay and I would be surprised if one or two schemes were not completed in the next decade.

"Even though it has forgone its 3,6c a litre subsidy, Sasol will make windfall profits out of the latest fuel price. These will enable it to pay off loans to the Government. The Government can use this money to fund further projects."

Determined

Dr Alberts said a decision on Mossel Bay would be taken in mid-year after the multi-million rand feasibility study was completed.

The decision to step up indigenous fuel production, even though synthetic fuel cost more than imported crude, was purely strategic.

Even though only a low rand could make these projects economic, the Government's determination to increase indigenous production did not indicate a lack of confidence in the rand.

55 ~~[illegible]~~ ~~[illegible]~~

30% profit lift for garages

S. Times 27/1/85

Business Times Reporter

GARAGE owners will receive a 30% profit boost.

A breakdown of the petrol price shows that garages can rake off 5,2c a litre compared with only 4c before.

The new price gives them a margin of less than 7,5% on the 69,3c they pay for a litre of petrol, but it will mean a substantial increase in income if sales remain unchanged. Sales are expected to recover after a temporary fall.

But the garage men are not happy. In the past, their margin has been as high as 8,4%. A spokesman for the Department of Mineral and Energy Affairs says that the profit margin for garages will be investigated in March.

Accepted wisdom when the margin was 4c was that a garage must sell 100 000 litres a month to make a profit on petrol.

This is the national average. Such sales would yield revenue of R4 000. Now 100 000 litres brings in R5 200, from which wages of pump attendants, rent and maintenance and depreciation must be subtracted.

The department believes that there are too many filling stations and has a plan to control the proliferation of garages.

Fuel-price increase adds to toll of blows for faltering economy

The day the bubble burst

55 S. Times 27/1/85

THURSDAY'S 40% increase in petroleum prices has shattered confidence in the South African economy. It comes on top of successive economic blows, including:

- Huge rises in taxation, interest and other living costs
- Small wage and salary increases
- Soaring bankruptcies and widespread unemployment.
- Disastrous agricultural seasons.

By David Carte

Dearer fuel will take an estimated R4 000-million a year out of the pockets of South Africans. It will push the inflation rate towards 20% in the next few months and keep interest rates at record levels.

Debt doubled

Because of the plunging rand, SA's foreign debt in rand terms has doubled in the past year (see page 7). More and more observers are talking of a "banana republic" and only the low rand has prevented a tide of emigration.

Economists say South Africans have never seen their economic welfare deteriorate as suddenly as in the past year.

They warn that if the dollar gold price declines with softening world oil prices, worse could lie ahead. This would give another twist to the vicious stagflation spiral.

The economic decline has contributed to political unrest and fears are that it will worsen as unemployment mounts.

Business Times economist Rex says that this time — unlike after Sharpeville in 1961 and Soweto in 1976 — SA's problems are firstly economic and only secondly political. He argues that they are largely of SA's making.

Gold prop

He says they stem from excessive dependence on gold and primary commodity exports — the essential structural fault in the economy. While other one-product countries have made strenuous attempts to diversify their exports, says Rex, hardly one economic commentator here has bothered to address the question.

"Our long-term weakness was identified by the Reynders Commission in 1972, but no Minister of Finance has tried to reduce our gold enslavement with an export drive of manufactured goods a la Japan, South Korea and Taiwan."

Economists say the evidence that SA's problems stem from economic mismanagement and not only from the lower gold price is that the rand has fallen twice as much as the gold price. Ari Ulliel says that in other currencies gold has fallen only slightly.

The crippled rand symptomises a lack of confidence in the authorities and their allegedly free-market policies.

Apart from a six-month rally in 1982, gold has been falling since early 1981. It has done so for a clearly identifiable reason — the industrial economies have re-established monetary and fiscal discipline.

Extravagant

The South African authorities have protected extravagance in the public and private sectors with stimulative policies and by allowing the rand to plunge.

The public service payroll last year rose 28% and its numbers by 20 000.

Gold, the authorities reasoned incorrectly, would eventually come to the rescue. It has not and economists warn that it is not likely to.

Because of sacrosanct "free-market" policies, the authorities have depended exclusively on interest rates to cool the economy. These have not worked because rates were not permitted to reach the politically unpopular levels required by real market forces — 30% and more. Instead, there has been ready accommodation of the banking system.

Non-gold exports are rising in volume and rand terms and the balance of payments

☐ To Page 3

☐ From Page 1

is narrowly back in the black. The higher petrol price will cause consumption to fall and thus result in import savings. This will assist the balance of payments further.

Economic observers say this could be the basis of recovery — but not if the gold price falls another $50 an ounce. In this not-inconceivable scenario, they warn that SA can expect hardship for years rather than months.

Controls

Rex advocates a long-term strategy of encouraging manufactured exports with an all-out drive, particularly now that they are so competitive because of the rand.

Another priority should be close examination of political spending and reduction of the Government's role in the economy.

For the short term, he advocates temporary direct controls over imports, if this is possible in terms of the General Agreement on Tariffs and Trade, and tighter control over overnight accommodation to the banking sector.

The rand should be quoted not against the dollar but a basket of currencies of SA's trading partners.

Other analysts call for tax relief on individual savings. For many savers a 20% interest rate boils down to 10% after tax, which is no compensation for inflation.

Until now, the rand has taken the brunt of SA's economic misfortune. These measures could shore it up and help roll back the inflationary tide.

Fuel-price increase adds to toll of blows for faltering economy

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55 S. Times 27/1/85

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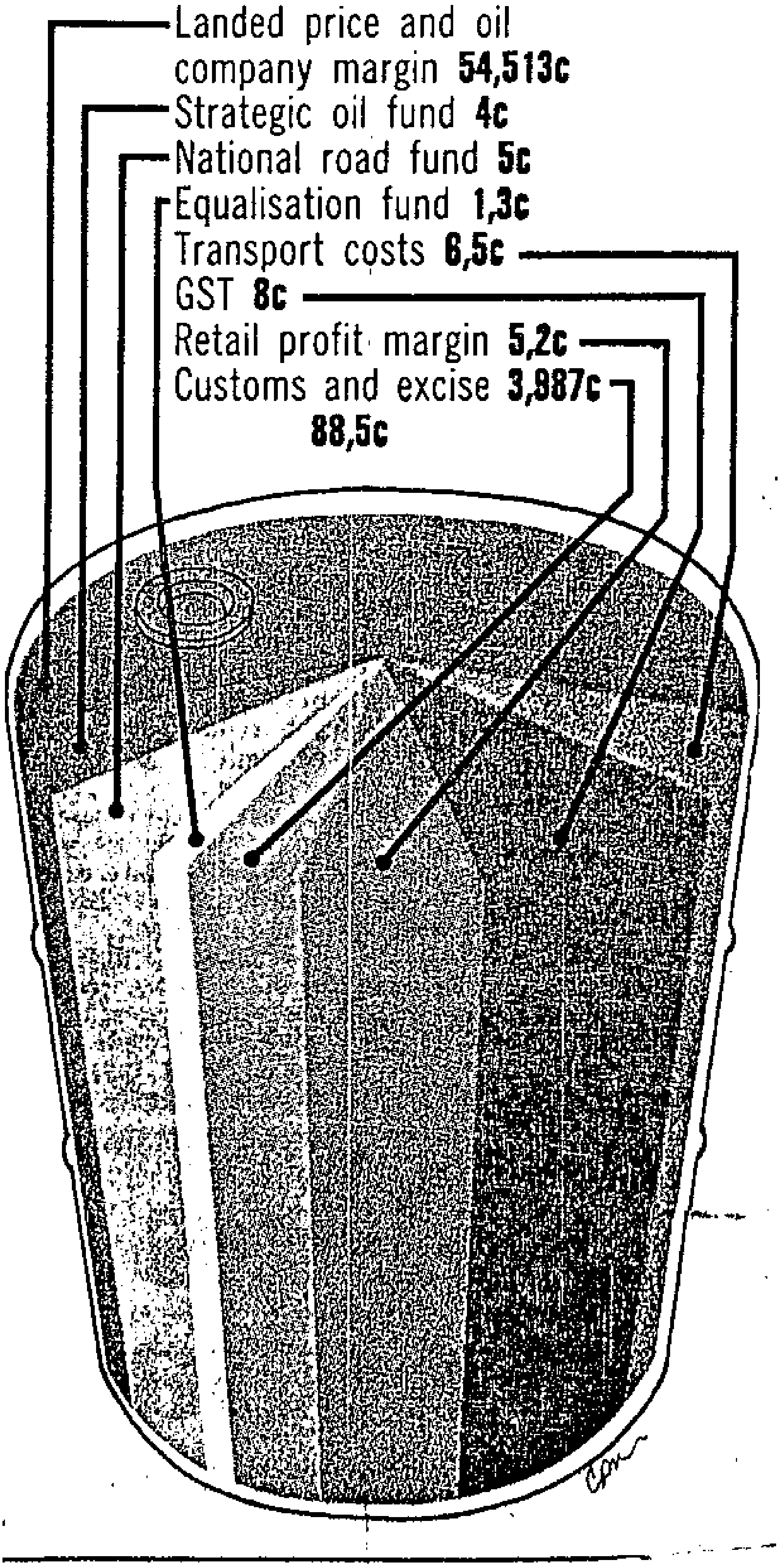
How the litre is shared



S. Times 27/1/85

Fuel blow to farm input costs

Business Times Reporters

THE increase of 12c a litre in agricultural diesel fuel will take R162-million a year out of the farming community, says the South African Agricultural Union (SAAU).

When the diesel subsidy of 4c/*l* is removed in June it will cost farmers another R135-million a year.

At the current price of R220 a ton, it costs a farmer R440 to harvest a hectare of maize and his return is R482, leaving a profit of R42.

Subsidy

The fuel-price increase will boost maize farmers' costs a hectare from R70,50 to R88, reducing the profit at current prices to R24,50.

Hennie Nel, general manager of the Maize Board, says it is unlikely that a maize subsidy will be paid this year. It has been suggested that a maize price of about R300 will be demanded by Nampo, an increase of 36%.

Wheat farmers are in a slightly better position. Dennis van Aard, general manager of the Wheat Board, says the fuel-price rise will lift input costs by 3% immediately, with bigger increases to follow.

"Last season we increased the wheat price by only 8,5% compared with the farmers' cost increases of 16%. The average return on a hectare of wheat is R375 compared with a cost of R303,5, leaving a profit of R72,5."

A 3% increase in total costs will push up input costs to R394 a hectare, so that farmers will make a loss of R19 a hectare at current prices.

The average wheat price is currently R260 a ton and seems likely to be raised to more than R300.

2 Cape Times, Monday, January 28, 1985

1985

Escom to recover millions

53

Own Correspondent

JOHANNESBURG. — Within the next six months Escom expects to recover most of the R8,4-million allegedly swindled by its former assistant chief accountant Mr Gert Rademeyer, now in hiding in Colonado, California.

Escom's legal advisor, Mr Ben Rheeder, said yesterday that legal proceedings to recover the money were well under way.

Escom obtained urgent court orders to freeze the money, which has been deposited in various bank accounts in Berne, Vienna and Bangkok.

Mr Rheeder said Escom-appointed attorneys in Switzerland and Austria were already instituting action, while an attorney in Bangkok was to be instructed this week to start legal proceedings.

However, criminal proceedings cannot be taken against Mr Rademeyer in Austria, because his transfer of money from the Swiss account to accounts in Vienna does not constitute a crime.

In this case civil proceedings to reclaim the money can be taken and Escom has appointed an attorney to deal with the matter.

Escom has applied to the court to have a temporary trustee appointed who will defend Mr Rademeyer.

Mr Rademeyer — wanted by Interpol — has offered to return to South Africa with the money in exchange for indemnity against prosecution.

This offer, made through attorneys acting for his wife, has been turned down by Escom officials, who refuse to negotiate with him.

In a further development, Escom has admitted that it has written off R57-million in trade losses because of political pressure exerted on South Africa, according to a report in the Sunday Express.

Escom's acting legal manager Mr A A Loots said these losses had not been reflected in its books or publicly disclosed because it had to be careful not to contravene the Atomic Energy Act or the Official Secrets Act.

Meanwhile in a telephone call to the Sunday Express, Mr Rademeyer denied his guilt and accused Escom of making him the victim of a massive cover-up of financial irregularities.

SASOL

Fuelling up

FM 1/2/85 (55) ([illegible])

Government and Sasol's management are undoubtedly correct when they stress that Sasol will not benefit from last week's increase in the petrol price. But from the investors' point of view, that is beside the point.

What is more important is that Sasol's earnings have been boosted enormously by the rand's fall against the dollar, and should also be helped by improved efficiencies and de-bottlenecking at the plants. As shown by strong demand for the share, the market expects that Sasol will report stronger profits and cash flow. In heavy trading last week, the share climbed from its 12-month low of 435c to 585c.

Sasol normally sells all the coal-based petroleum products it produces. It refines a significant amount of crude oil, but the main determinant of its profits is the producer prices. These are linked to the rand equivalent of the international oil price, which is quoted in dollars. So, despite the fact that the raw materials used in Sasol's synfuel plants are sourced locally, the group always does well when the rand weakens against the dollar. The opposite happens when the rand firms against the dollar.

The more than 50% drop in the rand in the past year caused the price at which Sasol sells its petroleum products to the distributors to increase too. As there are some fixed elements in the price, such as transport and excise duty, the rise would not have been in line with the rand oil price, but it would have been very large.

The retail price is controlled, so a higher rand price of oil results in an under-recovery by the petrol retailers, who also import crude oil. Sasol, on the other hand, over-recovers. That, at least, is how the slate normally works when the fluctuations in the rand are not unduly large. This time the cost was borne by government, which subsidised the industry by selling from strategic oil stocks.

Regardless of who carried the cost, though, Sasol has obviously gained substantially from the lower rand. This should more than compensate for the 14,7% fall in the oil price, and the suspension from January 1 of the 3,6c/*l* levy that had subsidised Sasol since the group went public in 1979. Of course, when the rand is overvalued, Sasol's income falls, as happened in 1981.

For more than a year now, the large Secunda plants, Sasol 2 and Sasol 3, have been fully on stream and have been running at, or above, theoretical capacity. This, and a de-bottlenecking programme planned to run over the next year or so, will have further increased production efficiencies.

At end-June last year, total group debt stood at some R2,3 billion. Included in this is the R1,5 billion borrowed from government during the acquisition of Sasol 2 in November 1983. With the interest on this loan calculated at the rate on five-year Escom loan stock plus 1,5%, it must now be close to 20%. There is, therefore, every incentive for Sasol to reduce its borrowings as quickly as possible. Much of the cash bonanza from the rand is likely to be used to repay debt, and should speed up the repayment schedule considerably.

At the very least, interest payments for the six months to end-December will be lower than expected. Because the public may assume that Sasol is raking in windfall profits as a result of the higher petrol price, Sasol would probably prefer to play down its surge in profits. But the interim report in March will inevitably show large growth on last year's earnings of 36,3c. The dividend is unlikely to rise in line, but an advance of about 18% to 16,5c is probable.

Andrew McNulty

Koeberg recruitment under fire

55

US questions Escom's 'secret' bank account

Star

2/2/85

by

Michael Chester and Stephen McQuillan

The South African Government has been asked by the US State Department to provide an assurance that Escom has not used its bank account in New York as a secret fund to recruit American technical experts for the Koeberg nuclear power station outside Cape Town.

Escom has also been asked by the US Ambassador in Pretoria to ensure that all 38 American experts employed at Koeberg complete a formal questionnaire that amounts to seeking approval from Washington of their work in South Africa.

The recruitment of American nuclear technicians has become a subject of diplomatic exchanges following news coverage of the R8,4 million swindle that has been exposed at Escom.

Escom blames the storm on inaccurate American news reports. "First of all, none of the Americans recruited for the Koeberg project is working here in contravention of US legislation relating to nuclear plants," said a spokesman. "The recruitment has all been above board.

"The role of our New York bank account has been raised in error due to inaccurate reporting in a Washington newspaper that implied it acts as a strategic fund to finance recruitment in the US. That is utter nonsense.

"Our bank account in New York is one of several that we maintain overseas to handle international trade deals. It's as simple as that.

"But in all the furore about the Escom swindle, its role has come under suspicion as a result of the misquoting of officials in a Washington newspaper report.

"It can be categorically denied that funds in the foreign accounts of Escom, which does much business on the foreign money markets, are used or were used for defraying costs of recruitment in Europe or in the United States".

The spokesman also emphatically denied that Mr Gert Rademeyer, the former assistant chief accountant who is the prime suspect in the R8,4 million scam, had ever been concerned in overseas recruitment, as had been incorrectly implied.

"He has never been on a single overseas assignment on behalf of Escom", he said.

Despite the Escom denial, Congressional investigators are trying to come up with their own evidence on the New York account and the possibility that several of the US technicians at Koeberg may be violating American laws on technology secrecy.

14 Weekend Argus, February 2 1985

55 ~~260~~ ~~357~~

Escom swindle fallout

US doubts about 'secret fund'

Weekend Argus Correspondent

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Secret deal led to huge Escom loss

55

S. Times

3/2/85

A SECRET operation mounted 10 years ago to obtain hundreds of millions of rands worth of vital nuclear fuel for the Koeberg nuclear reactor was behind the reported Escom "loss" of R57-million.

The plan was put into operation in 1974 — two years before the contract was signed for the construction of the power station — because of the then eight-year delay in having uranium enriched overseas.

By EUGENE ABRAHAMS

The R57-million was lost after the American Congress during the Jimmy Carter era introduced legislation prohibiting the supply of nuclear fuel to several countries, including South Africa.

However, despite this, South Africa is still obtaining nuclear fuel through the highly-successful secret operation from certain other countries.

The R57-million loss — which was written off by Escom — was disclosed last week by fugitive Escom accountant, Gert Rademeyer, wanted for misappropriating R8,3-million of the corporation's funds.

Rademeyer, who was this week reported to be in Australia, had claimed that he was used as a scapegoat to cover mismanagement at Escom, and cited the "loss" of R57-million as an example.

In 1974, Escom entered into two contracts with the US Department of Energy (DOE) to enrich unranium shipped in cake form from South Africa.

The enriched uranium was to be shipped to France, where the manufacturers of the Koeberg nuclear plant were to have converted it into ceramic pellets which were to be put in the plant's fuel assemblies — the reactor's fuel.

However, in 1978 the US Congress passed legislation prohibiting the supply of nuclear fuel to countries who were not signatories to the Nuclear Arms Non-proliferation Agreement.

Despite the introduction of this legislation, the DOE still expected Escom to honour the enrichment contract it had signed.

The first shipment of unenriched unranium was delivered to America in 1981 and a further shipment was sent the following year.

(Although South Africa announced in November, 1977, that the Atomic Energy Board had developed its own unranium enrichment plant at Velindaba, this plant did not, and still does not have the capacity to meet the Koeberg requirements).

A large percentage of the uranium was enriched at the DOE plants, but in terms of the new legislation the American government would not grant Escom an export licence to send it to France.

Although Carter had been replaced by President Reagan, protracted talks with the American authorities yielded no results and three years ago Escom and the DOE decided to cancel the contracts.

Escom was then left with no alternative but to try to sell its enriched and unenriched uranium in America on the open market.

Meanwhile, it used alternative sources available from its secret operation to supply enriched uranium to France.

The American-stored uranium was sold periodically to try to obtain the best prices in a collapsing market.

The last supplies were sold as recently as late last year.

The "loss" suffered by Escom was the difference between the price it received for the uranium and the cost of purchasing the raw uranium in South Africa, shipping it to America, and enriching it there.

While this amount was written off, Escom has successfully and legally obtained nuclear fuel worth hundreds of millions of rands since the secret operation was mounted 10 years ago.

R57m loss rescued Koeberg

55

S. Times
3/2/85

By David Carte

ESCOM'S loss of R57-million — disclosed by Gert Rademeyer — was "peanuts" compared with the cost of the R1,8-billion Koeberg power station not operating.

According to sources close to Escom, it was touch and go whether Koeberg would get going at one stage — and the spectacular loss was connected with its start-up.

It may have been connected with the US refusal to sell enriched fuel rods to Escom.

Secrecy

Koeberg's second reactor comes on stream in the next few weeks, after which it will reach specified output.

Escom reported the matter to the Department of Mineral and Energy Affairs, Danie Steyn, but has been forbidden to disclose what happened. Rademeyer's disclosure now has Escom red faced.

Escom hopes Mr Steyn will explain the loss to Parliament during the no-confidence debate. So far there has been a stunned silence on the matter.

The loss amounts to 3,2% of the cost of Koeberg and 1,7% of Escom's sales of R3,3-billion in 1983. It was 16,4% of the R347-million profit before capital development fund provisions.

Several nuclear power stations in the US and Europe are unfinished after billions of dollars have been spent on them because of environmental and safety fears following the accident at the Three Mile Island power station and because the world oil shortage has been reversed into a glut.

55 S. Times 3/2/85

Salem Three scuttle trial

South Africans back out of testifying in American court

By PATRICIA CHENEY: Washington

THE case against Mr Frederick Soudan, the kingpin in the infamous Salem supertanker scandal, may soon collapse because the three South Africans due to testify this week at the trial in Houston have backed out at the last minute.

Mr Stefanus Naude, Mr Jan Breytenkamp and Dr Dirk Mostert, all involved in the Sasol purchase of the Salem oil, got as far as London before they decided to return to South Africa.

The United States Government was hoping to prove that Mr Soudan knowingly sold 173 000 tons of stolen crude oil to South Africa before scuttling the ship for insurance purposes off the coast of West Africa.

The three South Africans were to testify that Mr Soudan deliberately misrepresented himself to the Sasol front company, SSF Association Ltd.

Mr Soudan, a resident of Houston, had already arranged to sell oil to South Africa when he bought the Salem with money believed to come from the South African Mercabank.

The Salem was then chartered, without cargo or crew, to a Dutch concern, Shipomex, which arranged for the tanker to load 193 000 tons of crude in Kuwait on behalf of the Italian trading company, Pontoil.

On the way to Genoa the oil was sold to Shell. Four days later all but 20 000 tons of the oil was offloaded in Durban.

Just over two weeks later the Salem sank under mysterious circumstances.

Publicity

Mr Bruce Locke, attorney

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Publicity

Mr Bruce Locke, attorney for Mr Soudan, told the Sunday Times on Friday that the South Africans changed their minds when they discovered they might have to give details of other SSF oil deals.

The South African Government had previously given them permission to testify despite the Oil Procurement Act, which bans publicity of South African oil transactions.

The three, however, apparently were afraid they might be prosecuted if they had to answer questions not directly pertaining to the Salem case.

They contacted the Houston law firm of Fulbright and Jaworksi from London and were advised that they might have to give out details of other SSF deals.

The judge trying the case gave them the chance to appear in a private, non-jury hearing to decide if it was necessary to ask them questions about other deals, but the three declined.

Mr Locke said that although Mr Soudan was accused of defrauding Lloyds of London insurance company, Shell Oil and Pontoil, as well as SSF, the US Government was building its case around proving the whole episode was part of one gigantic fraud scheme.

Collapse

"Without the South African link the whole case could collapse," he said.

The Salem scheme was Mr Soudan's first and only oil deal. Mr Locke is arguing that since SSF did not check up on Mr Soudan's credentials, he cannot be accused of misleading them.

"The South Africans really didn't care who Mr Soudan was as long as he delivered the oil," Mr Locke said.

He said the refusal of the South Africans to discuss other SSF deals also hurt the defence's case, because he would not be able to prove that it was the practice of SSF to engage in oil deals without digging too deep into the background of the seller.

The lawyer is hoping to convince the jury that his client did not know the oil offloaded in Durban was stolen or that the ship's captain planned to scuttle the Salem.

The trial will probably last another three weeks.

FM Feb. 1985

55

SASOL

Strike threat

The threat of a general strike by members of 24 unions hangs over this week's meeting to discuss the reinstatement of more than 5 000 Sasol employees dismissed after participating in last November's stayaway.

Sasol workers getting paid off ... some will not be rehired

The Chemical Workers' Industrial Union (CWIU) will hold talks with Sasol management later this week to review developments at the company. A Sasol spokesman says the company has received 4 300 applications for re-employment and as at January 22, 2 513 of these had been approved. In addition, "further appointments have since been made and the process is continuing." However, some former employees have been told they will not be rehired. The exact number is "not available."

Meanwhile, the *FM* understands that Sasol is opposing a CWIU application to the Manpower Minister for the establishment of a conciliation board to hear the dispute in the event of inconclusive negotiations. The spokesman says a reply to the application has been forwarded to the Minister, but he declined to comment on its contents. This application opens the way for the 24 unions to conduct a legal general strike if their demands for the reinstatement of the Sasol workers are not met.

Sympathy action

The unions which have indicated their intention to take sympathy action include the affiliates of the Federation of SA Trade Unions (Fosatu) and the Council of Unions of SA (Cusa), the Food and Canning Workers' Union, the General Workers' Union, the Commercial, Catering and Allied Workers' Union and the Cape Town Municipal Workers' Association. CWIU is a Fosatu affiliate.

The union plans received a boost on January 19 when 3 500 delegates to the National Union of Mineworkers conference in Welkom enthusiastically expressed support for a resolution condemning the dismissals and affirming the 110 000-member union's intention to take action in support of the Sasol workers if they are not rehired.

CWIU held two meetings with Sasol management during December where the two parties failed to reach agreement on the criteria to be used when considering the re-employment of the dismissed workers. Sasol has said it will not take back people who had intimidated others during the work stoppage. Neither party is prepared to confirm reports that Sasol has refused to reinstate those shop stewards whose applications have been considered.

It is not clear whether a full-scale strike or merely a brief demonstration stoppage is being contemplated if the dispute is not settled. But should any such event materialise, it will spell an abrupt end to this year's thus far relatively peaceful industrial relations scene.

ARGUS 6/2/85 55

'Rademeyer went on secret trip to find uranium'

Argus Correspondent

PRETORIA. — "Dr" Gert Rademeyer went on a secret, round-the-world trip in search of uranium vital for the operation of the Koeberg nuclear power station, it was claimed in an affidavit in the Pretoria Supreme Court today.

The trip was so successful, the affidavit claimed, that the ex-Escom accountant was entitled to more than the R8-million he is alleged to have stolen in commission. His secret deals had supplied Escom with "even more uranium than it had bargained for."

Papers containing details of highly secret procurement deals were handed into court.

Two senior Escom officials had appeared "quite happy" to transfer the money, which Escom now claims its former accountant stole.

Mr E Berg was applying on behalf of Mr Rademeyer for a three-week postponement of the return date for the final sequestration of the estate.

Mr Berg told Mr Justice Stegmann that Escom general manager Mr Isak van der Walt and assistant-general manager (finances) Mr Len te Goren, had authorised the transfer of the money into an account held by Enrichment Services, a company set up by Mr Rademeyer.

Affidavits handed to the court by Escom had not made it clear exactly how the alleged theft had been committed.

Mr F Zondagh, Mr Rademeyer's attorney, said in the affidavit, telexed by Mr Rademeyer from Sydney that his client had realised in mid-1981 that uranium bought by Escom in South Africa and shipped to Westinghouse in the United States for enrichment would never reach South Africa because this country had not signed the Nuclear Non-Proliferation Treaty.

Escom had urgently needed uranium for the R2 000-million Koeberg plant and Mr Rademeyer had used his Australian passport to travel in search of supplies.

Cape Times 7/2/85 55 ~~260~~

Estates of Rademeyer and wife se

Own Correspondent

JOHANNESBURG. — Gert Johannes Rademeyer, the former Escom accountant who conducted his defence in sequestration by telex from his hideyhole in Australia, yesterday lost his case.

The Pretoria Supreme Court has made a final sequestration order against his estate. That of his wife was also sequestrated in the same action.

Three dramatic new twists developed in the case of the missing R8,4-million which Mr Rademeyer transferred from Escom's New York account:

● Mr S A Cilliers SC, for Escom, told the court that judgment must be given as a matter of urgency because Mr Rademeyer's bank account in Bangkok, Thailand, had been "unfrozen" and Mr Rademeyer was now able to use the money in the account.

● Escom's senior accountant, Mrs Margeret Hefer, said she had been misled by Mr Rademeyer to transfer the money to his personal accounts for secret payments in respect of nuclear fuel.

● Mr E Berg, counsel for Mr Rademeyer, said the former accountant was entitled to payment as a result of the secret nuclear procurement. The money had been paid into a company known as Enrichment Services.

"Mr Rademeyer did not commit an act of insolvency. He was paid the money owed to him," Mr Berg said.

Mr Rademeyer fled the country after transferring R8,4-million of the commission's money from its New York account to accounts he had opened in his own name in Europe and the Far East.

In a last-ditch attempt to prevent the sequestration, three Johannesburg lawyers flew half-way round the world to Sydney, Australia, to consult Mr Rademeyer on his defence, which was telexed to counsel in Pretoria.

Mr Rademeyer asked the court through counsel that he be given until February 26 to challenge the provisional sequestration order made by Mr Acting Justice W G Human on January 14.

Mr Justice M S Stegman dismissed Mr Rademeyer's application for postponement with costs and made final the provisional order.

Mr F Zondagh, a Pretoria lawyer for Mr Rademeyer, told the court in an affidavit that he had received a telex message from Mr Rademeyer on Tuesday from Sydney.

He said he was not aware of Mr Rademeyer's present residential address and that he and two lawyers had been consulting him since January 31.

Mr Zondagh said Mr Rademeyer had been involved in a scheme to obtain uranium for the R2 000-million Koeberg atomic station.

CAPE TIMES 7/2/85

Rademeyer and wife sequestrated

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Mr Zondagh said Mr Rademeyer had been involved in a scheme to obtain uranium for the R2 000-million Koeberg atomic station.

Mr Rademeyer had obtained uranium for the country and even more than was bargained for.

As commission, he was paid $3 645 000 (about R7 168 000) in strict confidence.

"Mr Rademeyer was entitled to payment and the amount was thus transferred to a bank in Berne, Switzerland. There was no wrongfulness, fraud or theft involved," Mr Zondagh said.

Mr Isak David van der Walt, the senior chief manager of Escom, said in papers before court that Mr Rademeyer had fraudulently obtained the $3,6-million from Escom for his personal account on November 21 last year.

Before the final order was made, Mr Berg interrupted the judge to say that the Matrimonial Act required that the estate of Mrs Rademeyer must also be sequestrated if her husband's estate was sequestrated.

ARGUS 7/2/85 **CITY/NATIONAL** (55)

Schwarz pushes for probe on Escom

Political Staff

THE Progressive Federal Party says the Government appears to be unwilling to discuss — let alone agree to — an investigation into irregularities in the financial affairs of Escom.

The Official Opposition spokesman on finance, Mr Harry Schwarz, said his motion to appoint a parliamentary select committee to investigate any irregularities was in such a position on the House of Assembly's Order Paper that it indicated the Government's unwillingness even to discuss the issue.

"This is a matter which the taxpayer and user of Escom's power cannot allow to rest ... the reality is that Escom is owned by South Africans and its financial affairs are the business of their elected representatives," Mr Schwarz said.

"Lost R50-million"

He appealed to the Government to agree to the appointment of the select committee, saying that to frustrate such an investigation was contrary to taxpayers' interests.

Mr Schwarz said an independent investigation was necessary not only because of events involving fugitive Mr Gert Rademeyer but also because Escom had admitted that it had "lost" more than R50-million of public money.

He said that although Escom was owned by the State it was not accountable to Parliament, except that the Minister of Mineral and Energy affairs accepted political responsibility for it.

The Minister could choose whether to speak about Escom or not, Mr Schwarz said.

"If Escom managers appear before a parliamentary committee, however, they would be required to answer questions and provide information."

He said that if the information could prejudice the interests of the State a procedure could be followed to deal with that.

Cloak and dagger

He added that too much cloak and dagger methods were used to cover up dishonesty in South Africa.

"If any State department had been involved in similar circumstances it would have come before the Public Accounts Committee and the Auditor General would make inquiries," said Mr Schwarz.

The PFP therefore wanted the Auditor General to also makes inquiries into Escom's finances and the people concerned should appear before the select committee on Public Accounts.

55 ~~204~~ ~~260~~

Escom swindle: Two top men quit

Cape Times 9/2/85

JOHANNESBURG. — Two top officials of the Electricity Supply Commission were leaving their jobs after embezzlement allegations against former assistant chief accountant Mr G J Rademeyer, Escom's chairman, Mr Jan Smith, announced yesterday.

Mr Smith said in a press release that the senior general manager of Escom, Mr I D van der Walt, had taken early retirement and Mr L te Groen, general manager (finance), had resigned.

It is alleged by Escom that Mr Rademeyer transferred more than US $3,6-million from Escom's New York account to private accounts in Switzerland and elsewhere last year.

In the press release, Mr Smith said the auditors investigating the case had found there had been negligence on the part of Mr Van der Walt and Mr Te Groen, who had authorized the withdrawal of the money without ascertaining that necessary documents of proof were attached.

But there was no evidence of fraud on the part of any Escom employees other than Mr Rademeyer.

Mr Smith said that "as a result of coincidence", Mr Rademeyer was acting chief accountant at the time he submitted a document authorizing the transfer of the money for approval to Mr Te Groen.

"At that stage Mr Rademeyer had already given four years of satisfactory service and Mr Te Groen made an error of judgement by accepting the validity of the authorizing document, drawn up in the name of Mr Te Groen, without requesting the verifying signed vouchers."

'Secrecy'

Mr Van der Walt also signed this authorization, Mr Smith said.

But the transfer had been rejected by the receiving bank. Mr Rademeyer had then drawn up an amending document and "pressured the subordinate' official under the cover of a need for secrecy to have the said amount transferred to his own Swiss account".

Mr Smith commended Mr Te Groen and Mr Van der Walt for their service to the company.

Both men had been subject to "great pressure over long periods of time" and Escom's problems were definitely some of the most difficult in the present "adverse financial climate", Mr Smith said. — Sapa

● **Rademeyers not moving house yet, page 3**

(2) (a) No.

(b) It has not been deemed specifically necessary to request the Board, to make recommendations on the creation of employment opportunities for unemployed contributors as the Directorate of Economic Planning in the Department of Constitutional Development and Planning and the National Manpower Commission have given serious attention to the unemployment question for several years and have submitted recommendations to the Government which led to the White Paper on A Strategy for the Creation of Employment Opportunities in the Republic of South Africa which was tabled last year. The Government accepted a recommendation to the effect that the National Manpower Commission and the Directorate of Planning launch an investigation into more effective methods that can be used to moderate cyclical increases in unemployment. In this process they have and will continue to consult with the Unemployment Insurance Commissioner and whenever necessary the Unemployment Insurance Board.

Dieldrin

*34. Mr E K MOORCROFT asked the Minister of Agricultural Economics:

(1) Whether any instances of dieldrin contamination have been reported to his Department; if so, (a) how many instances and (b) in which magisterial districts;

(2) whether contamination of any food resources has been reported; if so, what resources;

(3) whether any steps are being taken to trace the source of the contamination; if not, why not; if so, what steps;

(4) whether he will make a statement on the matter?

The MINISTER OF AGRICULTURAL ECONOMICS:

(1) No instances have been reported during the last 12 months.

(2) and (3) No.

(4) I issued a press statement on the matter on 5 February 1985. In view of recent allegations in the media that dieldrin is being used on sugar cane in Natal, a team of 35 inspectors of the Department visited 400 sugar cane farms in Natal during the period 5 to 7 February 1985. No evidence could be found that dieldrin is still being used. Approximately 200 kg of dieldrin which is more than 6 years old was found on farms. On to the condition of the containers it is clear that these stocks were acquired prior to 1 May 1981 and have not been used since. The dieldrin was removed from the farms.

Hansard

Death of M Tyuka

Q.61.84 12/2/85

*35. Mr E K MOORCROFT asked the Minister of Law and Order:

(1) Whether the South African Police have conducted an investigation into the death of one Madodana Tyuka in Port Alfred Township on or about 6 November 1984; if not, why not; if so, what were the findings of the investigation;

(2) whether any person or persons have been taken into custody in connection with his death; if not, why not;

(3) whether any other action has been taken as a result of the investigation; if so, what action?

The MINISTER OF LAW AND ORDER:

(1) Yes, the investigation of the inquest docket has not yet been concluded, but will on completion be referred to the attorney-general for a decision.

(2) and (3) No. Whether or not steps will be taken will be determined by the decision of the attorney-general.

55 Hansard

Escom

Q.61.85 12/2/85

*36. Mr P G SOAL asked the Minister of Mineral and Energy Affairs:

(1) Who are the members of Escom at present;

(2) whether persons appointed to Escom are required to have any special qualifications in regard to the supply of electricity; if not, why not; if so, what special qualifications does each of the present members of Escom possess;

(3) Whether the members of Escom are advised of losses which are not reflected in its books of account; if not, why not; if so,

(4) whether these members are required to take any action as a result of such losses; if not, why not; if so, what action?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Messrs Jan H Smith (Chairman)
D J Malan
E Pavitt
T R Castle
The Honourable J F W Haak

(2) The members of the Electricity Supply Commission are appointed by the State President in terms of section 2(2) of the Electricity Act, 1958 (Act No 30 of 1958) for their knowledge and experience in respect of business or administration and, in so far as the State President may deem expedient, electricity supply.

I would like to refer to the Honourable Member's attention also to the reply to a question in his name, question 10 of 25 May 1983.

(3) Members of the Electricity Supply Commission are informed about trade losses suffered by Escom even if, as a result of security and/or secrecy requirements, it is not specified in accounts.

(4) Yes. Applicable actions of control as dictated by circumstances.

Hansard

Motor mechanics: apprenticeship training

Q.61.86 12/2/85

*37. Dr A L BORAINE asked the Minister of Manpower:

(1) Whether he or any member of his Department has received any representations concerning apprenticeship training for motor mechanics; if so, (a) from whom, (b) when and (c) what was (i) the nature of the representations and (ii) his response thereto;

(2) whether any changes in the training of apprentice motor mechanics are envisaged; if not, why not; if so, (a) what changes and (b) when?

The MINISTER OF MANPOWER:

(1) Yes.

(a) The major automobile manufacturers have made representations to the National Training Board.

(b) During 1983.

(c) (i) To have the existing system of training of apprentice motor mechanics changed. The proposed changes relate to institutionalized training by instructors as opposed to the present system of training on the shop floor by a qualified artisan as prescribed in the training schedules.

(2) (a) No.

(b) It has not been deemed specifically necessary to request the Board, to make recommendations on the creation of employment opportunities for unemployed contributors as the Directorate of Economic Planning in the Department of Constitutional Development and Planning and the National Manpower Commission have given serious attention to the unemployment question for several years and have submitted recommendations to the Government which led to the White Paper on A Strategy for the Creation of Employment Opportunities in the Republic of South Africa which was tabled last year. The Government accepted a recommendation to the effect that the National Manpower Commission and the Directorate of Planning launch an investigation into more effective methods that can be used to moderate cyclical increases in unemployment. In this process they have and will continue to consult with the Unemployment Insurance Commissioner and whenever necessary the Unemployment Insurance Board.

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(4) I issued a press statement on the matter on 5 February 1985. In view of recent allegations in the media that dieldrin is being used on sugar cane in Natal, a team of 35 inspectors of the Department visited 400 sugar cane farms in Natal during the period 5 to 7 February 1985. No evidence could be found that dieldrin is still being used. Approximately 200 kg of dieldrin which is more than 6 years old was found on farms. On to the condition of the containers it is clear that these stocks were acquired prior to 1 May 1981 and have not been used since. The dieldrin was removed from the farms.

[redacted] Hansard [redacted]

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The MINISTER OF LAW AND ORDER:

(1) Yes, the investigation of the inquest docket has not yet been concluded, but will on completion be referred to the attorney-general for a decision.

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55 [redacted] Hansard

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(1) Who are the members of Escom at present;

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(3) Whether the members of Escom are advised of losses which are not reflected in its books of account; if not, why not; if so,

(4) whether these members are required to take any action as a result of such losses; if not, why not; if so, what action?

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[redacted] Hansard

~~Motor mechanics: apprenticeship training~~

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(a) The major automobile manufacturers have made representations to the National Training Board.

(b) During 1983.

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(a) 12 701

(b) (i) 847

(ii) 11 854

(55) Hansard Q.61.99 13/2/85

Prospecting for oil

111. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

(1) What was the total amount spent in 1984 on prospecting for oil (a) on land and (b) at sea;

(2) whether any (a) oil and (b) gas was discovered in that year; if so, where in each case;

(3) whether prospecting was restricted to South African (a) territory and (b) territorial waters; if not, in what other areas did prospecting take place?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) R50 000.

(b) R97,1 million.

(2) Gas was encountered in 4 of the 17 boreholes drilled by SOEKOR in 1984. These further discoveries were made in the F-A and E-M gas fields.

(3) (a) Yes.

(b) Yes.

Hansard Q.61.99 13/2/85

Unemployment Insurance Fund

119. Dr A L BORAINE asked the Minister of Manpower:

(1) What was the balance in the Unemployment Insurance Fund at the end of 1984;

(2) (a) what was the amount (i) paid into the Fund and (ii) paid out in benefits in that year and (b) to how many (i) White, (ii) Coloured, (iii) Indian and (iv) Black applicants were benefits paid?

The MINISTER OF MANPOWER:

(1) R243 331 820

(2) (a) (i) R205 520 434.

(ii) R196 286 366.

(b) (i) to (iv) Figures in respect of different population groups are not readily available. Benefits were paid to 305 197 unemployed contributors.

WEDNESDAY, 13 FEBRUARY 1985

†Indicates translated version.

Hansard

For written reply:

General Affairs:

Q.61.100 13/2/85

Vaal Triangle area: disturbances at schools

14. Mr W L VAN DER MERWE asked the Minister of Education:†

(1) Whether any disturbances took place in the Vaal Triangle area in 1984; if so,

(2) whether any Black school buildings were damaged during these disturbances; if so, (a) what was the nature of the damage, (b) how many schools were involved and (c) what was the cost of the damage;

(3) whether his Department gave approval to certain building contractors to do repair work at such damaged schools during the recent builders' holiday; if so, (a) why, (b) at which schools and (c) what was the cost of the repair work;

(4) whether any of the school buildings so repaired, have again been damaged since; if so (a) what was the nature of the damage, (b) which schools were involved and (c) what was the cost of the damage?

The MINISTER OF EDUCATION:

(1) Yes.

(2) Yes.

(a) Damage caused by fire and broken window-panes as result of stone-throwing.

(b) 9.

(c) The estimated cost of R540 000,00.

(3) No. (a), (b) and (c) Fall away.

(4) No. (a), (b) and (c) Fall away.

Kirkpatrick, Marais and Associates: contract

24. Mr D J N MALCOMESS asked the Minister of Transport Affairs:

(1) Whether, with reference to his reply to Question No 1113 on 11 July 1984, the contract awarded to Kirkpatrick, Marais and Associates for R240 000 was (a) extended and (b) renewed; if so, (i) why and (ii) what was the (aa) contract price and (bb) duration of the contract;

(2) whether the contract was awarded on a tender basis; if not, why not; if so, which companies submitted tenders;

(3) whether any sums have been paid in respect of the contract; if so, (a) what total amount and (b) on what specified items?

The MINISTER OF TRANSPORT AFFAIRS:

(1) (a) and (b) Yes.

(i) To continue outstanding public relations work connected with approved toll projects in the Republic of South Africa.

(ii) (aa) and (bb)(i) R98 224,44 in respect of the extended period commencing 1 February 1984 and terminating on 31 July 1984; and

(ii) R107 699,39 in respect of the renewed contract commencing 1 August 1984 for an agreed period of two years but terminated on 30 September 1984 by mutual consent.

(2) No, as the extension and renewal was negotiated to allow Kirkpatrick, Marais and Associates to complete projects arising out of the original contract.

(3) Yes.

(a) R205 923,83.

Professional fees		R 80 000,00
Authorised expenditure		
Media advertising	R38 739,25	
Photocopying	R 441,75	
Travelling and accommodation	R 7 187,54	
Telephone and telex	R 353,42	
Courier delivery	R 267,61	
Postage	R 58,15	
Printing and stationery	R 5 758,65	
Functions	R13 075,40	
Miscellaneous	R 42,06	R 65 923,83
Winding-up fees		R 60 000,00
Total		R205 923,83

(a) 12 701

(b) (i) 847

(ii) 11 854

55 Hansard Q.61.99 13/2/85

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The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) R50 000.

(b) R97,1 million.

(2) Gas was encountered in 4 of the 17 boreholes drilled by SOEKOR in 1984. These further discoveries were made in the F-A and E-M gas fields.

(3) (a) Yes.

(b) Yes.

Hansard Q.61.99 13/2/85

Unemployment Insurance Fund

119. Dr A L BORAINE asked the Minister of Manpower:

(1) What was the balance in the Unemployment Insurance Fund at the end of 1984;

(2) (a) what was the amount (i) paid into the Fund and (ii) paid out in benefits in that year and (b) to how many (i) White, (ii) Coloured, (iii) Indian and (iv) Black applicants were benefits paid?

The MINISTER OF MANPOWER:

(1) R243 331 820

(2) (a) (i) R205 520 434.

(ii) R196 286 366.

(b) (i) to (iv) Figures in respect of different population groups are not readily available. Benefits were paid to 305 197 unemployed contributors.

WEDNESDAY, 13 FEBRUARY 1985

†Indicates translated version.

Hansard

For written reply:

General Affairs:

Q.61.100 13/2/85

Vaal Triangle area: disturbances at schools

14. Mr W L VAN DER MERWE asked the Minister of Education:†

(1) Whether any disturbances took place in the Vaal Triangle area in 1984; if so,

(2) whether any Black school buildings were damaged during these disturbances; if so, (a) what was the nature of the damage, (b) how many schools were involved and (c) what was the cost of the damage;

(3) whether his Department gave approval to certain building contractors to do repair work at such damaged schools during the recent builders' holiday; if so, (a) why, (b) at which schools and (c) what was the cost of the repair work;

(4) whether any of the school buildings so repaired, have again been damaged since; if so (a) what was the nature of the damage, (b) which schools were involved and (c) what was the cost of the damage?

The MINISTER OF EDUCATION:

(1) Yes.

(2) Yes.

(a) Damage caused by fire and broken window-panes as result of stone-throwing.

(b) 9.

(c) The estimated cost of R540 000,00.

(3) No. (a), (b) and (c) Fall away.

(4) No. (a), (b) and (c) Fall away.

Kirkpatrick, Marais and Associates: contract

24. Mr D J N MALCOMESS asked the Minister of Transport Affairs:

(1) Whether, with reference to his reply to Question No 1113 on 11 July 1984, the contract awarded to Kirkpatrick, Marais and Associates for R240 000 was (a) extended and (b) renewed; if so, (i) why and (ii) what was the (aa) contract price and (bb) duration of the contract;

(2) whether the contract was awarded on a tender basis; if not, why not; if so which companies submitted tenders;

(3) whether any sums have been paid in respect of the contract; if so, (a) what total amount and (b) on what specified items?

The MINISTER OF TRANSPORT AFFAIRS:

(1) (a) and (b) Yes.

(i) To continue outstanding publi relations work connected wit approved toll projects in the Republic of South Africa.

(ii) (aa) and (bb)(i) R98 224,44 in respect of the extended period commencing 1 February 1984 and terminating on 31 July 1984; and

(ii) R107 699,39 in respect of the renewed contract commencing August 1984 for an agreed period of two years but terminated on 30 September 1984 by mutual consent.

(2) No, as the extension and renewal was negotiated to allow Kirkpatrick, Marais and Associates to complete projects arising out of the original contract.

(3) Yes.

(a) R205 923,83.

Professional fees		R 80 000,00
Authorised expenditure		
Media advertising	R38 739,25	
Photocopying	R 441,75	
Travelling and accommodation	R 7 187,54	
Telephone and telex	R 353,42	
Courier delivery	R 267,61	
Postage	R 58,15	
Printing and stationery	R 5 758,65	
Functions	R13 075,40	
Miscellaneous	R 42,06	R 65 923,83
Winding-up fees		R 60 000,00
Total		R205 923,83

55

READERS' VIEWS

Sasol fuel: criticism and defence of the price increases

When I stop at a garage for petrol and all the pumps are out of order except the Sasol pump, I will walk any distance to the nearest garage to fill up with an imported brand.

Many people agree with me for the following reasons:

Ten to 12 years ago the octane rating of Sasol was 88 octane and the price was one cent cheaper than the 87 octane (regular).

Sasol then decided to increase the octane rating by one or two (90 octane) and increase the price by four cents per litre. With good marketing the public swallowed this obvious rip-off.

Then, the price of all brands were increased by 3,6 cents to help finance Sasol 2 and 3, which were supposed to produce 60 percent of our total petrol requirements.

If this is true, we should only be importing 40 percent of our present requirements, and with the world oil price the lowest in many years, the last increase should have been only 8 cents/litre (according to latest rand/dollar value).

Sasol then decided to produce alcohol.

All oil companies were forced to add 10 percent alcohol to their petrol (as an additive to increase octane rating to 90). Again, the price of Sasol was also increased with no valid reasons supplied.

Various people in the past have stated that Sasol does not produce a 90 octane petrol (a special arrangement with oil companies) and that Sasol tanks are filled with an imported brand.

All regular petrol sold by any garage is said to be Sasol petrol produced from coal. These reports have never been confirmed or denied by Sasol.

Sasol is now trying to convince the public via advertisements on the radio to fill up with "blue blood", even in the rain with the petrol pump not under cover.

Do they really think the public is so stupid not to realise that a few drops of water will react with the present petrol/alcohol mixture, and that the alcohol will separate from the petrol, leaving the motorist with a regular grade fuel in his tank?

Ask any garage owner about the recommended test for water in his tanks.

The latest drastic increase was due to the weak rand against the dollar. Why did the price of Sasol also increase?

Only one day before this increase Sasol decided to drop their surcharge of 3,6c/litre to "soften the blow" of the expected increase.

Is Sasol now making enough profit from the "stupid" public to afford this drop in revenue?

O G Barnard

Benoni

● Mr Robin Hugo, Public Relations Officer for Sasol, comments: "Mr Barnard makes various points, which, for convenience, I have broken down into five points to which I shall reply.

"(1) It is true that, before 1971, Sasol petrol used to be 1d per gallon and later 0,22c per litre cheaper than that of regular petrol. As Sasol enjoys hospitality at filling stations, it was considered unfair that Sasol should undercut the host-brand by selling at a lower price.

"The octane rating of Sasol petrol was therefore increased to 93 ron in 1971 to conform with premium petrol and the price was adjusted accordingly.

"(2) Mr Barnard's recollection of how the 3,6c/l rebate came into being is not complete.

"During the 1970s, when political factors affected crude oil supplies, the Government introduced various levies, which were administered by the SOF and equalisation funds to finance, inter alia, the construction of indigenous petroleum production facilities, premiums South Africa had to pay on crude oil purchases and incentives to indigenous producers.

"Indigenous producers received a 3,6c/l incentive to make synfuel processes economically viable.

"The 3,6c/l incentive was instituted because it was patent that the synfuel process would be considerably more expensive than the crude derived product, as it entails the mining of the coal, which is then subjected to complex and expensive processes before crude oil fractions are produced, and only then is it capable of being refined to final products. The point is that petrol from coal is not cheap.

"It was never envisaged that Sasol Two and Sasol Three would produce as much of our petrol needs as Mr Barnard states, and, therefore, his calculation of a justified 8c a litre increase is academic.

"However, what is pertinently relevant is that all producer prices for petroleum products (including Sasol's) are based on the rand value of international market prices of crude oil products.

"Sasol's prices are therefore based on the price of imported fuels.

"The Sasols were established as import replacement industries to protect South Africa against boycotts and to ensure we had fuel, not as a source of cheaper fuel, hence the initial 3,6 cents a litre incentive on indigenous fuels.

"Due to the adverse rand/dollar exchange rate, the price which Sasol (and other producers) was receiving for its products had improved to the point where Sasol could compete on equal footing with the imported product, and it was agreed with Government that the benefit of the 3,6 cents a litre could be suspended with effect from January 1 1985.

"Normally, the ultimate aim of all import replacement industries is to be able to compete on equal footing with the imported product. Sasol considers that its greatest achievement is to be able to do so.

"Nations without crude oil resources would all dearly like to have synfuel industries which can compete on equal footing with crude oil derived fuel, but none has been able to emulate South Africa in this respect.

"(3) As alcohol is produced as a co-product in the manufacture of synfuels, it was in the interest of South Africa that this fuel be used as an extender for petrol in order to save valuable foreign exchange.

"Alcohol is furthermore used as a blending component in all 93 ron fuel sold in the Transvaal and parts of the OFS and Northern Cape. It partially replaces another expensive imported component, lead, which has a concommitant pollution advantage.

"Mr Barnard is mistaken in his view that petroleum companies were forced to use alcohol, or that the use of alcohol caused an increase in the price of petrol.

"(4) Mr Barnard's information that Sasol does not produce 90 ron octane petrol (should probably be 93) is not correct as all the grades of petrol viz 87, 93 and 98 ron petrol are being produced.

"(5) Operating experience on alcohol since 1980 has shown that water contamination while filling in the rain does not permit sufficient water to enter the tank to cause separation.

"It is true that water in sufficient quantity will cause the alcohol to separate. The engine will then stop, as it would even if the car was running on pure petrol.

"Mr Barnard's vehement anti-Sasol view is obviously based on several incorrect premises. We would gladly show him through our factories at Secunda to dispel any doubts that the synthol process is extremely complex and that it cannot produce cheap crude oil."

No extradition treaty to get Rademeyer

CAPE TIMES 19/2/85

55 ~~260~~ ~~280~~

Own Correspondent

MELBOURNE. — South Africa has not concluded any special extradition treaty to try to bring Mr Gert Rademeyer back to the Republic to face criminal charges of stealing R8,4-million from Escom.

Late yesterday the South African Department of Foreign Affairs confirmed that negotiations to try to establish a treaty were still going on.

"If recent press reports are right and he knows something more about South Africa's uranium deals, and that proves to be the real reason they want him back, then it becomes a political game," said an Australian federal police officer last night. "In that case it's anyone's guess if we'd bother to send him."

The Australian authorities said that there would have to be very powerful justifications for extraditing Mr Rademeyer, and that if there was any suggestion that he was being hounded for political reasons, an extradition would be out of the question. And he would be afforded every avenue of appeal against an extradition order.

South African Government sources said that the matter of Mr Rademeyer's extradition was at a sensitive stage but there was reasonable confidence that an application for his extradition would succeed.

Mr Rademeyer denies stealing money from Escom and says he was owed the money as commission on secret enriched-uranium deals.

Speaking to Australian newspapers, Mr Rademeyer has threatened that unless Escom drops all charges against him, he will disclose irregularities in the Commission's secret payments to overseas agents who have assisted South Africa in buying enriched uranium.

Soekor HQ to move to Parow

Cape Times 19/2/85 (55)

Chief Reporter

A START is to be made at Parow North in the next few months on a new head-office complex for the State-sponsored oil-exploration company Soekor, which is moving from Johannesburg and centralizing its operations at the Cape for logistical and other reasons.

The site acquired for the new complex is near the Tygerberg Hospital.

A Soekor spokesman said from Johannesburg yesterday that the new head office was scheduled to come into operation in January 1987.

The complex would accommodate between 300 and 400 people, but no special housing scheme was planned for the staff.

Soekor's logistics base would remain at Mossel Bay, but all its technical and managerial operations would be centralized at Parow North.

The spokesman said the cabinet was expected to take a decision in June on whether to go ahead with gas production from the wells being investigated off the Southern Cape coast.

Feasibility

Feasibility-study contracts had been awarded to two consortia in December, and it was on the basis of these studies that the government decision would be taken.

● Last year it was reported that South Africa was ready to produce offshore natural gas from a major field established off the Cape coast and that engineers were studying a R2 000-million plan to convert the gas to petrol and diesel fuel.

It was officially disclosed that Soekor's target figure was 1-trillion cubic feet of gas, which would yield 20 000 barrels of liquid fuel a day. Soekor has said that once this figure is reached, the high costs of extraction will be justified.

CAPE Times 19/2/85

55

Legislation coming to restructure Escom

HOUSE OF ASSEMBLY. — Legislation to restructure the Electricity Supply Commission (Escom) to conform with most of the recommendations of the De Villiers Commission report released last November will be submitted during the present parliamentary session, according to a White Paper tabled here yesterday.

The comprehensive report and the government's acceptance of the recommendations, with minor amendments, was released in Pretoria last year by the Minister of Mineral and Energy Affairs a few days after the announcement that Escom, which supplies more than 95 percent of the country's electricity needs, would increase its tariffs.

According to the White Paper, Escom "must be replaced with a body corporate . . . with a two-tier control structure comprising an electricity council and a management board".

Levy

"The electricity council, as the controlling body of Escom, will be financed separately by . . . a levy on the sale of electricity, with the responsibility of formulating policy, strategic planning and high-level control, while the management board will manage Escom's affairs on sound business principles within the guidelines, policy and objectives determined by the electricity council."

The electricity council must submit proposals to the government on the implementation of five other recommendations put by the commission and accepted by the government.

"In particular, it must give attention on a priority basis to the establishment of a tariff structure according to the guidelines recommended by the commission, with the emphasis on savings."

The government will submit the amending legislation to the Electricity Act "with a view to rationalizing electricity supply in South Africa as soon as possible . . . and especially to appoint the electricity council so that it may commence its task". — Sapa

Alexandra on a rental basis from West Rand Development Board and tenders are presently being invited for the provision of a prefabricated building to accommodate the office. Provided nothing unforeseen occurs, the building should be ready for occupation towards the second half of this year; and

(b) as of today.

Hansard Q.61.135

Ciskei: members of South African Defence Force

19/2/85

*2. The Leader of the Official Opposition asked the Minister of Defence:

(1) Whether any members of the South African Defence Force were seconded to the Ciskei Government in 1984; if so, how many;

(2) whether the Ciskei Government took any steps in January 1985 in respect of any members of the South African Defence Force so seconded; if so, (a) what steps, (b) in respect of which members and (c) why were these steps taken;

(3) whether he has met with any member of the Ciskei Government in 1985 concerning matters of the South African Defence force seconded to Ciskei; if so, (a) when, (b) with whom did he meet, (c) what was discussed at this meeting and (d) what was the outcome; if not,

(4) whether he intends meeting with representatives of the Ciskei Government concerning these members of the South African Defence Force; if not, why not; if so, when;

(5) whether he will make a statement on the matter?

†The DEPUTY MINISTER OF DEFENCE:

(1) Yes. 44.

(2) Yes.

(a) The immediate withdrawal of 3 members was requested.

(b) Brig A A Nell, Col P Hall, Capt S R Barnard.

(c) Because the Government of the Ciskei let it be known that it was no longer satisfied with the services of these members. In this connection it must be mentioned that Col Hall was seconded at the request of the Ciskei Government and had just arrived in the Ciskei, but had not reported for duty with the Ciskei Defence Force, when his deseconding was requested.

(3) No. (a), (b), (c) and (d) fall away.

(4) Yes. As the withdrawal of the SA Defence Force personnel resulted from the actions of the Ciskei Government the initiative for discussion on this matter should come from that Government via the Department of Foreign Affairs.

(5) No.

Hansard Q.61.136

55 **Strategic Fuel Fund Association**

19/2/85

*4. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

Who were the directors of the Strategic Fuel Fund Association as at (a) 31 October 1984 and (b) 25 January 1985?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(a) *31 October 1984*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal— Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

(a) *25 January 1985*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal—Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh Deputy-Director-General: Department of Commerce and Industries

State Oil Fund (Pty) Ltd

*5. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

Who were the directors of the State Oil Fund (Pty) Ltd as at (a) 31 October 1984 and (b) 25 January 1985?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(a) *31 October 1984*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal—Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

(a) *25 January 1985*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal—Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

(iii) *Burst tyres*	Internal		International
	A300	B737	B747
March 1984	—	—	—
April 1984	—	—	—
May 1984	—	—	—
June 1984	1	—	—
July 1984	—	—	—
August 1984	1	—	—
September 1984	—	—	—
October 1984	—	—	—
November 1984	—	—	—
December 1984	1	—	—

[illegible] EBLA Hansard
Q. 61. 127

Bus operators 18/2/85

204. Mr A SAVAGE asked the Minister of Transport Affairs:

What was the extent of the subsidy granted to bus operators in respect of commuter traffic in each of the four main metropolitan areas in the 1983-84 financial year?

The MINISTER OF TRANSPORT AFFAIRS:

Pretoria	R36 136 387
Johannesburg	R22 196 215
Durban	R24 560 894
Cape Town	R12 305 234
Total	R95 198 730

For the attention of the hon member it is mentioned that the payments effected above include amounts derived from the respective transport accounts as well as monies appropriated by the Treasury.

TUESDAY, 19 FEBRUARY 1985

†Indicates translated version.

For oral reply:
General Affairs:
State President:

Departments/bodies: programmes for improvement of attitudes

*1. Mr D J DALLING asked the State President:

(1) Whether he has issued directives to all Departments and other Government bodies concerned with functions relating to Blacks in the socio-economic sphere to submit programmes for the improvement of attitudes in the performance of their functions; if not, (a) why not and (b) when does he intend issuing such directives; if so,

(2) (a) what is the full text of these directives, (b) what is the full list of Departments and other Government bodies to which these directives have been issued, (c) on what date were these directives despatched and (d) when is it anticipated that the resulting programmes will be implemented?

The STATE PRESIDENT:

(1) and (2) I refer the hon member to my speech during the Opening of Parliament on 25 January 1985. Attention is being given to ways and means as to how this matter should be handled.

Mr D J DALLING: Mr Chairman, arising out of the reply given by the State President, could he tell the House whether he intends to give a reply to the specific questions asked?

The STATE PRESIDENT: Mr Chairman, yes, at a later stage, once the proceedings I have instituted have been finalized.

Mr D J DALLING: Mr Chairman, further arising out of the reply given by the State President, could he tell the House when he anticipates he will be ready to give those replies?

The STATE PRESIDENT: Mr Chairman, when the proceedings have been finalized.

Mr D J DALLING: Mr Chairman . . .

The CHAIRMAN OF THE HOUSE: Order! I will allow the hon member for Sandton one final supplementary question.

Mr D J DALLING: Mr Chairman, there is only one more question I should like to put to the State President. Could he tell us whether he has sent out any directives at all at this stage?

The STATE PRESIDENT: Mr Chairman, I am prepared to reply to that question when the proceedings have been finalized.

Ministers:

Question standing over from Tuesday, 12 February 1985:

55 [illegible] Hansard
Q. 61. 129 19/2/85

Escom

*40. Mr B B GOODALL asked the Minister of Mineral and Energy Affairs:

(1) Whether Escom suffered losses of approximately R57 million in the recent past; if so,

(2) whether the management of Escom recently admitted that such losses had occurred; if so, (a) how were these losses incurred, (b) who authorized the transfer of the funds concerned and (c) in what manner was this money lost;

(3) whether these losses were reflected in Escom's books; if not, why not;

(4) whether any Escom officials were informed of these losses; if not, why not; if so, (a) which officials and (b) when were they informed;

(5) whether these officials took any action as a result; if not, why not; if so, what action;

(6) whether any other such losses have been incurred by Escom; if so,

(7) whether these losses were reflected in its books; if not, why not; if so, (a) what total amount was lost in this manner, (b) when were these losses incurred and (c) who was aware of these losses?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Yes.

(2) Yes.

(a), (b) and (c) In 1974 Escom concluded a contract with an American contractor for the enrichment of uranium which would serve as fuel for the Koeberg Nuclear Power Station. In terms of the contract Escom had to supply the contractor with unenriched uranium for enrichment. The relevant American administration has, however, prohibited the return to South Africa of the enriched uranium and consequently Escom had to obtain enriched uranium from other sources. The unenriched material was, however, supplied in order to avoid breach of contract by Escom.

Approximately a year ago Escom and the American contractor agreed to suspend the contract and Escom has taken steps to dispose of the enriched as well as unenriched material. Losses were, however, suffered as a result of the collapse of the uranium market and the high uranium prices to which Escom were contractually bound which are reflected by the fact that in the last quarter of 1984, as a result of escalation, Escom had to pay R194,46 per kilogram for uranium while the spot market price is approximately R60 per kilogram at present.

Contractual obligations and forced sales are as follows:

Costs	R-million
Purchases of U_3O_8	47,800
Uranium enrichment costs ..	34,793
Interest	30,120
Miscellaneous*	3,671
Total	116,384
Income from sales	
Ten transactions between 2/4/82 and 31/3/83	(29,226)
Further transactions:	
29/6/84	(7,850)
13/9/84	(9,820)
26/11/84	(12,257)
Interest on deposits at the contractor	(0,449)
Total	(59,602)
Total amount written-off	56,782

Note: *Include legal costs, transport, insurance, transformation of U_3O_8 to UF_6, handling charges and brokers' fees.

(3) Yes. At the insistence of the external auditors and with the knowledge of the Atomic Energy Corporation and members of the Electricity Supply Commission a provisional amount of R59,317 million was written off against operating costs which are reflected on pages 40 and 41 of Escom's 1983 annual report.

(4) (a) and (b) Yes. Officials involved in these transactions, including the Senior General Manager, General Manager (Finance), the Commercial Manager and the Legal Manager were aware of the situation and members of the Electricity Supply Commission were informed accordingly.

(5) By direction of the Commission, steps were taken to, as far as possible, recoup expenditure and to minimise losses by negotiation of the most advantageous contracts possible.

(6) Yes.

(7) (a), (b) and (c) Contracts on the local market were concluded in December 1977 for the supply of uranium but as a result of the suspension by the USA of the enrichment contracts, this material was not required anymore.

The resale of the material at the present lower world price will have losses as a result and resales in 1984 will be accounted for in the applicable annual report. The amounts involved will only be known after the 1984 figures are audited and approved by the members of the Electricity Supply Commission.

Members of the Electricity Supply Commission including the Senior General Manager, General Manager (Finance), the Commercial Manager and the Legal Manager are aware of the potential losses.

In explanation it can be pointed out that the acquisition of uranium is of a long term nature and economic factors of the eighties leading to the decline of world prices could not be foreseen in 1977.

Mr H H SCHWARZ: Mr Chairman, arising out of the hon the Minister's reply, in addition to the losses to which he has made reference, has his attention been drawn to the allegation in a Sunday newspaper concerning further losses of R800 million? Will the hon the Minister reply to that or make any statement in this regard?

†The MINISTER: Mr Chairman, yes, it has been brought to my attention. I have read the reports in the *Sunday Express*, I think, attentively. I immediately contacted the executive of Escom, the commission, and they were requested to do a detailed analysis of the Koeberg costs as soon as possible, which they will shortly submit to me, after which I will definitely consider a meeting, either through Escom, or through me.

Mr W V RAW: Mr Chairman, further arising out of the reply of the hon the Minister, may I ask him whether all parties in the House were briefed fully in confidence on the question which he has just answered, or not?

†The MINISTER: No, no one has yet been informed concerning the detail which this answer provides.

†Mr W V RAW: I mean the amount which is connected therewith.

†The MINISTER: Mr Chairman, the hon member evidently means the amount of R57 million. I beg your pardon, I misunderstood the question. The answer is yes, to the best of my ability the leaders of all the Opposition parties were informed in respect of this question.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, can he confirm that substantial foreign exchange losses are to be faced by Escom?

†The MINISTER: Mr Chairman, I think the hon member must exercise patience until Escom's annual report is published, because the information that he wants will be published in it. As far as Koeberg is concerned, we will have the information available shortly.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, could he confirm what I believe he said and that was that the first he knew about these matters reported in the *Sunday Express* was when he read the *Sunday Express*?

†The MINISTER: Mr Chairman, I definitely did not say that. In replying to a supplementary question of the hon member for Yeoville I said that I have read the reports in the *Sunday Express*. I am ware of most of the things that appear in those reports.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, could he tell the House when he did become ware of the losses as reported in the *Sunday Express* and what he did about the matter at the time when he did become aware thereof?

†The MINISTER: Mr Chairman, I ha already replied to that question by that I immediately contacted Escom

†Mr S S VAN DER MERWE: What "immediately" mean? [Interjections.]

†The MINISTER: What "immedia means? Immediately after I had read that was the Monday morning . . . [Interjections.]

The CHAIRMAN OF THE HOUSE: Order! There are hon members who are interested in the reply of the hon the Minister. Those hon members who do not appear to be interested ought to be quiet at the very least. The hon the Minister may proceed.

†The MINISTER: Thank you, Sir, but I have already completed my answer.

Mr H H SCHWARZ: Mr Chairman, further arising out of the reply of the hon the Minister and particularly with reference to his reply to the supplementary question of the hon member for Durban Point, does he not consider that this matter should be submitted to a parliamentary committee for investigation?

New Questions:

Alexandra Township

*1. Mr D J DALLING asked the Minister of Communications:

Whether any progress has been made in the provision of a post office in Alexandra Township since his replies to Questi No 15 on 9 February 1983 and No 2 10 February 1984; if not, why not; if so (a) what progress and (b) in respect what date is the information furnished?

The MINISTER OF COMMUNICATIONS:

Yes;

(a) a site for the proposed post office has been acquired at the corner Rooseveld Street and Sixth Avenue (next to the new mens hostel)

55

Hansard

Sasol plants: exercises/functions

Q. 61 . 139

*6. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

(1) Whether the South African Defence Force conducted any exercises and/or performed any functions in or around the Sasol plants in Secunda in 1984; if so, (a) what was the purpose thereof, (b) who authorized the exercises and/or functions, (c) how many members of the South African Defence Force were involved and (d) what was the nature of the exercises and/or functions;

(2) whether any members of the South African Defence Force took any action in respect of any Sasol workers in or about November 1984; if so, (a) what action was taken, (b) why was it taken, (c) how many Sasol workers were involved and (d) who authorized this action;

(3) whether any workers were injured as a result; if so, what was the nature of the injuries;

(4) whether he will make a statement on the matter?

The DEPUTY MINISTER OF DEFENCE:

(1) Yes.

(a) To support the SA Police during a disturbance.

(b) The Chief of the SA Defence Force at the request of the SA Police.

(c) 403

(d) Guard duties at vulnerable points in and outside residential areas.
Escort duties for buses together with the SA Police.
Access control to the Sasol-Secunda National Key Point.
Provision of air and surface loud hailing equipment to the SA Police and Sasol management with which to speak to workers.
Showing the flag (Demonstration of power).
Reserve for the SA Police in an emergency situation.

(2) No (a), (b), (c) and (d) fall away.

(3) Fall away.

(4) No.

Hansard

Committee investigating adjustments

Q. 61. 140 19/2/85

*7. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

(1) Whether a committee is investigating or has investigated adjustments which may be necessary in the South African Defence Force; if so, what is the name of this committee;

(2) whether this committee has completed its investigations; if not, (a) why not and (b) when is it anticipated that it will complete its investigations; if so, (i) when and (ii) to whom will the report be made available?

†The DEPUTY MINISTER OF DEFENCE:

(1) Yes.

The Committee is known as the "Geldenhuys Committee."

(2) No. (a) and (b) The nature of the investigation necessitates study of a wider magnitude than which was initially foreseen and at the request of the Committee an extension was granted until the second half of this year for the submission of its report with the proviso that it may submit interim reports on specific matters of an urgent nature.

In this regard I would like to draw the attention of the hon the Leader of the Official Opposition to my statement in this House on 17 May 1984, as recorded in Hansard, column 6746.

Tuynhuys

*8. Mrs H SUZMAN asked the Minister of Public Works:

What is the estimated cost of refurbishing Tuynhuys?

The MINISTER OF PUBLIC WORKS:

The estimated costs for the refurbishing and fitting out of the building is R3 350 000

Hansard Q.61.141

Certain person: member of Police Force/rank

19/2/85

*9. Mr P A MYBURGH asked the Minister of Law and Order:

(1) Whether a certain person, whose name has been furnished to the South African Police for the purpose of the Minister's reply, was a member of the South African Police Force; if so, when did he (a) join and (b) leave the Police Force;

(2) whether this person held any rank while he was a member of the Force; if so, (a) what rank, (b) on what date did he attain such stage in his promotion and (c) on what basis did he qualify for this rank;

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(4) whether this person appeared before a selection board; if not, why not; if so, (a) when and (b) who served on this board?

†The DEPUTY MINISTER OF LAW AND ORDER:

(1) Yes.

(a) 12 January 1981

(b) 31 December 1983

(2) Yes.

(a) Lieutenant

(b) 1 December 1982

(c) On account of academic qualifications and the successfull completion of the prescribed course for appointment in officer's rank.

(3) Yes (a), (b) and (c). He underwent an abridged counter insurgency course from 18 January to 24 February 1982 and a candidate officers course from 15 September to 3 December 1982.

(4) Yes.

(a) On 8 September 1982

(b) Two lieutenant-generals and two major-generals from Head Office.

Anti-smoking campaign

*10. Dr M S BARNARD asked the Minister of Health and Welfare:

Whether his Department intends to hold an anti-smoking capaign in 1985; if not, why not; if so, what is the nature of these plans?

†The MINISTER OF HEALTH AND WELFARE:

Since smoking is a cause of death, disability and ill-health, the Department's anti-smoking Health Education and Activities is on-going, not merely a series of campaigns.

The Department as a matter of course participates in all anti-smoking campaigns.

Prevention is of prime importance and thus the Department concentrates its at-

tention on preventing young people from adopting smoking habits.

The Department of Health and Welfare will be publishing a teachers guide on "Smoking and the Respiratory System" in conjunction with all Education Departments, for distribution to all primary and secondary schools in the Republic.

In addition, a pupils workbook will be developed and should be available by the end 1985.

Mr A B WIDMAN: Mnr Chairman, arising out of the hon the Minister's reply, I want to ask him whether he does not think the time has come for official action to be taken to warn the public of South Africa against the dangers of smoking?

Bophuthatswana: television signals

*11. Mr D J DALLING asked the Minister of Foreign Affairs:

Whether, with reference to his reply to Question No 4 on 1 February 1984, the Government has received any communication from the Government of Bophuthatswana in connection with the agreement entered into between the Republic and Bophuthatswana relating to (a) the relaying by the SABC of Bophuthatswana TV signals to areas within the Republic and/or (b) any ancillary matter; if so, what was the (i) gravamen of the communication and (ii) response of the Government?

†The DEPUTY MINISTER OF FOREIGN AFFAIRS:

(a) and (b) Yes.

- (i) A communication has recently been received from the Government of the Republic of Bophuthatswana concerning the relaying of the signal of the Bophuthatswana television service to agreed target areas in the RSA.
- (ii) A meeting between the Governments of the Republic of South Africa and the Republic of Bophuthatswana during which certain aspects regarding the relaying of the Bophuthatswana television service to agreed target areas in the RSA will be discussed, is due to be held in the near future.

55 Hansard
Q.61.144 19/2/85

Oil: rand cost per barrel

*12. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) What was the average rand cost per barrel of crude oil imported into the Republic in 1984;

(2) what was the rand cost per barrel of such oil imported into the Republic as at the latest specified date for which figures are available?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) R45,86 cost, insurance, freight.

(2) The average cost for January 1985 was R62,18 cost, insurance, freight.

Hansard Q.61.144
19/2/85

Housing subsidies

*13. Mr R R HULLEY asked the Minister of Public Works:

What was the total amount paid out in the 1983-84 financial year in housing subsidies in terms of the Public Service Act, No 54 of 1957?

†The MINISTER OF PUBLIC WORKS:

R107 839 857.

Soweto

*14. Mrs H SUZMAN asked the Minister of Co-operation and Development:

How many trading licences were operative in Soweto as at 1 January 1985?

The MINISTER OF CO-OPERATION AND DEVELOPMENT:

The City Council of Johannesburg is the licensing authority for Soweto. Upon enquiry the Council indicated that the requested information was not available and could not be readily obtained.

Apprenticeship/artisan training: investigation

*15. Dr A L BORAINE asked the Minister of Manpower:

(1) Whether, with reference to his reply to Question No 10 on 1 February 1984, the investigation by the National Training Board into apprenticeship and artisan training in South Africa has been completed; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, what were the findings;

(2) whether any action is to be taken as a result of the investigation; if so, what action?

†The MINISTER OF MANPOWER:

(1) Yes.
- (a) Falls away.
- (b) The report with findings and recommendations will soon be submitted to me as Minister of Manpower for consideration.

(2) Any action necessary will be taken after the Report has received due consideration.

Gross national product: educational research/development

*16. Dr A L BORAINE asked the Minister of National Education:

What percentage of the gross national product of South Africa was spent on educational research and development in the field of science in 1982-83?

The MINISTER OF NATIONAL EDUCATION:

The information for 1982/83 is not available, as this information is only collected every two years. The information for 1983/84 is presently being processed.

Muizenberg beach-front: water-slide

*18. Mr P H P GASTROW asked the Minister of Law and Order:

(1) Whether any member of the South African Police received any complaints concerning a water-slide at the Muizenberg beachfront area in January 1985; if so, (a) when, (b) from whom and (c) what was (i) the nature of the complaints and (ii) his response thereto;

(2) whether any member of the South African Police approached any owner or operator of the said water-slide on an official basis in that month; if so, (a) when, (b) why and (c) with what result?

†The DEPUTY MINISTER OF LAW AND ORDER:

(1) No, no record that such a complaint was lodged, could be traced.

(2) No, ~~not~~ on an official basis.

Hansard Q.6
19/2/8

Oil: landed cost

*19. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) Whether he will furnish the House with information on the landed cost in South Africa of crude oil; if not, why not; if so,

(2) in respect of the latest specified date for which figures are available, (a) what was the landed cost in South Africa of crude oil in United State dollars per barrel, (b) what, in respect of 93-octane petrol, was this cost expressed in cents per litre at the pump and (c) what elements com-

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†The DEPUTY MINISTER OF LAW AND ORDER:

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(2) No, ~~not~~ on an official basis.

55 Hansard Q.61.146 19/2/85

Oil: landed cost

*19. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) Whether he will furnish the House with information on the landed cost in South Africa of crude oil; if not, why not; if so,

(2) in respect of the latest specified date for which figures are available, (a) what was the landed cost in South Africa of crude oil in United State dollars per barrel, (b) what, in respect of 93-octane petrol, was this cost expressed in cents per litre at the pump and (c) what elements com-

prised the marketing margin in the latest petrol price composition?

The MINISTER OF MINERAL AND ENERGY AFFAIRS (Reply laid upon the Table with leave of House):

(1) Yes.

(2) (a) 29,71 USA Dollars for January 1985.

(b) en (c) Prices of fuel are not determined on a cost plus basis but in terms of the international list price of refined petroleum products at four large refineries at Singapore and Bahrein. The international list price reflects current international crude oil costs as well as refinery costs and refinery profits. The landed cost plus wholesale profit margin of 93 octane petrol amounted to 58,513 RSA cents per litre at an exchange rate ratio of R1,00 to USA 0,465 Dollar in January 1985.

The wholesale margin is based on a scientific economic analysis and amounts at present to approximately 15 per cent on assets without provision for tax and interest on capital employed. The present comprehensive price composition of 93 octane petrol is as follows:

	c/l
Pump price at Witwatersrand	88,5
General sales tax at Reef	8,0 or 9,0% of Reef price
Railage and pipeline costs to Reef	6,5 or 7,3% of Reef price
Service station profit margin	5,2 or 5,9% of Reef price
Pump price at coast	81,4
Less: General sales tax	7,4 or 9,1% of coast price
Service station profit margin	5,2 or 6,4% of coast price
Wholesale price	68,8
Less: Customs and excise duty	3,987 or 4,9% of coast price
Equalisation Fund Levy	1,300 or 1,5% of coast price
National Road Fund Levy	5,000 or 6,2% of coast price
State Oil Fund Levy	4,000 or 5,0% of coast price
Landed cost reflected in price	54,513 or 66,9% of coast price
Actual landed cost including wholesale profit margin	58,513
Unit loss which is financed as a price equalisation factor from the sale of stockpiled supplies	4,000

Advertisements/sponsorship by tobacco companies: legislation

*20. Dr M S BARNARD asked the Minister of Health and Welfare:

(1) Whether he intends introducing legislation relating to (a) advertisements for the smoking of tobacco products and (b) sponsorship of sporting and other events by tobacco companies; if not, why not; if so, (i) what will be the nature of such legislation and (ii) when is it anticipated that it will be introduced;

(2) whether he will make a statement on the matter?

†The MINISTER OF HEALTH AND WELFARE:

(1) (a) No.

(b) No. I do not believe that smoking-related problems can be altered dramatically by legislation but rather by continued education and information.

(2) No.

Mr A B WIDMAN: Mr Chairman, arising out of the hon the Minister's reply, I again put the question to him whether he does not think it is time to warn the public of South Africa of the dangers of smoking.

Mr Chairman, seeing that the hon the Minister does not reply . . .

The CHAIRMAN OF THE HOUSE: Order! The hon member asked this particular question earlier today. On what occasion the hon the Minister did not reply, and I presume that he does not want to do so now.

Mr A B WIDMAN: Mr Chairman, can I then ask the hon the Minister whether he intends replying?

Mr M A TARR: Mr Chairman, further arising out of the hon the Minister's reply, does he not consider that cigarette advertisements have the effect of encouraging young people to smoke?

Cape Peninsula meat-controlled area

*21. Mr P A MYBURGH asked the Minister of Agricultural Economics:

Whether, with reference to his reply to Question No 14 on 11 July 1984, the National Marketing Council has completed its investigation into the proposed extension of the Cape Peninsula meat-controlled area; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, (i) what were the findings and (ii) when will the decision of the Meat Board to extend the controlled area be implemented?

The MINISTER OF AGRICULTURAL ECONOMICS:

Yes. (a) and (b) fall away.

(i) The National Marketing Council recommended that the controlled area of the Cape Peninsula not be extended.

(ii) I decided that before I finally decide on the Meat Board's request that the controlled area of the Cape Peninsula be extended, the bodies concerned should investigate the possibility of extending the slaughtering facilities in the Western Cape.

Anti-smoking campaign

*22. Dr M S BARNARD asked the Minister of Education:

(1) Whether his Department (a) is holding or (b) intends to hold an anti-smoking campaign at schools falling under its control; if not, why not; if so, what is the nature of the campaign;

(2) whether he will make a statement on the matter?

†The MINISTER OF EDUCATION:

(1) (a) and (b) No. It is not practicable for the Department to hold countrywide campaigns in order to combat specific hazards singly. However, the Department is using whatever opportunities present themselves in various syllabi to make pupils aware of health hazards. Smoking, as well as other dangerous habits such as drug abuse and the absuse of intoxicating liquor are being dealt with in the syllabuses for guidance. Also, pamphlets on various health topics are compiled in close co-operation with the Department of Health and Welfare by the interdepartmental Advisory Committee for Health Education on which the Department and other departments of Education are represented.

(2) No.

†Dr M S BARNARD: Mr Chairman, further arising out of the hon Minister's answer, will the hon Minister please tell us if it would help his department if his colleague next to

Escoms's East Cape tariff increases highest in SA

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~~[illegible]~~

E. Post

19/2/85

Political Correspondent

CAPE TOWN — Escom electricity tariffs for the Eastern Cape show the highest percentage increase in South Africa over a 10-year period.

This emerged from a White Paper on the report and recommendations of the Commission of Inquiry into the Supply of Electricity in South Africa, tabled in Parliament yesterday.

In 1982 the price of Escom electricity was, however, still cheaper in the Eastern Cape than in four other regions.

The report states that in terms of the total cost to consumers, electricity cost each Eastern Cape consumer 416% more in 1982 than in 1972 (a rise from 0,536c a kWh to 2,763c).

The next highest increase over this period was on the Rand and in the Free State (404%) while the Western Cape (230%) had the lowest rise.

In the Border region, the increase was 239%.

Percentage rises for the two other Escom regions for which statistics are available were Natal 288% and Northern Cape 326%.

It was suggested to the commission that a tariff policy which comes as near as possible to supply at cost be accepted.

Transmission costs to certain reference points could then be established, so that each consumer's transmission cost would include his share up to the nearest reference point plus the additional cost between the consumer and the reference point.

Rises in electricity tariffs should occur only once a year — in January — and should include the coal price adjustment for the following year and should be valid for the whole year.

To reduce administrative costs and eliminate inconsistencies, the report recommends reducing the existing seven regional distribution undertakings to three. A two-tier control structure is recommended, consisting of the Board of Control of the Electricity Supply Corporation (Escor) and a management structure.

An Electricity Amendment Bill is to be introduced during the current session of Parliament to rationalise electricity supply in South Africa "as soon as possible."

- Escom's share in electricity supply in South Africa had by 1982 grown to 93,6%.

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Hansard

Sasol plants: exercises/functions

Q. 601. 139

*6. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

(1) Whether the South African Defence Force conducted any exercises and/or performed any functions in or around the Sasol plants in Secunda in 1984; if so, (a) what was the purpose thereof, (b) who authorized the exercises and/or functions, (c) how many members of the South African Defence Force were involved and (d) what was the nature of the exercises and/or functions;

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(3) whether any workers were injured as a result; if so, what was the nature of the injuries,

(4) whether he will make a statement on the matter?

The DEPUTY MINISTER OF DEFENCE:

(1) Yes.

(a) To support the SA Police during a disturbance.

(b) The Chief of the SA Defence Force at the request of the SA Police.

(c) 403

(d) Guard duties at vulnerable points in and outside residential areas.
Escort duties for buses together with the SA Police.
Access control to the Sasol-Secunda National Key Point.
Provision of air and surface loud hailing equipment to the SA Police and Sasol management with which to speak to workers.
Showing the flag (Demonstration of power).
Reserve for the SA Police in an emergency situation.

(2) No (a), (b), (c) and (d) fall away.

(3) Fall away.

(4) No.

Hansard

Committee investigating adjustments

Q. 601. 140 19/2/85

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(1) Whether a committee is investigating or has investigated adjustments which may be necessary in the South African Defence Force; if so, what is the name of this committee;

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The Committee is known as the "Geldenhuys Committee."

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The MINISTER OF PUBLIC WORKS:

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Hansard Q. 601. 141

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(1) Whether a certain person, whose name has been furnished to the South African Police for the purpose of the Minister's reply, was a member of the South African Police Force; if so, when did he (a) join and (b) leave the Police Force;

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†The DEPUTY MINISTER OF LAW AND ORDER:

(1) Yes.

(a) 12 January 1981

(b) 31 December 1983

(2) Yes.

(a) Lieutenant

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(c) On account of academic qualifications and the successfull completion of the prescribed course for appointment in officer's rank.

(3) Yes (a), (b) and (c). He underwent an abridged counter insurgency course from 18 January to 24 February 1982 and a candidate officers course from 15 September to 3 December 1982.

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The Department as a matter of course participates in all anti-smoking campaigns.

Prevention is of prime importance and thus the Department concentrates its at-

Alexandra on a rental basis from West Rand Development Board and tenders are presently being invited for the provision of a prefabricated building to accommodate the office. Provided nothing unforeseen occurs, the building should be ready for occupation towards the second half of this year; and

(b) as of today.

Hansard Q.61.135

Ciskei: members of South African Defence Force

19/2/85

*2. The Leader of the Official Opposition asked the Minister of Defence:

(1) Whether any members of the South African Defence Force were seconded to the Ciskei Government in 1984; if so, how many;

(2) whether the Ciskei Government took any steps in January 1985 in respect of any members of the South African Defence Force so seconded; if so, (a) what steps, (b) in respect of which members and (c) why were these steps taken;

(3) whether he has met with any member of the Ciskei Government in 1985 concerning matters of the South African Defence force seconded to Ciskei; if so, (a) when, (b) with whom did he meet, (c) what was discussed at this meeting and (d) what was the outcome; if not,

(4) whether he intends meeting with representatives of the Ciskei Government concerning these members of the South African Defence Force; if not, why not; if so, when;

(5) whether he will make a statement on the matter?

†The DEPUTY MINISTER OF DEFENCE:

(1) Yes. 44.

(2) Yes.

(a) The immediate withdrawal of 3 members was requested.

(b) Brig A A Nell, Col P Hall, Capt S R Barnard.

(c) Because the Government of the Ciskei let it be known that it was no longer satisfied with the services of these members. In this connection it must be mentioned that Col Hall was seconded at the request of the Ciskei Government and had just arrived in the Ciskei, but had not reported for duty with the Ciskei Defence Force, when his deseconding was requested.

(3) No. (a), (b), (c) and (d) fall away.

(4) Yes. As the withdrawal of the SA Defence Force personnel resulted from the actions of the Ciskei Government the initiative for discussion on this matter should come from that Government via the Department of Foreign Affairs.

(5) No.

Hansard Q.61.136

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Strategic Fuel Fund Association

19/2/85

*4. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

Who were the directors of the Strategic Fuel Fund Association as at (a) 31 October 1984 and (b) 25 January 1985?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(a) *31 October 1984*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal— Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

(a) *25 January 1985*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
M T de Waal—Managing Director: Industrial Development Corporation

Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh Deputy-Director-General: Department of Commerce and Industries

State Oil Fund (Pty) Ltd

*5. Mr D J N MALCOMESS asked the Minister of Mineral and Energy Affairs:

Who were the directors of the State Oil Fund (Pty) Ltd as at (a) 31 October 1984 and (b) 25 January 1985?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(a) *31 October 1984*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
Dr L Alberts—Director-general: Department of Mineral and Energy Affairs
S J P du Plessis—Director-general: Department of Commerce and Industries
M Macdonald—General Manager: Industrial Development Corporation
D R Voster—General Manager: Industrial Development Corporation
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Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

(a) *25 January 1985*
Dr D C Neethling—Chief Director: Energy, Department of Mineral and Energy Affairs
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Alternates:
F J Reuvers—Industrial Development Corporation
A J Myburgh—Deputy-Director-General: Department of Commerce and Industries

tention on preventing young people from adopting smoking habits.

The Department of Health and Welfare will be publishing a teachers guide on "Smoking and the Respiratory System" in conjunction with all Education Departments, for distribution to all primary and secondary schools in the Republic.

In addition, a pupils workbook will be developed and should be available by the end 1985.

Mr A B WIDMAN: Mnr Chairman, arising out of the hon the Minister's reply, I want to ask him whether he does not think the time has come for official action to be taken to warn the public of South Africa against the dangers of smoking?

Bophuthatswana: television signals

*11. Mr D J DALLING asked the Minister of Foreign Affairs:

Whether, with reference to his reply to Question No 4 on 1 February 1984, the Government has received any communication from the Government of Bophuthatswana in connection with the agreement entered into between the Republic and Bophuthatswana relating to (a) the relaying by the SABC of Bophuthatswana TV signals to areas within the Republic and/or (b) any ancillary matter; if so, what was the (i) gravamen of the communication and (ii) response of the Government?

†The DEPUTY MINISTER OF FOREIGN AFFAIRS:

(a) and (b) Yes.

- (i) A communication has recently been received from the Government of the Republic of Bophuthatswana concerning the relaying of the signal of the Bophuthatswana television service to agreed target areas in the RSA.
- (ii) A meeting between the Governments of the Republic of South Africa and the Republic of Bophuthatswana during which certain aspects regarding the relaying of the Bophuthatswana television service to agreed target areas in the RSA will be discussed, is due to be held in the near future.

55 Hansard Q. Col. 144 19/2/85

Oil: rand cost per barrel

*12. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) What was the average rand cost per barrel of crude oil imported into the Republic in 1984;

(2) what was the rand cost per barrel of such oil imported into the Republic as at the latest specified date for which figures are available?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) R45,86 cost, insurance, freight.

(2) The average cost for January 1985 was R62,18 cost, insurance, freight.

Hansard Q. Col. 144 19/2/85

Housing subsidies

*13. Mr R R HULLEY asked the Minister of Public Works:

What was the total amount paid out in the 1983-84 financial year in housing subsidies in terms of the Public Service Act, No 54 of 1957?

†The MINISTER OF PUBLIC WORKS:

R107 839 857.

Soweto

*14. Mrs H SUZMAN asked the Minister of Co-operation and Development:

How many trading licences were operative in Soweto as at 1 January 1985?

The MINISTER OF CO-OPERATION AND DEVELOPMENT:

The City Council of Johannesburg is the licensing authority for Soweto. Upon enquiry the Council indicated that the requested information was not available and could not be readily obtained.

Apprenticeship/artisan training: investigation

*15. Dr A L BORAINE asked the Minister of Manpower:

(1) Whether, with reference to his reply to Question No 10 on 1 February 1984, the investigation by the National Training Board into apprenticeship and artisan training in South Africa has been completed; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, what were the findings;

(2) whether any action is to be taken as a result of the investigation; if so, what action?

†The MINISTER OF MANPOWER:

(1) Yes.
- (a) Falls away.
- (b) The report with findings and recommendations will soon be submitted to me as Minister of Manpower for consideration.

(2) Any action necessary will be taken after the Report has received due consideration.

Gross national product: educational research/development

*16. Dr A L BORAINE asked the Minister of National Education:

What percentage of the gross national product of South Africa was spent on educational research and development in the field of science in 1982-83?

The MINISTER OF NATIONAL EDUCATION:

The information for 1982/83 is not available, as this information is only collected every two years. The information for 1983/84 is presently being processed.

Muizenberg beach-front: water-slide

*18. Mr P H P GASTROW asked the Minister of Law and Order:

(1) Whether any member of the South African Police received any complaints concerning a water-slide at the Muizenberg beachfront area in January 1985; if so, (a) when, (b) from whom and (c) what was (i) the nature of the complaints and (ii) his response thereto;

(2) whether any member of the South African Police approached any owner or operator of the said water-slide on an official basis in that month; if so, (a) when, (b) why and (c) with what result?

†The DEPUTY MINISTER OF LAW AND ORDER:

(1) No, no record that such a complaint was lodged, could be traced

(2) No, not on an official basis.

Hansard Q. Col. 146 19/2/85

Oil: landed cost

*19. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) Whether he will furnish the House with information on the landed cost in South Africa of crude oil; if not, why not; if so,

(2) in respect of the latest specified date for which figures are available, (a) what was the landed cost in South Africa of crude oil in United State dollars per barrel, (b) what, in respect of 93-octane petrol, was this cost expressed in cents per litre at the pump and (c) what elements com-

(iii) *Burst tyres*

	Internal		International
	A300	B737	B747
March 1984	—	—	—
April 1984	—	—	—
May 1984	—	—	—
June 1984	1	—	—
July 1984	—	—	—
August 1984	1	—	—
September 1984	—	—	—
October 1984	—	—	—
November 1984	—	—	—
December 1984	1	—	—

Hansard

Q. Col. 127 **Bus operators** 18/2/85

204. Mr A SAVAGE asked the Minister of Transport Affairs:

What was the extent of the subsidy granted to bus operators in respect of commuter traffic in each of the four main metropolitan areas in the 1983-84 financial year?

The MINISTER OF TRANSPORT AFFAIRS:

Pretoria	R36 136 387
Johannesburg	R22 196 215
Durban	R24 560 894
Cape Town	R12 305 234
Total	R95 198 730

For the attention of the hon member it is mentioned that the payments effected above include amounts derived from the respective transport accounts as well as monies appropriated by the Treasury.

TUESDAY, 19 FEBRUARY 1985

†Indicates translated version.

For oral reply:
General Affairs:
State President:

Departments/bodies: programmes for improvement of attitudes

*1. Mr D J DALLING asked the State President:

(1) Whether he has issued directives to all Departments and other Government bodies concerned with functions relating to Blacks in the socio-economic sphere to submit programmes for the improvement of attitudes in the performance of their functions; if not, (a) why not and (b) when does he intend issuing such directives; if so,

(2) (a) what is the full text of these directives, (b) what is the full list of Departments and other Government bodies to which these directives have been issued, (c) on what date were these directives despatched and (d) when is it anticipated that the resulting programmes will be implemented?

The STATE PRESIDENT:

(1) and (2) I refer the hon member to my speech during the Opening of Parliament on 25 January 1985. Attention is being given to ways and means as to how this matter should be handled.

Mr D J DALLING: Mr Chairman, arising out of the reply given by the State President, could he tell the House whether he intends to give a reply to the specific questions asked?

The STATE PRESIDENT: Mr Chairman, yes, at a later stage, once the proceedings I have instituted have been finalized.

Mr D J DALLING: Mr Chairman, further arising out of the reply given by the State President, could he tell the House when he anticipates he will be ready to give those replies?

The STATE PRESIDENT: Mr Chairman, when the proceedings have been finalized.

Mr D J DALLING: Mr Chairman . . .

The CHAIRMAN OF THE HOUSE: Order! I will allow the hon member for Sandton one final supplementary question.

Mr D J DALLING: Mr Chairman, there is only one more question I should like to put to the State President. Could he tell us whether he has sent out any directives at all at this stage?

The STATE PRESIDENT: Mr Chairman, I am prepared to reply to that question when the proceedings have been finalized.

Ministers:

Question standing over from Tuesday, 12 February 1985:

55 Hansard

Escom

Q. Col. 129 19/2/85

*40. Mr B B GOODALL asked the Minister of Mineral and Energy Affairs:

(1) Whether Escom suffered losses of approximately R57 million in the recent past; if so,

(2) whether the management of Escom recently admitted that such losses had occurred; if so, (a) how were these losses incurred, (b) who authorized the transfer of the funds concerned and (c) in what manner was this money lost;

(3) whether these losses were reflected in Escom's books; if not, why not;

(4) whether any Escom officials were informed of these losses; if not, why not; if so, (a) which officials and (b) when were they informed;

(5) whether these officials took any action as a result; if not, why not; if so, what action;

(6) whether any other such losses have been incurred by Escom; if so,

(7) whether these losses were reflected in its books; if not, why not; if so, (a) what total amount was lost in this manner, (b) when were these losses incurred and (c) who was aware of these losses?

†The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Yes.

(2) Yes.

(a), (b) and (c) In 1974 Escom concluded a contract with an American contractor for the enrichment of uranium which would serve as fuel for the Koeberg Nuclear Power Station. In terms of the contract Escom had to supply the contractor with unenriched uranium for enrichment. The relevant American administration has, however, prohibited the return to South Africa of the enriched uranium and consequently Escom had to obtain enriched uranium from other sources. The unenriched material was, however, supplied in order to avoid breach of contract by Escom.

Approximately a year ago Escom and the American contractor agreed to suspend the contract and Escom has taken steps to dispose of the enriched as well as unenriched material. Losses were, however, suffered as a result of the collapse of the uranium market and the high uranium prices to which Escom were contractually bound which are reflected by the fact that in the last quarter of 1984, as a result of escalation, Escom had to pay R194,46 per kilogram for uranium while the spot market price is approximately R60 per kilogram at present.

Contractual obligations and forced sales are as follows:

Costs	R-million
Purchases of U_3O_8	47,800
Uranium enrichment costs	34,793
Interest	30,120
Miscellaneous*	3,671
Total	116,384
Income from sales	
Ten transactions between 2/4/82 and 31/3/83	(29,226)
Further transactions:	
29/6/84	(7,850)
13/9/84	(9,820)
26/11/84	(12,257)
Interest on deposits at the contractor	(0,449)
Total	(59,602)
Total amount written-off	56,782

Note: *Include legal costs, transport, insurance, transformation of U_3O_8 to UF_6, handling charges and brokers' fees.

(3) Yes. At the insistence of the external auditors and with the knowledge of the Atomic Energy Corporation and members of the Electricity Supply Commission a provisional amount of R59,317 million was written off against operating costs which are reflected on pages 40 and 41 of Escom's 1983 annual report.

(4) (a) and (b) Yes. Officials involved in these transactions, including the Senior General Manager, General Manager (Finance), the Commercial Manager and the Legal Manager were aware of the situation and members of the Electricity Supply Commission were informed accordingly.

(5) By direction of the Commission, steps were taken to, as far as possible, recoup expenditure and to minimise losses by negotiation of the most advantageous contracts possible.

(6) Yes.

(7) (a), (b) and (c) Contracts on the local market were concluded in December 1977 for the supply of uranium but as a result of the suspension by the USA of the enrichment contracts, this material was not required anymore.

The resale of the material at the present lower world price will have losses as a result and resales in 1984 will be accounted for in the applicable annual report. The amounts involved will only be known after the 1984 figures are audited and approved by the members of the Electricity Supply Commission.

Members of the Electricity Supply Commission including the Senior General Manager, General Manager (Finance), the Commercial Manager and the Legal Manager are aware of the potential losses.

In explanation it can be pointed out that the acquisition of uranium is of a long term nature and economic factors of the eighties leading to the decline of world prices could not be foreseen in 1977.

Mr H H SCHWARZ: Mr Chairman, arising out of the hon the Minister's reply, in addition to the losses to which he has made reference, has his attention been drawn to the allegation in a Sunday newspaper concerning further losses of R800 million? Will the hon the Minister reply to that or make any statement in this regard?

†The MINISTER: Mr Chairman, yes, it has been brought to my attention. I have read the reports in the *Sunday Express*, I think, attentively. I immediately contacted the executive of Escom, the commission, and they were requested to do a detailed analysis of the Koeberg costs as soon as possible, which they will shortly submit to me, after which I will definitely consider a meeting, either through Escom, or through me.

Mr W V RAW: Mr Chairman, further arising out of the reply of the hon the Minister, may I ask him whether all parties in the House were briefed fully in confidence on the question which he has just answered, or not?

†The MINISTER: No, no one has yet been informed concerning the detail which this answer provides.

†Mr W V RAW: I mean the amount which is connected therewith.

†The MINISTER: Mr Chairman, the hon member evidently means the amount of R57 million. I beg your pardon, I misunderstood the question. The answer is yes, to the best of my ability the leaders of all the Opposition parties were informed in respect of this question.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, can he confirm that substantial foreign exchange losses are to be faced by Escom?

†The MINISTER: Mr Chairman, I think the hon member must exercise patience until Escom's annual report is published, because the information that he wants will be published in it. As far as Koeberg is concerned, we will have the information available shortly.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, could he confirm what I believe he said and that was that the first he knew about these matters reported in the *Sunday Express* was when he read the *Sunday Express*?

†The MINISTER: Mr Chairman, I definitely did not say that. In replying to a supplementary question of the hon member for Yeoville I said that I have read the reports in the *Sunday Express*. I am ware of most of the things that appear in those reports.

Mr R R HULLEY: Mr Chairman, further arising out of the reply of the hon the Minister, could he tell the House when he did become ware of the losses as reported in the *Sunday Express* and what he did about the matter at the time when he did become aware thereof?

†The MINISTER: Mr Chairman, I have already replied to that question by saying that I immediately contacted Escom . . .

†Mr S S VAN DER MERWE: What does "immediately" mean? [Interjections.]

†The MINISTER: What "immediately" means? Immediately after I had read it—that was the Monday morning . . . [Interjections.]

The CHAIRMAN OF THE HOUSE: Order! There are hon members who are interested in the reply of the hon the Minister. Those hon members who do not appear to be interested ought to be quiet at the very least. The hon the Minister may proceed.

†The MINISTER: Thank you, Sir, but I have already completed my answer.

Mr H H SCHWARZ: Mr Chairman, further arising out of the reply of the hon the Minister and particularly with reference to his reply to the supplementary question of the hon member for Durban Point, does he not consider that this matter should be submitted to a parliamentary committee for investigation?

New Questions:

Alexandra Township

*1. Mr D J DALLING asked the Minister of Communications.

Whether any progress has been made in the provision of a post office in Alexandra Township since his replies to Questions No 15 on 9 February 1983 and No 29 on 10 February 1984; if not, why not; if so, (a) what progress and (b) in respect of what date is the information furnished?

The MINISTER OF COMMUNICATIONS:

Yes;

(a) a site for the proposed post office has been acquired at the corner of Rooseveld Street and Sixth Avenue (next to the new mens hostel) in

tention on preventing young people from adopting smoking habits.

The Department of Health and Welfare will be publishing a teachers guide on "Smoking and the Respiratory System" in conjunction with all Education Departments, for distribution to all primary and secondary schools in the Republic.

In addition, a pupils workbook will be developed and should be available by the end 1985.

Mr A B WIDMAN: Mnr Chairman, arising out of the hon the Minister's reply, I want to ask him whether he does not think the time has come for official action to be taken to warn the public of South Africa against the dangers of smoking?

Bophuthatswana: television signals

*11. Mr D J DALLING asked the Minister of Foreign Affairs:

Whether, with reference to his reply to Question No 4 on 1 February 1984, the Government has received any communication from the Government of Bophuthatswana in connection with the agreement entered into between the Republic and Bophuthatswana relating to (a) the relaying by the SABC of Bophuthatswana TV signals to areas within the Republic and/or (b) any ancillary matter; if so, what was the (i) gravamen of the communication and (ii) response of the Government?

†The DEPUTY MINISTER OF FOREIGN AFFAIRS:

(a) and (b) Yes.

(i) A communication has recently been received from the Government of the Republic of Bophuthatswana concerning the relaying of the signal of the Bophuthatswana television service to agreed target areas in the RSA.

(ii) A meeting between the Governments of the Republic of South Africa and the Republic of Bophuthatswana during which certain aspects regarding the relaying of the Bophuthatswana television service to agreed target areas in the RSA will be discussed, is due to be held in the near future.

Hansard

Oil: rand cost per barrel

Q.61.144 19/2/85

*12. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) What was the average rand cost per barrel of crude oil imported into the Republic in 1984;

(2) what was the rand cost per barrel of such oil imported into the Republic as at the latest specified date for which figures are available?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) R45,86 cost, insurance, freight.

(2) The average cost for January 1985 was R62,18 cost, insurance, freight.

Hansard Q.61.144

Housing subsidies

19/2/85

*13. Mr R R HULLEY asked the Minister of Public Works:

What was the total amount paid out in the 1983-84 financial year in housing subsidies in terms of the Public Service Act, No 54 of 1957?

†The MINISTER OF PUBLIC WORKS:

R107 839 857.

Soweto

*14. Mrs H SUZMAN asked the Minister of Co-operation and Development:

How many trading licences were operative in Soweto as at 1 January 1985?

The MINISTER OF CO-OPERATION AND DEVELOPMENT:

The City Council of Johannesburg is the licensing authority for Soweto. Upon enquiry the Council indicated that the requested information was not available and could not be readily obtained.

Apprenticeship/artisan training: investigation

*15. Dr A L BORAINE asked the Minister of Manpower:

(1) Whether, with reference to his reply to Question No 10 on 1 February 1984, the investigation by the National Training Board into apprenticeship and artisan training in South Africa has been completed; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, what were the findings;

(2) whether any action is to be taken as a result of the investigation; if so, what action?

†The MINISTER OF MANPOWER:

(1) Yes.
- (a) Falls away.
- (b) The report with findings and recommendations will soon be submitted to me as Minister of Manpower for consideration.

(2) Any action necessary will be taken after the Report has received due consideration.

Gross national product: educational research/development

*16. Dr A L BORAINE asked the Minister of National Education:

What percentage of the gross national product of South Africa was spent on educational research and development in the field of science in 1982-83?

The MINISTER OF NATIONAL EDUCATION:

The information for 1982/83 is not available, as this information is only collected every two years. The information for 1983/84 is presently being processed.

Muizenberg beach-front: water-slide

*18. Mr P H P GASTROW asked the Minister of Law and Order:

(1) Whether any member of the South African Police received any complaints concerning a water-slide at the Muizenberg beachfront area in January 1985; if so, (a) when, (b) from whom and (c) what was (i) the nature of the complaints and (ii) his response thereto;

(2) whether any member of the South African Police approached any owner or operator of the said water-slide on an official basis in that month; if so, (a) when, (b) why and (c) with what result?

†The DEPUTY MINISTER OF LAW AND ORDER:

(1) No, no record that such a complaint was lodged, could be traced.

(2) No, ~~not~~ on an official basis.

(55) Hansard Q.61.146

Oil: landed cost

19/2/85

*19. Mr R R HULLEY asked the Minister of Mineral and Energy Affairs:

(1) Whether he will furnish the House with information on the landed cost in South Africa of crude oil; if not, why not; if so,

(2) in respect of the latest specified date for which figures are available, (a) what was the landed cost in South Africa of crude oil in United State dollars per barrel, (b) what, in respect of 93-octane petrol, was this cost expressed in cents per litre at the pump and (c) what elements com-

prised the marketing margin in the latest petrol price composition?

The MINISTER OF MINERAL AND ENERGY AFFAIRS (Reply laid upon the Table with leave of House):

(1) Yes.

(2) (a) 29,71 USA Dollars for January 1985.

(b) en (c) Prices of fuel are not determined on a cost plus basis but in terms of the international list price of refined petroleum products at four large refineries at Singapore and Bahrein. The international list price reflects current international crude oil costs as well as refinery costs and refinery profits. The landed cost plus wholesale profit margin of 93 octane petrol amounted to 58,513 RSA cents per litre at an exchange rate ratio of R1,00 to USA 0,465 Dollar in January 1985.

The wholesale margin is based on a scientific economic analysis and amounts at present to approximately 15 per cent on assets without provision for tax and interest on capital employed. The present comprehensive price composition of 93 octane petrol is as follows:

	c/l
Pump price at Witwatersrand	88,5
General sales tax at Reef	8,0 or 9,0% of Reef price
Railage and pipeline costs to Reef	6,5 or 7,3% of Reef price
Service station profit margin	5,2 or 5,9% of Reef price
Pump price at coast	81,4
Less: General sales tax	7,4 or 9,1% of coast price
Service station profit margin	5,2 or 6,4% of coast price
Wholesale price	68,8
Less: Customs and excise duty	3,987 or 4,9% of coast price
Equalisation Fund Levy	1,300 or 1,5% of coast price
National Road Fund Levy	5,000 or 6,2% of coast price
State Oil Fund Levy	4,000 or 5,0% of coast price
Landed cost reflected in price	54,513 or 66,9% of coast price
Actual landed cost including wholesale profit margin	58,513
Unit loss which is financed as a price equalisation factor from the sale of stockpiled supplies	4,000

Advertisements/sponsorship by tobacco companies: legislation

*20. Dr M S BARNARD asked the Minister of Health and Welfare:

(1) Whether he intends introducing legislation relating to (a) advertisements for the smoking of tobacco products and (b) sponsorship of sporting and other events by tobacco companies; if not, why not; if so, (i) what will be the nature of such legislation and (ii) when is it anticipated that it will be introduced;

(2) whether he will make a statement on the matter?

†The MINISTER OF HEALTH AND WELFARE:

(1) (a) No.

(b) No. I do not believe that smoking-related problems can be altered dramatically by legislation but rather by continued education and information.

(2) No.

Mr A B WIDMAN: Mr Chairman, arising out of the hon the Minister's reply, I again put the question to him whether he does not think it is time to warn the public of South Africa of the dangers of smoking.

Mr Chairman, seeing that the hon the Minister does not reply . . .

The CHAIRMAN OF THE HOUSE: Order! The hon member asked this particular question earlier today. On what occasion the hon the Minister did not reply, and I presume that he does not want to do so now.

Mr A B WIDMAN: Mr Chairman, can I then ask the hon the Minister whether he intends replying?

Mr M A TARR: Mr Chairman, further arising out of the hon the Minister's reply, does he not consider that cigarette advertisements have the effect of encouraging young people to smoke?

Cape Peninsula meat-controlled area

*21. Mr P A MYBURGH asked the Minister of Agricultural Economics:

Whether, with reference to his reply to Question No 14 on 11 July 1984, the National Marketing Council has completed its investigation into the proposed extension of the Cape Peninsula meat-controlled area; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, (i) what were the findings and (ii) when will the decision of the Meat Board to extend the controlled area be implemented?

The MINISTER OF AGRICULTURAL ECONOMICS:

Yes. (a) and (b) fall away.

(i) The National Marketing Council recommended that the controlled area of the Cape Peninsula not be extended.

(ii) I decided that before I finally decide on the Meat Board's request that the controlled area of the Cape Peninsula be extended, the bodies concerned should investigate the possibility of extending the slaughtering facilities in the Western Cape.

Anti-smoking campaign

*22. Dr M S BARNARD asked the Minister of Education:

(1) Whether his Department (a) is holding or (b) intends to hold an anti-smoking campaign at schools falling under its control; if not, why not; if so, what is the nature of the campaign;

(2) whether he will make a statement on the matter?

†The MINISTER OF EDUCATION:

(1) (a) and (b) No. It is not practicable for the Department to hold country-wide campaigns in order to combat specific hazards singly. However, the Department is using whatever opportunities present themselves in various syllabi to make pupils aware of health hazards. Smoking, as well as other dangerous habits such as drug abuse and the abuse of intoxicating liquor are being dealt with in the syllabuses for guidance. Also, pamphlets on various health topics are compiled in close co-operation with the Department of Health and Welfare by the interdepartmental Advisory Committee for Health Education on which the Department and other departments of Education are represented.

(2) No.

†Dr M S BARNARD: Mr Chairman, further arising out of the hon Minister's answer, will the hon Minister please tell us if it would help his department if his colleague next to

What was the average number of passengers per South African Airways flight from (a) Johannesburg to Houston and (b) Houston to Johannesburg during the period 1 July 1984 to 31 December 1984?

The MINISTER OF TRANSPORT AFFAIRS:

(a) 147.

(b) 154.

Technikons: students

178. Mr K M ANDREW asked the Minister of Education:

How many (a) full-time and (b) part-time students were enrolled at technikons for Blacks as at the latest specified date for which figures are available?

The MINISTER OF EDUCATION:

(a) The hon member is referred to Table 7, page 235 of the 1984 Annual Report of the Department.

(b) None.

Hansard Q. Col. 235

Std 10 examinations

25/2/85

179. Mr K M ANDREW asked the Minister of Education:

(a) How many Black pupils at schools on the Witwatersrand wrote Std 10 examinations in 1984 or during the latest specified period of 12 months for which figures are available and (b) how many of these pupils obtained matriculation exemption?

The MINISTER OF EDUCATION:

(a) 6 574.

(b) 486.

Hansard

First-year students

Q. Col. 235

181. Mr K M ANDREW asked the Minister of Education:

25/2/85

How many (a) White, (b) Coloured, (c) Asian, (d) Black and (e) other specified first-year students were registered at each university falling under the control of his Department in 1984?

The MINISTER OF EDUCATION:

	(a)	(b)	(c)	(d)	(e)
Fort Hare ..	5	5	1	1 291	—
The North ..	—	2	—	1 841	—
Zululand ...	—	2	—	1 534	—
Medunsa ...	—	—	—	254	—
Vista	—	11	—	4 837	—

Hansard

(55) **Cahora Bassa scheme**

Q. Col. 236 25/2/85

187. Mr F J LE ROUX asked the Minister of Mineral and Energy Affairs:†

(1) Whether the Republic concluded an agreement in regard to the Cahora Bassa scheme on or around 2 May 1984; if so,

(2) whether the Cahora Bassa scheme has supplied any electricity to the Republic since this agreement was concluded; if so, (a) on what date did the supply thereof commence and (b)(i) what total amount of electricity has been supplied to the Republic since and (ii) what percentage of the Republic's electricity consumption in the corresponding period does this amount of electricity represent;

(3) whether any amounts have been paid to (a) Portugal and (b) Mozambique in respect of (i) electricity supplied and (ii) the use of powerlines and installations; if so, what amounts in each case?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Yes.

(2) Yes.

(a) The supply was partially restored at 02h16 on 27 January 1985 and was interrupted at 12h06 on 8 February 1985.

(b) (i) 152,5 GWh.

(ii) 4 per cent of the electricity sent out by Escom. The figure for the Republic as a whole is not known.

(3) No.

Hansard Q. Col. 237

Joint Matriculation Board

25/2/85

200. Mr K M ANDREW asked the Minister of National Education:

(a) How many (i) Black, (ii) White, (iii) Coloured and (iv) Indian (aa) private and (bb) other candidates wrote the matriculation examinations of the Joint Matriculation Board in 1984 and (b) how many such candidates (i) passed and (ii) failed their examinations?

The MINISTER OF EDUCATION:

	Black	White	Coloured	Indian
(a)	1 337	1 245	81	45

No separate statistics are available in respect of private and other candidates.

(b)	Black	White	Coloured	Indian
(i)	200	1 156	63	26
(ii)	1 137	89	18	19

The above statistics only pertain to candidates who wrote examinations in six or more subjects.

Hansard Q. Col. 237

Nurses

25/2/85

226. Dr M S BARNARD asked the Minister of Health and Welfare:

(1) Whether there is a shortage of nurses in the Republic; if so, what was this shortage as at the latest specified date for which figures are available;

(2) whether his Department intends to increase the facilities available for the training of nurses; if not, why not; if so, (a) when and (b) what additional number of nurses will be accommodated in these facilities?

The MINISTER OF HEALTH AND WELFARE:

(1) Shortage of nurses is a relative concept and it is therefore not possible to give a meaningful figure in this regard

(2) Nursing training is only partly the responsibility of the Department of Health and Welfare.

Within the Department of Health and Welfare the training of nurses will be slightly increased.

(a) as soon as present negotiations with Provincial Hospital Departments regarding the new nursing curriculum and sharing of training facilities have been finalized;

(b) numbers not available at this stage

Hansard Q. Col. 238

Cadet detachments

25/2/85

286. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

How many (a) cadet detachments and (b) persons attached to these detachments were there in the Republic as at 31 December 1984?

The MINISTER OF DEFENCE:

(a) 653

(b) 2 885 officers and 178 240 cadets.

(89) Hansard Q. Col. 238

Notifiable diseases

25/2/85

316. Dr M S BARNARD asked the Minister of Health and Welfare:

How many cases of each notifiable disease were notified in respect of each race group in 1984?

Demand for control after huge Escom loss

ARGUS 20/2/85

55

[illegible]

[illegible]

Argus Correspondent

DURBAN. — Against a background of huge losses, demands were made today that Escom should either be handed over to private enterprise or be brought back under the control of Parliament.

Progressive Federal Party spokesmen on finance and energy said today after confirmation of a R57-million loss on a uranium deal that the party was not satisfied that proper controls were being applied at Escom.

The loss on the uranium deal was yesterday confirmed in Parliament by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, who also announced he had asked for details of allegations of further losses totalling R800-million.

DISCLOSURE

The losses were initially exposed after fugitive Escom accountant Mr Gert Rademeyer, who is alleged to have taken R8,5-million of Escom funds, had telephoned a Sunday newspaper making claims of a cover-up of bad management.

Mr Brian Goodall, PFP energy spokesman, said there was clearly a "less-than-full disclosure" by Escom over what was happening.

"There is this obsession with secrecy laws being used whenever there is something embarrassing."

PROHIBITION

Last week PFP MP Mr Peter Soal accused the Government of making political appointments to the board of Escom instead of appointing people according to their experience and expertise.

Mr Steyn told Parliament yesterday that the R57-million loss was caused by a United States prohibition on the sale of enriched uranium to South Africa and a drop in the price of uranium.

The loss had been written off in 1983, being shown in that year's Escom report as "operating costs".

per kg

55

2 Cape Times, Wednesday, February 20, 1985

Escom lost R56m on uranium contract

Political Staff

THE Minister of Mineral and Energy Affairs, Mr Danie Steyn, confirmed in Parliament yesterday that Escom lost nearly R57-million when a contract with an American contractor for enriched uranium for the Koeberg power station collapsed because of political pressure.

Escom suffered additional losses when related contracts also collapsed, he said.

The additional losses would be known only when Escom's 1984 figures were audited and approved.

In reply to questions from the Progressive Federal Party spokesman on Mineral and Energy Affairs, Mr Brian Goodall, Mr Steyn said Escom concluded a contract with an American contractor in 1974 for the enrichment of uranium for Koeberg. In terms of the contract, Escom supplied the uranium for enrichment.

"The relevant American administration has, however, prohibited the return to South Africa of the enriched uranium and consequently Escom had to obtain enriched uranium from other sources."

The unenriched material was, however, supplied in order to avoid breach of contract by Escom.

About a year ago, Escom and the American contractor agreed to suspend the contract and Escom had taken steps to dispose of the enriched uranium as well as the unenriched material.

However, losses were suffered because of the collapse of the uranium market.

Escom was contractually bound to pay far higher prices for uranium than the spot market price.

For example, in the last quarter of 1984, Escom was contractually bound to pay R194,46 a kg for uranium while the spot market price was about R60 a kg.

The cost of the American contract was R116 384 000, including purchase of the uranium, enrichment costs and interest.

The income from sales after the contract was suspended was R59 602 000, which led to R56 782 000 being written off he said.

The loss was reflected in Escom's books.

Further losses were incurred when contracts concluded in 1977 for the supply of unenriched uranium collapsed as a result of the suspension of the American enrichment contract.

"In explanation, it can be pointed out that the acquisition of the uranium is of a long-term nature and economic factors of the 80s leading to a decline of world prices could not be forseen in 1977," he said.

The loss on the collapsed enrichment deal was disclosed to the Sunday Express recently by Escom's fugitive former accountant, Mr Gert Rademeyer.

M Times 21/2/85

'Politics' in Escom drama

55

Own Correspondent

JOHANNESBURG. — Mr Gert Rademeyer's Australian lawyer said late yesterday that his client wished to be brought to trial as soon as possible and would testify about South Africa's uranium deals to establish that his extradition was wanted for political reasons.

Mr Ros Barwick, acting for Mr Rademeyer in Sydney, said he would bring a bail application as soon as possible to establish his client's innocence of allegedly defrauding Escom of R8 400 000.

Mr Rademeyer, 49, who has dual South African-Australian citizenship, was taken to court in handcuffs and tried to avoid being photographed by covering his face with a newspaper.

He left Johannesburg in December last year, re-entering on New Year's Eve before leaving again.

Australian sources said his defence appeared to rely on proving he was wanted in South Africa because of his knowledge of the Republic's attempts to buy enriched uranium. South Africa, India and Israel are barred from buying enriched uranium as non-signatories of the UN Nuclear Non-Proliferation Treaty.

The Australian Government has said that if there were any political, racial, or religious reason for wanting Mr Rademeyer extradited, he would not be sent back for trial.

Australian authorities are awaiting documentation from South Africa which both countries claim will have an important bearing on Mr Rademeyer's case.

But Canberra has agreed in principle to investigate Mr Rademeyer's extradition, reports **Chris Freimond**.

This was confirmed by a South African Department of Foreign Affairs statement last night.

There is no extradition treaty between the two countries at the moment, but it is believed one is soon to be concluded. In the meantime an interim arrangement is in force.

The statement said the South African Police, the Department of Justice, the Attorney-General in Johanneburg and other interested parties were preparing an application for Mr Rademeyer's extradition.

Escom chief explains 'secret acts'

55

Star 22/2/85

Escom did not act in secret in an unwarranted manner, chairman Mr Jan H Smith said in a Press release in Johannesburg last night.

He was reacting to reports of Escom losses connected with the Koeberg nuclear power station, and in other ways.

He denied that Escom published information only when forced to do so, and said the source of many allegations, Mr Gert Rademeyer, was untrustworthy.

Mr Smith also dismissed allegations that Escom was badly managed and that "financial control is insufficient".

The findings of the commission of inquiry into electricity supply, published last November, had "confirmed that the measure of financial control in Escom was of recognised and acceptable standards".

Of Koeberg, Mr Smith said: "It it self-evident that Escom wished to, and will, obey the laws of the country."

The Nuclear Energy Act and the instructions of the State and the Atomic Energy Corporation to keep certain information secret "is directly in opposition to Escom's normal desire to inform Parliament and the public fully and properly concerning all its activities", he added. — Sapa.

Faulty pipes at Koeberg

Cape Times 22/2/85 (55)

Own Correspondent

JOHANNESBURG. — The Koeberg nuclear power station near Cape Town has been shut down for "some time" because faults have been found in imported stainless steel pipes — less than a year after it came on stream.

Escom has declined to take delivery of the second reactor — and may have to unload the nuclear fuel because of the faulty pipes.

In an official statement last night, Escom said the giant plant had been shut down and that so far 50 pipe "elbows" of the 500 in the stainless steel piping system had been taken out and sent for close inspection in Germiston.

Escom has also had to purchase special equipment from abroad to inspect the piping in both reactor systems.

This follows the announcement that the number one reactor had been shut down for certain work and inspection, after the station had produced more power in six months than all the 11 other Escom stations in Natal and the Cape Province.

Mr I D van der Walt, senior general manager at Escom, said there was no danger to the public or the Koeberg operating staff because Escom had introduced the most stringent safety precautions in the world.

During the pre-commissioning inspection of the second reactor, Escom had found small ferritic inclusions (faults in the steel which could lead to rust and other difficulties) in a stainless steel pipe elbow.

"Further inspection has since revealed more of these. Although the contractor did not regard these as serious, Escom extended the inspection to the number one reactor.

"At this stage we cannot evaluate the full extent of the damage but among 500 pipe elbows we have tested, there are 50 we would like to examine more fully," the Escom statement said.

Escom said late yesterday that "in depth" discussions were being held with the contractors responsible, because the number one reactor was still under guarantee and the second one had not yet been taken over.

Commenting on the closure, a Koeberg Alert spokesman, Mr John Venn, said last night that his organization "deplored the vagueness of the statement by Escom" and called for a detailed and public assessment of the faults at the power station.

"It is not clear from the statement whether the faults lie in the reactor steam generator or the condenser," he said.

"However the fact that the removal of the fuel elements is contemplated indicates that the fault is a serious one."

Fresh calls for probe into Escom

55

~~260~~

22/2/85 Star

By David Braun,
Political Correspondent

Cape Town

Opposition parties have renewed calls for a full parliamentary investigation into Escom's financial affairs after the announcement that South Africa's nuclear power station has been shut down because of faulty pipes.

Last night Escom announced that Koeberg nuclear power station, near Cape Town, would be shut for at least two months because faults had been found in imported stainless steel pipes.

It has given an assurance that there is no danger to the public or operating staff because the safety precautions are the most stringent in the world.

Power supplies

Today Escom spokesmen also said there would be no threat to winter power supplies.

"There is no risk of blackouts," they said. "Consumers can rely on normal services through the peak months."

However, the announcement of the closure — less than a year after Koeberg came on stream — has raised a storm of criticism.

It is being seen in the light of other recent revelations: that Escom has written off a R500 million cost overrun at Koeberg; that it faces losses of R300 million as a result of failing to cover its overseas deals against the fall of the rand; that it has "lost" millions of rands in other deals; and because it was allegedly defrauded by a former senior employee.

Mr Roger Hulley, a Progressive Federal Party spokesman on energy affairs, said today that it was quite horrendous that a new nuclear power station should have developed faults so soon.

"Quite apart from a safety aspect," he said, "the question that needs to be answered now is how much money is going down the drain. The bad news about Escom just seems to be piling up to a ridiculous degree."

Mr Harry Schwarz, PFP spokesman on finance, said that the latest Koeberg development reinforced demands for full parliamentary control of Escom.

"There is a tremendous amount of (public) money invested in Koeberg. Escom should be accountable to Parliament in the same way that any Government department is."

He added that the case for a complete investigation of Escom's financial affairs by a parliamentary committee grew stronger by the day.

"The PFP will insist and persist on this issue," said Mr Schwarz.

Mr S P Barnard, the Conservative Party's spokesman on economic affairs, also called for an inquiry.

"It worries me that we, as MPs, have to read what is going on in the newspapers. We have not been informed of Escom's losses and other activities."

In the Escom statement last night, senior general manager Mr I D van der Walt said stainless steel piping in the No 1 reactor was being inspected for iron particles after these had been found in No 2 reactor, which is yet to be commissioned.

The full extent of the problem could not be evaluated yet, he said, but among more than 500 pipe elbows tested Escom wanted to examine about 50 more fully.

Koeberg has produced more power during the past six months than the annual output of all Escom's 11 power stations in the Cape and Natal — hydro stations excluded.

● See Page 5.

'SA asked for more oil'

55

Star

Salem: Jo'burg broker testifies

27/2/85

The Star's Foreign News Service

HOUSTON — James Hillary Shorrock, the 50-year-old Johannesburg oil broker convicted as an accomplice in the Salem oil swindle, has returned to Houston and testified as a US Government witness.

Mr Frederick Ed Soudan, a Houston businessman, is accused of acquiring the supertanker Salem (119 000 tons) and selling its allegedly stolen cargo of oil to the South African Government.

SHIP WAS SUNK

After the oil was unloaded at Durban the ship was allegedly sunk to make it appear the oil had been lost.

Shorrock, originally accused with Mr Soudan and his cousin, Mr Abdul Wayhab al Ghazou, was placed on five years' probation last November after spending six months in a Houston jail.

He was released on condition that he return to give evidence for the prosecution at Mr Soudan's trial.

Shorrock, who admitted being "intimately involved" in the oil tanker deal, claimed he was bilked out of $250 000 by Mr Soudan.

But he also boosted Mr Soudan's defence by declaring that he did not believe Mr Soudan knew of the theft of the oil or of the deliberate sinking of the tanker.

"I have no evidence to that effect whatsoever," Shorrock told the court.

"My own analysis of the situation is that he wasn't involved."

Under further cross-examination, Shorrock said officials of South Africa's oil purchasing agency were so confident Mr Soudan was innocent they asked him to obtain more oil for them — even after news of the sinking of the Salem had been received.

The Salem went down on January 17 1980, and rumours began circulating the following month. Anxious to clear his name, said Shorrock, Mr Soudan invited Mr D F Mostert of the South Africa Stategic Fuel Fund to go with Shorrock to see him in Geneva.

Over dinner, Shorrock said, Mr Mostert reassured Mr Soudan of his confidence that he was not responsible.

"It's all right Fred. Forget about this nonsense and come out and get us some crude oil," Shorrock quoted Mr Mostert as saying.

Shorrock said Mr al Ghazou had lied to help Mr Soudan hide hundreds of thousands of dollars to avoid paying American income tax.

(55)

Weekend Argus, February 23 1985 3

Concern over length of Koeberg's closure

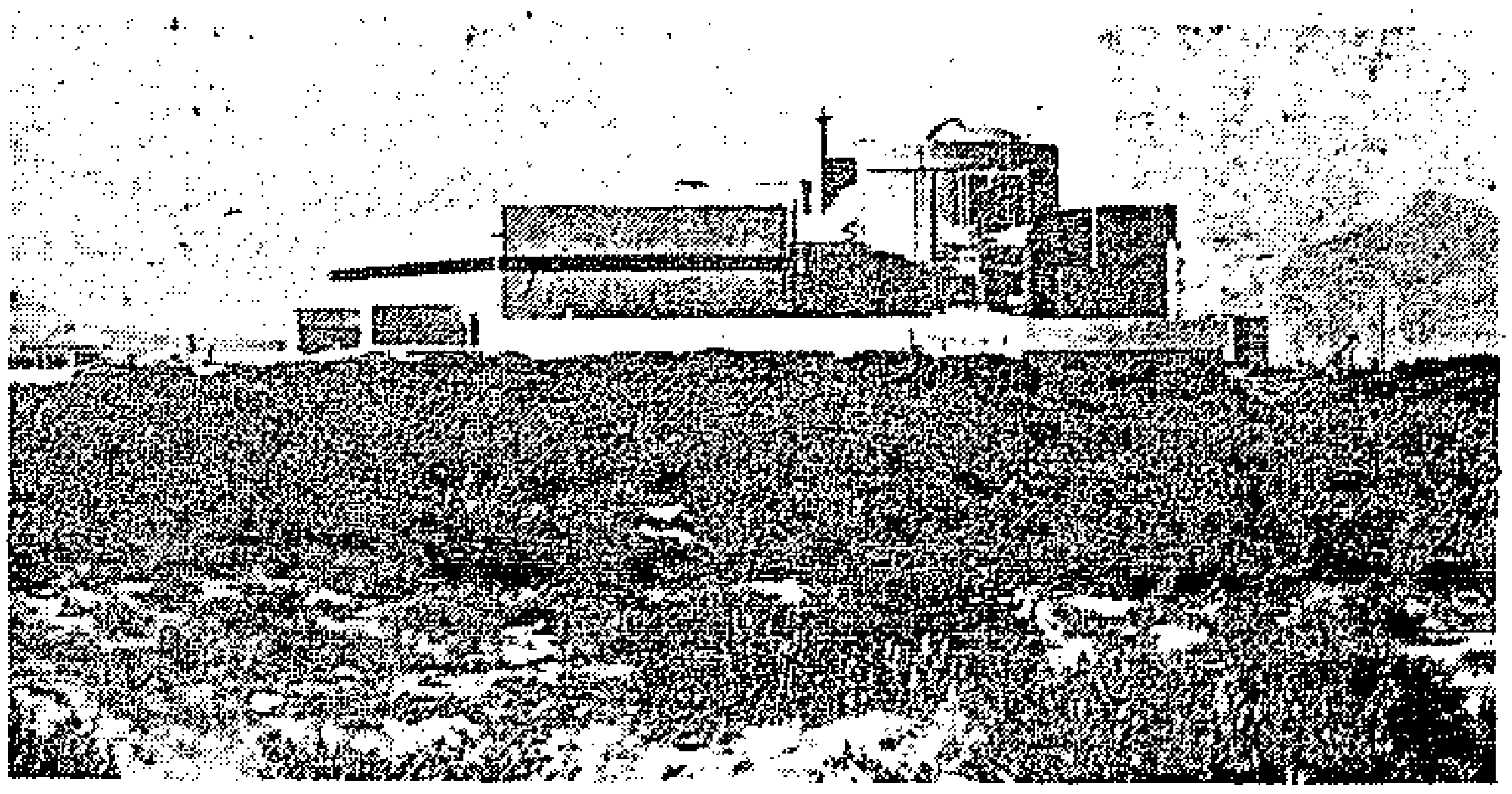
Weekend Argus Reporters

ESCOM spokesmen admit they are not sure how long the Koeberg nuclear power station will be out of action and concede it will be "uncomfortable" if Koeberg's power is not available to the national grid in winter.

Meanwhile, Mr Harry Schwarz, Progressive Federal Party spokesman on finance, has issued a new call for an investigation of Escom's affairs. He also wants Escom made answerable to the taxpayer, through Parliament.

The unexpected closure of the R5-billion power station this week after flecks of rust were noted in stainless steel piping is the latest in a series of incidents which have aroused concern.

The suspect pipe elbows in the Koeberg reactor are throughout the entire station and include those which carry contaminated material, Escom officials confirmed today.



The turbine hall and two reactor containment buildings at Koeberg power station.

Confusion

Until now there has been confusion about whether the suspect pipes carry contaminated material.

An Escom spokesman confirmed today that the potential faults were in ancillary pipes in both the primary and the secondary systems of the station, including pipes which carry borated water to the reactor.

The Escom statement contradicts earlier suggestions that the pipes were outside the containment building — which shields the radioactive reactor at the core of the station.

But the Escom spokesman emphasised that the material in the pipes was not "highly contaminated". He also emphasised that the pipes might not be faulty at all. There had been no leaks and even if the pipes were faulty they would probably have continued to operate for years without danger.

"We would like to stress that right now the station is perfectly normal. It is just that we have some pipes which might cause a problem in a number of years."

Escom discovered an iron particle on the surface of a stainless steel pipe in Unit 2 of the reactor — which has not yet begun operating. It then decided to check the pipes in Unit 2 which has been working for over a year but which happened to be shut down for routine maintenance.

Escom investigated 500 pipe elbows in Unit 1 and got "preliminary indications" that 50 might contain iron particles. These would be investigated.

If Escom found that the 50 suspect pipe elbows did not contain iron particles, Unit 1 would be back on stream in a short time. If all 50 were faulty it would take "some months" to replace them, the spokesman said.

Koeberg Alert

A spokesman for Koeberg Alert said the disclosure that the suspect pipes were throughout the station confirmed their view that there was cause for concern about the quality-control of materials used in the plant.

"This calls into question the safety and reliability of all the equipment used in the plant."

The Government will be questioned in Parliament this week about the Koeberg shutdown by the NRP spokesman on mineral and energy affairs, Mr Ralph Hardingham.

Escom denies losing money at Koeberg

25/2/85

55 Star

Own Correspondent

CAPE TOWN — Escom has denied reports that it is losing money through the temporary shutdown of Koeberg nuclear power station.

Regional information officer Mr Andre van Heerden said allegations that the facility was facing a loss of R1-million a day indicated a "complete lack of knowledge of how an electrical system works".

He said that, if Koeberg were the only power station in the country, Escom would definitely lose money. The closure of the plant meant that Escom used spare generating units at other power stations to provide electricity for the Western Cape.

"The amount we can sell remains the same whether or not Koeberg is shut down."

C/T Times 25/2/85. (55)

Escom denies report

JOHANNESBURG. — Escom yesterday denied any knowledge of weekend reports that former accountant "Dr" Gert Rademeyer, who made off with over R8-million of Escom funds, was returning to South Africa voluntarily.

It was reported that Mr Rademeyer, now held in Australia, was meant to return on Saturday night but could not do so because police confiscated his traveller's cheques when he was arrested last Saturday to appear in court for an extradition hearing.

The report quoted a "senior Escom official" who was not named.

But yesterday Escom spokesman Mr Ettiene du Plessis said he did not believe the report of Mr Rademeyer's return was true: "I can't even find the official who was quoted."

He said Escom had not been negotiating with Mr Rademeyer at all.

The Rademeyer family could not be contacted for comment yesterday.

Koeberg: PFP to ask who will pay

55

Cape Times 25/2/85

Own Correspondent

JOHANNESBURG. — Questions are to be tabled in Parliament this week on whether electricity consumers will foot the bill for losses incurred in the shutdown of the Koeberg nuclear power station.

A loss of about R1-million a day in revenue to Escom, South Africa's power-supply giant, would result from the shutdown, weekend reports said.

The Progressive Federal Party deputy spokesman on energy affairs, Mr Roger Hulley, confirmed yesterday that he would ask in Parliament for:

- Details of the problems which caused the shutdown.
- A breakdown of the costs involved and the losses to Escom.
- Escom's plans on how the costs would be covered.

R1m a day

The number one reactor at Koeberg, which was on stream for six months before its closure last week, generates more electricity than the 12 alternate power stations in the Cape and the hydro-power stations in Natal together.

The number two reactor, scheduled to come into operation in July, should alone have earned R1-million daily, according to the latest Escom annual report.

With Koeberg idle, Escom will lose a source of finance for repayment of interest — estimated at R300-million a year — on the cost of building the power station.

The estimated R1-million daily revenue loss excludes the cost of possible repairs to faulty pipes in both reactors.

However, an Escom public relations spokesman, Mr Etienne du Plessis, yesterday denied that Escom was losing money in electricity sales because of the closure.

"Escom is still selling and supplying electricity to all its consumers. Therefore there is no loss in revenue," he said.

He estimated Koeberg's average daily income from sales at R790 000.

He said that when Koeberg was closed down Escom simply invoked the use of spare capacity generating units at other big power stations, since Escom functioned on a national interlocking grid system.

Koeberg generated less electricity than other big power stations such as Matla and Duvha, which could each generate 3 600 megawatts compared with Koeberg's 920 megawatts on each of its two units.

Asked why Koeberg was built if enough power could be generated nationally without it, Mr Du Plessis said the main reasons were "strategic in nature" and he did not want to go into this.

Mr Hulley said yesterday that he would be tabling questions about the exact nature of the problems at Koeberg and what had given rise to them, and also about the costs involved and who would foot the bill — the contractor or Escom.

If Escom had to foot the bill, the cost would be passed on to consumers indirectly.

"The bottom line here is that a brand-new nuclear power plant has had to be closed down, and it sounds like a fiasco. Consumers will be expecting some pretty smart answers from the minister," he said.

Mr Du Plessis said yesterday that Koeberg's number one reactor was still functioning under the contractor's guarantee and the guarantee made provision for repair costs, but not for "consequential losses".

"We are busy negotiating with the contractor on this count," he said.

'Over-reacting'

A statement released in Paris by the French contractor, Framatone, over the weekend, accused Escom of "over-reacting" and said that the number one reactor had been shut down against its advice.

Mr Du Plessis drew attention yesterday to a statement released by Koeberg Alert, which praised Escom for "obviously adhering to high standards of safety".

The PFP spokesman on finance, Mr Harry Schwarz, said yesterday that the PFP would continue calling for Escom finances to be put under parliamentary control.

"Any losses that Escom may suffer because of the Koeberg shutdown will indirectly be passed on to consumers.

"Escom must be brought under the control of Parliament's Committee of Public Accounts," Mr Schwarz said.

● **Koeberg: French hit back, page 3**

Koeberg: French hit back

Cape Times 25/2/85

55

JOHANNESBURG. — The French contractors at Koeberg have hit back at the Electricity Supply Commission (Escom) for shutting down the giant nuclear plant because of faults found in some of the imported equipment, the Johannesburg Sunday Express reported this weekend.

Escom claims faults have been found in stainless steel pipes which could lead to rust and other problems, and says it will keep the plant shut in the interest of safety, no mattter the cost.

But Framatone, the French suppliers of the equipment and co-ordinator of the Koeberg project, disputes the claims.

'Over-reacting'

In a statement issued in Paris on Saturday, Framatone, which has built 37 similar units in France, accused Escom of "over-reacting" and said the No 1 reactor had been shut down against its advice.

In the light of the "French experience", said Framatome, there were no defects at Koeberg that could threaten public safety.

The cost of the shutdown — now expected to be longer than the two months originally estimated — will run into hundreds of millions of rands.

Framatone has also criticized Escom for saying it may now have to unload the nuclear fuel from the No 1 reactor and empty the water circuits for a thorough examination.

Escom said this week that during pre-commissioning inspection of the second reactor, it found small ferritic inclusions in a stainless steel pipe elbow and extended the inspection to the No 1 reactor.

So far, said Escom, 500 pipe elbows had been tested, of which 50 would be more fully examined.

However, according to Framatone, the faulty pipe elbow in the second reactor was replaced in spite of laborotory tests showing that it could have been left in place with no risk to the safety of the plant.

It said no other defects existed that could affect the quality of the equipment, and believed Escom's over-reaction would cast doubt on the safety of the plant.

Framatone has undertaken to replace whatever equipment may be shown to be faulty during future inspections. It has strongly recommended to Escom that the first reactor be put on stream again and that commissioning of the second reactor be resumed while samples removed from it are inspected.

Mr I D van der Walt, Escom's senior general-manager, said in a statement: "It may be said we are over-reacting and that this costs money, but Escom has never considered the question of safety as negotiable." — Sapa

What was the average number of passengers per South African Airways flight from (a) Johannesburg to Houston and (b) Houston to Johannesburg during the period 1 July 1984 to 31 December 1984?

The MINISTER OF TRANSPORT AFFAIRS:

(a) 147.

(b) 154.

Technikons: students

178. Mr K M ANDREW asked the Minister of Education:

How many (a) full-time and (b) part-time students were enrolled at technikons for Blacks as at the latest specified date for which figures are available?

The MINISTER OF EDUCATION:

(a) The hon member is referred to Table 7, page 235 of the 1984 Annual Report of the Department.

(b) None.

Hansard Q. Col. 235

Std 10 examinations

25/2/85

179. Mr K M ANDREW asked the Minister of Education:

(a) How many Black pupils at schools on the Witwatersrand wrote Std 10 examinations in 1984 or during the latest specified period of 12 months for which figures are available and (b) how many of these pupils obtained matriculation exemption?

The MINISTER OF EDUCATION:

(a) 6 574.

(b) 486.

Hansard

First-year students

Q. Col. 235

181. Mr K M ANDREW asked the Minister of Education:

25/2/85

How many (a) White, (b) Coloured, (c) Asian, (d) Black and (e) other specified first-year students were registered at each university falling under the control of his Department in 1984?

The MINISTER OF EDUCATION:

	(a)	(b)	(c)	(d)	(e)
Fort Hare ..	5	5	1	1 291	—
The North ..	—	2	—	1 841	—
Zululand ...	—	2	—	1 534	—
Medunsa ...	—	—	—	254	—
Vista	—	11	—	4 837	—

Hansard

Cahora Bassa scheme

Q. Col. 236 25/2/85

(55) 187. Mr F J LE ROUX asked the Minister of Mineral and Energy Affairs:†

(1) Whether the Republic concluded an agreement in regard to the Cahora Bassa scheme on or around 2 May 1984; if so,

(2) whether the Cahora Bassa scheme has supplied any electricity to the Republic since this agreement was concluded; if so, (a) on what date did the supply thereof commence and (b)(i) what total amount of electricity has been supplied to the Republic since and (ii) what percentage of the Republic's electricity consumption in the corresponding period does this amount of electricity represent;

(3) whether any amounts have been paid to (a) Portugal and (b) Mozambique in respect of (i) electricity supplied and (ii) the use of powerlines and installations; if so, what amounts in each case?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) Yes.

(2) Yes.

(a) The supply was partially restored at 02h16 on 27 January 1985 and was interrupted at 12h06 on 8 February 1985.

(b) (i) 152,5 GWh.

(ii) 4 per cent of the electricity sent out by Escom. The figure for the Republic as a whole is not known.

(3) No.

Hansard Q. Col. 237

Joint Matriculation Board

25/2/85

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Hansard Q. Col. 237

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25/2/85

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(1) Whether there is a shortage of nurses in the Republic; if so, what was this shortage as at the latest specified date for which figures are available;

(2) whether his Department intends to increase the facilities available for the training of nurses; if not, why not; if so, (a) when and (b) what additional number of nurses will be accommodated in these facilities?

The MINISTER OF HEALTH AND WELFARE:

(1) Shortage of nurses is a relative concept and it is therefore not possible to give a meaningful figure in this regard

(2) Nursing training is only partly the responsibility of the Department of Health and Welfare.

Within the Department of Health and Welfare the training of nurses will be slightly increased.

(a) as soon as present negotiations with Provincial Hospital Departments regarding the new nursing curriculum and sharing of training facilities have been finalized;

(b) numbers not available at this stage

Hansard Q. Col. 238

Cadet detachments

25/2/85

286. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

How many (a) cadet detachments and (b) persons attached to these detachments were there in the Republic as at 31 December 1984?

The MINISTER OF DEFENCE:

(a) 653

(b) 2 885 officers and 178 240 cadets.

Hansard Q. Col. 238

Notifiable diseases

25/2/85

(69) 316. Dr M S BARNARD asked the Minister of Health and Welfare:

How many cases of each notifiable disease were notified in respect of each race group in 1984?

R360-m electric plan

26/2/85

Keeping tariffs at half those Escom charges

S Kw

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Municipal Reporter

A planned saving of more than R360 million by the Johannesburg Electricity Department over the next decade should allow the city to continue to charge consumers half the price which Escom does, says chief electrical engineer Mr Wessel Barnard.

Mr Barnard said that up to 1995 his department would save more than R400 million on buying Escom electricity by maintaining its own power stations — but this would cost about R40 million.

"About 40 percent of our electricity comes from Escom, but our tariff increases have been half Escom's.

"This should continue," he added.

He said the department would maintain its power stations by using machinery from obsolete British stations.

"Some of our equipment is quite old, and you can no longer get spares.

"The British are closing down some of their smaller stations and we recently bought two major parts for what it would have cost to repair one," said Mr Barnard.

He added that British Electricity International, a consulting company, recently conducted a technical feasibility study to see what equipment at the Johannesburg stations needed to be replaced.

Mr Barnard said he expected a report from the company within the next few weeks.

C.T. 26/2/85

55 ~~260~~

Koeberg may cost R2m a day

By DI MEEK
Environment Reporter

THE Koeberg Nuclear Power Station could be costing the consumer over R2-million a day at present overdraft rates, Mr Roger Hulley, the Progressive Federal Party spokesman on energy affairs said yesterday.

Mr Hulley was reacting to a statement by an Escom public relations spokesman that the closure of Koeberg meant no loss in revenue.

Mr Hulley said his information was that the capital cost of establishing Koeberg had been in the order of 3½ billion rand.

According to information supplied to him yesterday this was borrowed money which had to be financed. At current interest rates the interest alone on this amount of money would be over R2-million a day excluding operating costs, maintenance and overheads.

He said even if the financing of Koeberg was at a more favourable interest rate he would estimate that the interest bill must be at least R1-million a day.

"If you have the facility and do not derive electricity from it and then say you are not making losses it is juggling with figures to a ridiculous point.

"The hard fact is that you can't afford to spend that amount of money on something that is not producing anything.

"Escom is saying that it doesn't cost anyone anything to shut down the plant but that strikes me as a rather fallacious argument," he said.

Mr Hulley said that if South Africa's electricity supply was so over-established there was an element of wasted money on facilities.

A spokesman for Escom, Mr Etienne du Plessis, said the same argument used by Mr Hulley for Koeberg could also be used if any of the giant coal fire stations on the Highveld were closed down, as they were periodically. They also cost Escom money and were also built on loans.

Mr Du Plessis also disputed the claim that South Africa's electricity supply was over-established.

He said he thought it would be irresponsible if Escom did not have the reserves to call on in the event of a shutdown, whether at Koeberg or at one of the major coal fire stations in the Transvaal.

"Because Escom has this reserve capacity it is still selling and supplying the same amount of electricity as it did before Koeberg was shut down. And that is why I say there is no loss in revenue," Mr Du Plessis said.

He said he could not confirm the figures quoted by Mr Hulley but he felt sure the interest rates would have been less than the current rate.

● **Leading article, page 10**

55

Star 28/2/85

Policeman with gun threatened leaders — union

A meeting of Sasol workers was disrupted on Tuesday night when a policeman threatened union leaders with a gun, the Chemical Workers' Industrial Union (CWIU) claimed yesterday.

In a statement the union said the man, dressed in civilian clothing, was disarmed and asked to identify himself. Union leaders then took him to the local police station to lay charges. There security police confirmed that he was a policeman.

The unionists were then allegedly subjected to abusive language and one of them was detained.

A CWIU spokesman said police had told its lawyers that the unionist was being held under the Criminal Procedure Act.

"CWIU condemns police interference in workers' freedom of association in view of the delicate stage reached in the settlement negotiations between Sasol and CWIU. We demand the immediate release of our leader," said the union.

The police public relations division said: "In the light of the present unrest in the country, members of the South African Police attend meetings where and when necessary.

"In this instance a member of the South African Police attended the meeting, where he was identified by persons present as a member of the South African Police. He was then allegedly assaulted and robbed of his firearm.

"A charge of assault and robbery is being investigated and to date one person has been arrested."

Star

28/2/84

55

Uranium plant to operate by 1987

South Africa's first uranium enrichment plant, near Pretoria, will come into operation by 1987, the Atomic Energy Corporation's executive chairman, Dr J W de Villiers, said yesterday.

He said Escom would have to continue buying its enriched uranium abroad until Valindaba was in production. — Sapa.

First oil in 'fairly large' quantities

Cape Times/
1/3/85

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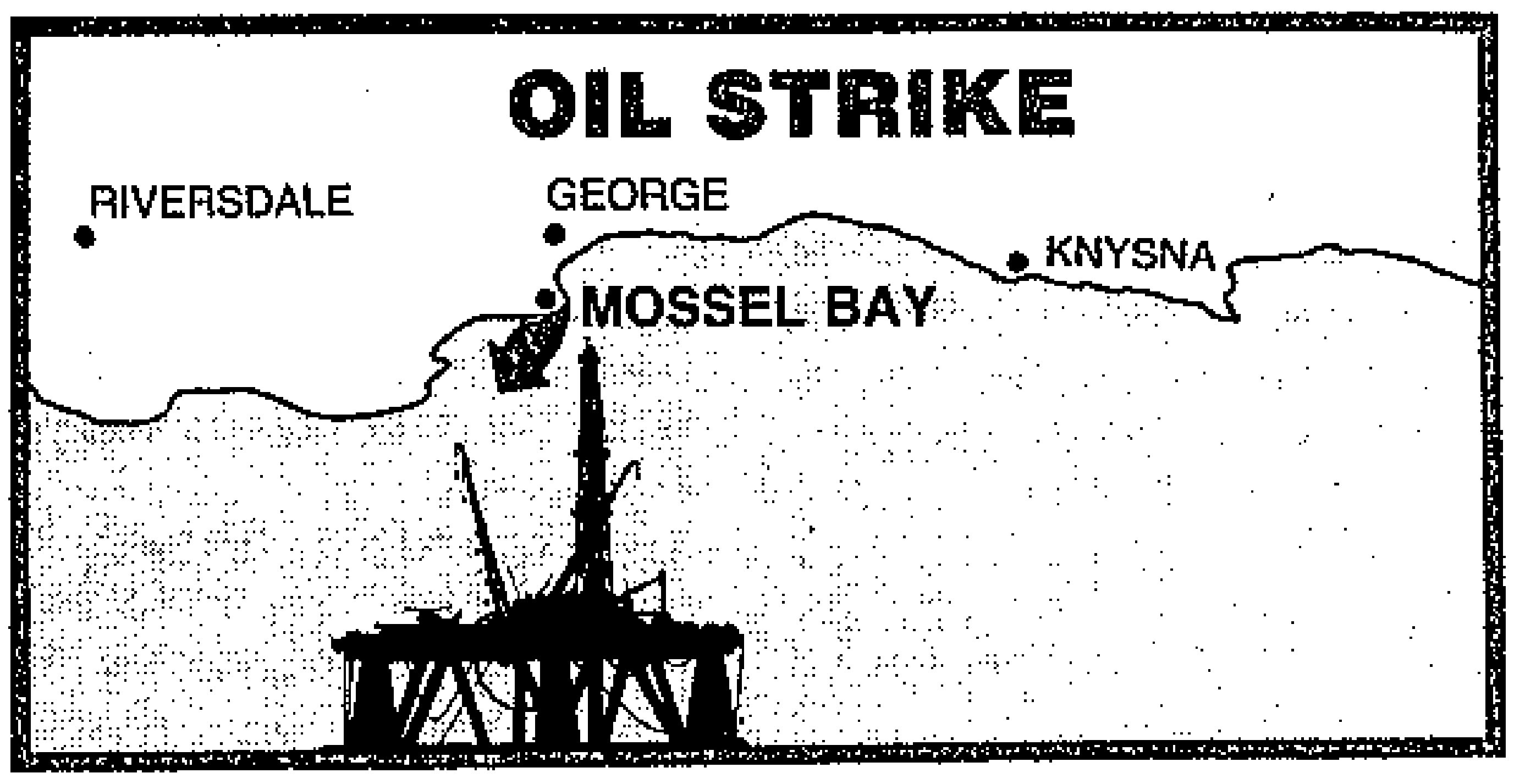
~~[illegible]~~

JOHANNESBURG. — South Africa's State-owned Southern Oil Exploration Corporation (Soekor) yesterday announced the first strike in its 20-year search for the only strategic mineral the country does not have.

Soekor spokesman Mr Mike Leibrand said a well sunk off the southern coast near Mossel Bay, about 480km east of Cape Town, was producing 2 600 barrels of light crude and a million cubic feet of gas a day.

"This is the first time we have brought crude oil to the surface," he said, "But it is expected that the oil occurrence will be of limited extent."

Mr Leibrand said the find was not immediately viable, but it was significant because it was the first time prospectors had found crude since Soekor was established in 1965.


OIL STRIKE

ing would establish the exact significance of the strike.

The search, believed to have cost about $200 million so far, has yielded significant quantities of natural gas, some including quantities of oil condensate, in the same offshore area and plans are under way to convert the gas into petroleum.

South Africa already is the world's leading producer of petrol made from coal.

South Africa, a leading producer of minerals including gold, diamonds, platinum and other strategic metals, has no oil of its own.

An embargo by the Organization of Petroleum Exporting Countries (Opec) and unofficial sanctions by other oil-producing nations opposed to its race laws has left the country without a regular supply of crude.

Since the Iranian revolution, the country has had to buy all its oil on the international spot market, often at above-average prices.

● In a statement, Soekor said it had "encountered" oil in a borehole to the south of Mossel Bay.

Soekor said: "This is the first oil produced to the surface in fairly large quantities by Soekor."

But, the statement added, "it is expected that the oil occurrence will be of limited extent".

Further holes will have to be drilled.

Approached by Sapa to explain the significance of the find, a Soekor spokesman said it was "of limited extent".

"The gas is merely associated with the oil. A gas find of significance should produce at least 20 000 000 cubic feet a day."

● On March 25, 1969, the then Minister of Mines and Planning, Dr Carel de Wet, announced in the House of Assembly that a "significant petroleum discovery" had been made 40 miles offshore from Plettenberg Bay. Reports at the time said the gas production was 25 million cubic feet a day.

Dr De Wet produced two bottles of oil condensate for members of Parliament to examine. These two bottles were displayed at the Rand Easter Show a few days later.

In May of the same year, the head of the American oil exploration consortium said the Plettenberg Bay gas well would not be developed for industrial or commercial purposes. UPI, Sapa and Staff Reporters

ARGUS 1/3/85 (55)

Soekor hopes to exploit gas soon

Staff Reporter

SOEKOR hopes to get the green light for its fuel-from-gas project at Mossel Bay by the middle of this year.

This was disclosed today by Mr Mike Leibbrandt, Soekor liaison officer, following yesterday's announcement that oil had been brought to the surface for the first time in the 20-year search for oil.

Mr Leibbrandt said the oil find was a significant bonus in the search but Soekor's top priority was to prove as many reserves as possible and go ahead with the Mossel Bay project.

He said there was no question of the oil find being economically viable and there would be further exploration to determine the size of the reservoir, "but we do definitely know that it is limited".

The well could produce about 2 600 barrels of light crude and 1 000 000 cubic feet of gas a day.

Two feasibility studies into the Mossel Bay project are being made by engineering groups — one for the offshore operation and one for the onshore operation — and these were expected to be with the Cabinet by May.

After that a decision on whether to go ahead with the scheme was expected to be made fairly quickly.

Mr Leibbrandt said he could not disclose the extent of the gas reserves already proved. However, Soekor had said several times that it would consider one trillion cubic feet of gas as commercially viable to produce 22 000 barrels of fuel a day over about 20 years.

News of South Africa's historic first oil strike was greeted with nonchalance by locals.

Mr Abie van der Merwe, owner of Hotel Bellevue in Still Bay, close to where the find was made 82km south-west of Mossel Bay, said today it was not news.

"This has been in the pipeline for several years and nobody got very excited when they saw the announcement on television news last night."

Still hope for oil near PE

By KIN BENTLEY

(55)

E. Post 1/3/85

THERE was still a good chance of an oil strike near Port Elizabeth, an expert on Eastern Cape geology said today.

Commenting after the news of an oil strike near Mossel Bay, Professor Izak Rust, head of the Geology Department at the University of Port Elizabeth, said that in his opinion two oil-bearing "basins" existed near PE.

Giving a geological explanation for Mossel Bay strike, Prof Rust said there were oil-bearing formations on the Agulhus Bank. These occured in localised "basins".

Geological formations and conditions in the Algoa and Gamtoos "basins" were similar to those in the Mossel Bay area where South Africa's first important oil strike was made.

Prof Rust said oil was created in "source material or mother-rock" and stored in porous rock beneath the mother-rock into which it seeped. A suitable "storage structure" to keep the oil in was also required.

He had seen samples from the recent strike and was impressed by the oil's quality. It was comparable to Iranian crude and was dark brown, much like coffee.

It was very different from previous paraffin finds, which were lighter and partly "refined".

It was easier to produce the required end products from crude oil.

The refineries in Durban and Cape Town could probably process the new crude if production was a viable proposition.

However, he said, it remained to be seen if there was actually an oilfield off Mossel Bay comparable to the gasfields there.

● Soekor's public relations officer, Mr Mike Leibbrandt, said today that the oil find was potentially good news for South Africa, but Soekor's main concern at present was still to get the green light to start producing liquid fuel from the several gas strikes near Mossel Bay since 1980.

He said viability studies on the extent of the gas reserves were with the Government and a decision was expected by July. It was impossible to say at this stage what would constitute a viable number of barrels of oil a day at Mossel Bay.

A viable gas reservoir would have to contain one trillion cubic feet of gas which would be able to produce about 22 000 barrels of liquid fuel a day for about 15 to 20 years.

If Soekor moved from exploration to production, "production platforms" would be moved in to link up with the concreted-up holes blocking the gas wells already discovered.

The "astronomically expensive" process of shipping or piping the oil to the shore and into a refinery would then take place, with Mossel Bay being the logical site for the refinery.

Mr Leibbrandt said the processing of gas was relatively far cheaper than processing crude oil.

He was hopeful that the Government would consider the Mossel Bay find viable. The oil strike should, therefore, be seen mainly as a "welcome bonus" at this stage.

● Mr Leibbrandt said the burning up of the oil which TV viewers saw last night was not a waste of the precious substance.

He explained that the oil was "blown" like that for a couple of minutes at a time, during which tests were made, then the valves were closed.

and Industry the power to retroactively wind up or sequestrate revolving schemes. Indications are that it will have an untroubled passage through the three Houses of Parliament within the next few weeks.

The amendment describes a revolving scheme as any scheme which at any stage applies or follows "a method or practice which contains a risk of financial loss for any or all of the participants in that scheme in the event of a decline in the participation in that scheme."

Regulations outlawing the milk culture business were in fact published in last week's *Government Gazette* after a lengthy investigation into the business and various Supreme Court actions, some of which have already been running for more than three months. This process will, if the new legislation is passed, be dramatically short-circuited.

The effect of the proposed legislation will in fact be to protect people against their own stupidity. The Minister will be able to act immediately on the recommendation of the Trade Practices Advisory Committee to prevent public losses by sequestrating or winding up a "revolving scheme." In this way, the assets of the company will be frozen, and any expensive court proceedings already in progress against the offending company will be stopped, with costs to date deemed as part of the winding-up.

Independent liquidators will then be appointed in the normal way to trace and protect whatever assets remain. The fact that the proposed legislation is retroactive could mean that some of the milk culture "investors" will get at least some of their cash back.

SASOL FIRINGS

Compromise offer

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The Chemical Workers' Industrial Union (CWIU) will decide at a special congress this weekend whether to accept a compromise offer from Sasol in the dispute over the firing of more than 5 000 workers after the November stayaway. Rejection could, in theory, lead to a general strike by black workers.

The two major black union federations, the Federation of SA Trade Unions (to which CWIU is affiliated) and the Council of Unions of SA, as well as a number of independent unions, have threatened strike action in support of the Sasol workers if a satisfactory agreement is not reached.

Both the union and the company have declined to elaborate on the contents of Sasol's "package deal", which was arrived at after a month of intensive bargaining. However, the *FM* understands that it includes a commitment by Sasol to rehire about 70% of those dismissed.

Since December, Sasol has been interviewing ex-employees who reapplied for employment. By about a month ago, 4 300 had reapplied, of whom more than 2 500 had been employed. The company had previously stated that it would not take back workers who it found had been involved in "intimidating" others during the stayaway.

A CWIU spokesman says the other organisations are likely to consider the possibilities of support action only if the congress rejects the offer.

The union has a tough decision to make. It would prefer to see a far larger proportion of its members reinstated. On the other hand, acceptance of the deal will mean that CWIU will again have substantial membership at the Sasol 2 and 3 plants and will avoid the dangers of strike action. Discretion may prove the better part of valour.

BLACK HOUSING

FM 1/3/85

Profits are needed

33

Bureaucratic red tape is often cited as the reason for construction companies fighting shy of black housing projects. Some stalwarts who braved the difficulties subsequently withdrew in frustration over delays in getting the necessary approvals, confu-

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NUCLEAR POWER

Quick return for Koeberg?

The Koeberg nuclear power station could be back in operation soon, possibly within weeks. The reopening date will depend on whether the investigation by Escom, the Atomic Energy Corporation (AEC) and the Council for Nuclear Safety (CNS) confirms the French contractor's contention that the plant is completely safe.

Framatome, which supplied and erected the Westinghouse-designed reactor, charges that SA has "over-reacted" to the discovery of ferritic inclusions, which could cause corrosion, in some key stainless steel elbow pipes in the plant.

An Escom spokesman tells the *FM* that at this stage it is impossible to say with any certainty how long the plant will be out of commission. He says: "We are still in the investigatory phase. However, if further investigations uphold the contractor's insistence that the plant is safe then it could be reopened in a week or two, after we have completed normal maintenance.

"If, on the other hand, we come to the conclusion that some of the units need to be replaced, the time taken will depend on the number of units involved. If there are only a few the plant could reopen in a month or so. If there are very many it could be closed for a considerable number of months."

Escom does not doubt the expertise or good faith of Framatome. However, although Escom officials will not speak openly on the subject, it is well aware of the commercial pressures on the contractors — and there is an obvious fear that the pressures could affect its judgment on potentially damaging issues.

Although France, in contrast to America, has encouraged its nuclear power industry, it also over-estimated the growth in domestic demand for energy. As a result, the industry is geared to produce several nuclear reactors a year for the domestic market, reactors which will produce power for which there is no immediate demand.

Although the French government has scaled down its nuclear power programme, it is being forced to build plants it does not need purely to keep the industry going. In the circumstances the industry is desperate for foreign sales, the prospect of which could be damaged by the widely publicised safety problems at Koeberg.

In addition, Koeberg and similar reactors elsewhere are still under guarantee, and a serious safety problem, particularly if it is duplicated at other plants, could prove extremely costly for Framatome.

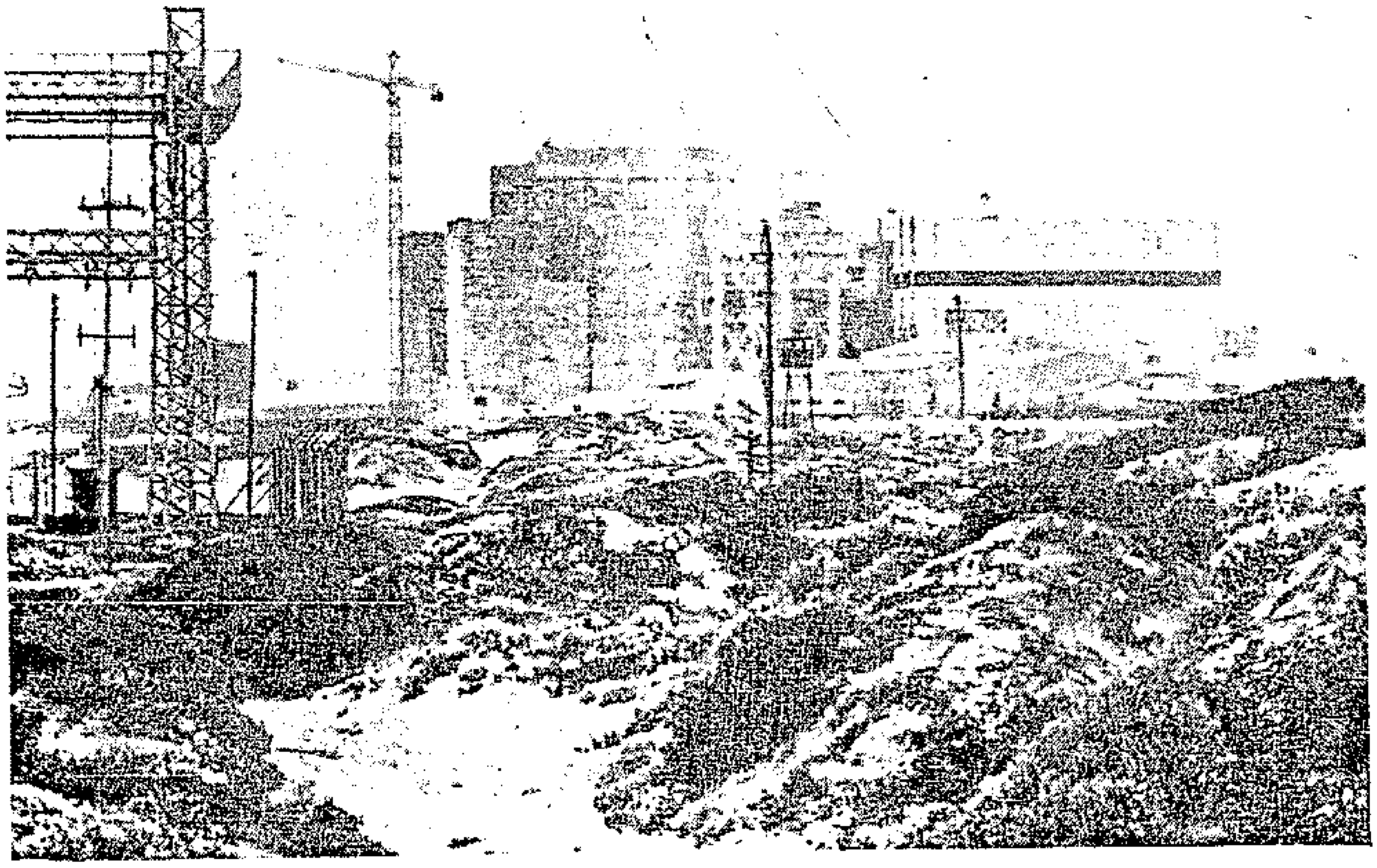
The final decision on Koeberg will not be made by Escom. In terms of the Nuclear Energy Act of 1982 the safety of nuclear facilities is overseen by the Atomic Energy Corporation (AEC) and the Council for Nuclear Safety (CNS). Unless these two authorities are satisfied that Koeberg is safe the plant may not be reopened. In the event of disagreement between the AEC and the CNS the final decision will be made by the Minister of Mineral and Energy Affairs.

Escom maintains that the closure of Koeberg will not lead to power cuts as it has ample reserve capacity to compensate for the loss of the plant's generating capacity. It may well be right, particularly as demand for power has not grown as fast as was anticipated when Koeberg was designed.

At the very least, however, the Koeberg problem reduces Escom's reserve capacity as autumn, with its surge in energy demand, approaches. With sabotage problems in Mozambique continuing to interrupt supply from Cahora Bassa, there is obvious pressure to recommission Koeberg as soon as possible.

Escom is understandably bruised, with the Koeberg problem arising so soon after the Rademeyer debacle, allegations of cost over-runs, foreign exchange losses and losses in obtaining nuclear fuel.

The anti-nuclear lobby has been quick to climb onto the bandwagon with claims that the problems at Koeberg prove their contention that nuclear power is not safe. Escom maintains, with justice, that the speed with which the problem was discovered and acted upon justifies the nuclear industry's claim that SA's inspection and safety procedures are among the best in the world.



Koeberg ... a R36m investment on ice

POLITICS

Barclays speaks out

FM 1/3/85

In an uncommonly bold statement, Barclays Bank chairman Basil Hersov and MD Chris Ball have called for rapid and fundamental political reform. Their statement implies rejection of the new constitution and calls unambiguously for a newer, and fairer, one.

In their annual review published this week, they ask for a constitution in which all South Africans can participate and criticise security legislation, influx control and discriminatory legislation.

The review says: "The welcome statement of intent by the State President on the opening of the 1985 Parliament identifies some of the urgent issues that need to be addressed. The role of the private sector, it seems to us, is to ensure that real and rapid content is given to the broadly stated objectives identified in the statement.

"We would, in particular, wish to see expedited the elimination of restrictive and discriminating laws as well as the design and development of an appropriate constitutional framework through which participation of all South Africans in our political process can be secured.

"There is an increasing awareness that unjust laws are untenable and have to be removed from our statute books. In this re-

TUESDAY, MARCH 5, 1985

Cpt Times 5/3/85 (55)

Sasol earnings show 20,1% growth

SASOLBURG. — The income of Sasol Ltd attributable to shareholders for the six months ended December 29 last year was R245,5m (43,6c a share) compared with R204,4m (36,6c a share) for the same period in 1983.

This represents a growth of 20,1 percent which largely corresponds to earnings growth in preceding periods.

An interim dividend of 16,5c a share has been declared for the half year (14c).

The directors in a report released yesterday say that as forecast at the end of the preceding financial year, the provision for tax increased considerably.

The amount provided increased by R153m compared to the first half of the previous financial year.

"The financial results of our industry depend to a large extent on continuous and steady operations, control of production costs and on the market prices of crude oil and petroleum products," their report says.

"At the Sasol I and Sasol II plants of the oil-from-coal production division and the related collieries production was consistently good.

"At Sasol II production optimization resulted in a material improvement in production. Good production at Natref improved the financial results of the refining division considerably compared with the corresponding period the previous year.

"Since the half year ended in 1983, Sasol III has attained full normal production which also positively influenced these results."

They say that in spite of a further weakening in the dollar market prices of crude oil and petroleum products, the strengthening of the dollar against the rand led to a significant net increase in the local producer prices of liquid fuels.

The chemical division also benefited in respect of exports from the strengthening of the dollar against the rand.

The results of the fertilizer division, however, were unsatisfactory "as a result of the prevailing unfavourable circumstances in the fertilizer industry".

In the interests of the group, "a flexible dividend policy is appplied in respect of Sasol III due to future uncertainty regarding crude-oil prices and exchange rates. It has been decided to maintain the previous interim devidend of R25m."

The profit attributable to Sasol Ltd for the half year therefore includes R12,5m being the company's share of the interim dividend declared by Sasol III.

Sasol III's before and after tax profit for the half year was R225m (R73m). Apart from the strengthening of the dollar against the rand, it reflects the achievement of full production at Sasol III.

Sasol III's profit does not include provision for tax as the company has a loss for tax purposes.

Of the future outlook, the directors say: "The profit expectations in respect of the oil-from-coal production division for the remaining six months of the financial year will be influenced largely by the dollar market prices of crude oil and petroleum products and the international value of the rand.

"If the present circumstances continue, it is expected that the profit growth for the current financial year will not be less favourable than the rate achieved in the past."

About the repayment of loans, the directors say: They "believe that in times like these it is in the interest of the Sasol companies on the one hand and the country's interests on the other, to diminish Sasol's indebtedness to the government sector substantially.

"The present favourable cash flow outlook permits the exercising of the contractual right to accelerate repayment of the loans. At this stage it is anticipated that Sasol Ltd will repay approximately R400m and Sasol III approximately R300m of these loans at the end of the financial year.

"The repayment of foreign loans which are fully covered against exchange rate risks will proceed in terms of the existing agreements." — Sapa

Sasol continues to sparkle

(55) Star 5/3/85

By Duncan Collings

Not surprisingly Sasol continued its sparkling profit record in the first half of the current financial year and cash flow is so great that it anticipates being able to reduce its indebtedness to the government sector by R700 million by the end of the year.

Attributable earnings rose 20 percent in the half year to end-December at R245,5 million, representing earnings a share of 43,6c (36,6c). Turnover including excise duties and levies was R1,4 billion against R1,1 billion in the same period of the previous year.

An interim dividend of 16,5c is declared against 14c last time.

It is anticipated that Sasol Ltd will repay R400 million and Sasol Three R300 million to the State, but that foreign exchange loans, which are fully covered, will proceed in terms of their agreements.

It is anticipated that profit growth for the full year will not be less than the rate achieved in the past.

At Sasol One and Two production was consistently good and Sasol Three has attained full normal production.

In spite of the fall in world petroleum prices, substantial increases in local prices were obtained because of the fall in the value of the rand against the dollar.

The chemical division also benefited in respect of exports from the strengthening of the dollar, but the results of the fertilizer division were unsatisfactory because of the state of this market.

and (c) to which country was he deported or repatriated;

(11) whether any member of the South African Police received any representations concerning this person; if so, (a) who received such representations, (b) when were they received and (c) what was the (i) nature of the representations and (ii) response thereto;

(12) whether he will make a statement on the matter?

The MINISTER OF LAW AND ORDER:

(1) Yes.

- (a) On 14 October 1983.
- (b) Regulation 26—Admission of Persons to the Republic Regulation Act, No 59 of 1972.
- (c) (i) and (ii) Barberton.
- (d) For the first time from 14 October 1983 to 28 November 1983 when he was released on his own cognizance. For the second time from 4 October 1984 to 5 October 1984 when he was repatriated.
- (e) S Z Ngomane.

(2) Yes.

(3) No, because he is an illegal immigrant who falsely obtained an identity document.

(4) No.

(5) Falls away.

(6) No, because it was unknown where his family resides.

(7) No, he was detained as a witness for the State.

(8) No, because no such request was received from him.

(9) No, for the reason stated in para (7).

(10) Yes he was repatriated.

- (a) Because he is an illegal immigrant.
- (b) On 5 October 1984.
- (c) To Mozambique.

(11) Yes.

- (a) The Station Commander, Barberton.
- (b) On 3 October 1984.
- (c) (i) The representations related to his detention and the allegation that he was detained on a farm.
  - (ii) At that stage an order for his repatriation was already issued and he was repatriated on 5 October 1984.

(12) No.

Deportation of South African Blacks to Zimbabwe

*47. Mrs H SUZMAN asked the Minister of Co-operation, Development and Education:

(1) Whether, with reference to the reply to Question No 19 on 6 June 1984, the investigation into allegations concerning the deportation of South African Blacks to Zimbabwe has been completed; if not, (a) why not and (b) when is it anticipated that it will be completed; if so, (i) when was the investigation completed and (ii) what were the findings;

(2) whether the report on this matter will be made available to members of parliament; if not, why not; if so, when;

(3) whether any action has been taken as a result of this report; if not, why not; if so, (a) what action and (b) when;

(4) whether he will make a statement on the matter?

The MINISTER OF CO-OPERATION, DEVELOPMENT AND EDUCATION:

(1) Yes.

- (a) Falls away.
- (b) Falls away.
  - (i) 4 June 1984.
  - (ii) The more important findings were as follows: South African Blacks are not deported. Some persons had in the past been detained for rather long periods. The primary reason being problems experienced in the investigation of cases.

(2) No. The investigation and report deal with alleged irregularities in respect of foreign Blacks in general and is not restricted only to the allegations made in connection with the deportation of "South African Blacks to Zimbabwe", as was stated. The matter was disposed of departmentally.

(3) Yes.

- (a) Discussions at high level were held with the South African Police and other authorities in connection with the detention of foreign Blacks. Steps have been taken to obviate delays.
- (b) During September 1984 and on 3 October 1984.

(4) No.

Hansard Q. 61. 429

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5/3/85

Escom: foreign exchange losses

*48. Mr B B GOODALL asked the Minister of Mineral and Energy Affairs:

(1) Whether Escom has suffered any foreign exchange losses as a result of the fall of the rand; if so, (a) what total amount and (b) over what period were these losses incurred;

(2) whether there is a standing instruction by the Escom Management to the finance and loans sections to consider forward cover on foreign transactions; if not, why not; if so, why was such forward cover not taken out in respect of these transactions;

(3) whether any action has been taken as a result of these losses; if not, why not; if so, what action;

(4) whether he will make a statement on the matter?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) (a) and (b) Escom's accounts for 1983 included a realized profit of R11.7 million on foreign exchange transactions which was credited to finance charges and the unaudited accounts for 1984 indicate that a net profit of R72 735 will be realized on foreign exchange transactions for 1984. Unrealized losses, valued at the rate of exchange ruling at 31 December 1984 amounted to R137,2 million. This unrealized loss is in respect of commitments payable at various times up to 1989.

(2) The general policy of the Electricity Supply Commission is to cover all foreign commitments. Recommendations are made each month by Escom management to the Commission with regard to the hedging strategy for the following month for each type of commitment and the decision of the Commission in this regard is then implemented by the foreign exchange section of the financial department. Depending on market conditions, expectations regarding exchange rates and economic forecasts the Commission may find it prudent to leave certain commitments temporarily un-

covered. These commitments are, however, kept to a minimum and are covered when considered appropriate or are paid offshore directly from the proceeds of loans raised overseas.

(3) In accordance with the decision of the Commission all existing and new unfinanced commitments payable up to the end of 1985 have been covered while all commitments payable thereafter will be covered whenever reasonable cover rates can be obtained or the commitments will be paid when due from the proceeds of loans raised overseas depending on conditions at the time.

(4) No, information regarding Escom's foreign exchange transactions will appear in Escom's 1984 annual report.

Koeberg Nuclear Power Station

*49. Mr B B GOODALL asked the Minister of Mineral and Energy Affairs:

(1) Whether there has been a cost overrun of approximately R500 million in respect of the Koeberg Nuclear Power Station; if so, (a) what was the total amount involved and (b) what was the cause of this over-run;

(2) whether this amount was disclosed in Escom's balance sheets or financial statements; if so, when; if not, why not;

(3) whether any Escom officials were informed of these cost overruns; if not, why not; if so, (a) which officials and (b) when;

(4) whether any action was taken as a result; if not, why not; if so, (a) what action and (b) with what result;

(5) whether he will make a statement on the matter?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

1. The estimated costs at 31 December 1979 of the Koeberg project including the power station, high voltage yard and housing for staff, but excluding fuel compared with the total amount excluding the additional costs which resulted from the sabotage incident, as at 31 December 1984, are as follows:

	December 1979	December 1984
	R million	R million
Capital plus overheads	1 957	2 144
Interest capitalized	535	867
TOTAL	2 492	3 011

The increase of R519 million is made up as follows:

	R million
Capital	10
Price adjustment due to inflation ..	131
Overheads	46
Interest capitalized	332
	519

The increased capital costs, overheads and interest arises from approved modifications and additions to the original contract as a result of improvements in design, increased security measures as well as delays to licensing problems and late delivery of fuel.

2. Yes, costs incurred up to the end of 1983 are included in published annual accounts and amounts with respect to 1984 will be included in the 1984 report.

3. (a) and (b)

Yes, Escom officials associated with the project have knowledge of it on a continuous basis and the management and members of the Commission are advised regularly in this regard.

4. (a) and (b)

Yes, procedures applicable to the control of all capital projects are followed and expenditure is monitored and approved by Escom management in order to minimise costs.

5. No, not at this stage.

Escom: commissions to agents

*50. Mr B B GOODALL asked the Minister of Mineral and Energy Affairs:

(1) Whether commissions were paid by Escom to any persons acting as agents for Escom during the latest specified period for which figures are available; if so, (a) to whom were commissions paid, (b) what was the total amount paid out in commissions to these persons and (c) on what basis were these commissions paid;

(2) whether Escom officials are allowed to act as agents for Escom in obtaining (a) clients, (b) supplies and (c) loans; if so, on what basis;

(3) whether he will make a statement on the matter?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

(1) No, Escom does not employ individuals as agents.

(a), (b) and (c) Fall away.

(2) (a), (b) and (c) No.

(3) No.

Own Affairs:

[redacted] Hansard

Old-age homes

Q. 601.433 5/3/85

*1. Mr K M ANDREW asked the Minister of Health Services and Welfare:

Whether *per capita* subsidies paid to old-age homes for Whites have been increased during the past five years; if not, why not; if so, (a) when did the past two increases come into effect and (b) by how much did the subsidy increase on each of those occasions?

†The DEPUTY MINISTER OF HEALTH SERVICES AND WELFARE:

(1) Yes.

(a) and (b)

	Category A	Category B	Category C
	Per month	Per month	Per month
1.4.83 ...	R19,04	R27,31	R49,28
1.4.84 ...	R21,50	R30,28	R53,60

Rent control

*2. Mr S S VAN DER MERWE asked the Minister of Local Government, Housing and Works:

(1) Whether he has received any representations regarding legislation affecting rent control which was published for comment in or about September 1984; if so, (a) from whom and (b) what was (i) the nature of the representations and (ii) his response thereto;

(2) whether any deadlines were set for the receipt of representations concerning this legislation; if not, why not; if so, what are these deadlines;

(3) whether he consulted any rent boards in connection with this legislation; if not, why not; if so, (a) when and (b) which rent boards?

The MINISTER OF LOCAL GOVERNMENT, HOUSING AND WORKS:

(1) The Select Committee on Rent Control tabled a report in this House on 9 July 1984, which included a draft bill to amend the Rent Control Act, 1976 (Act 80 of 1976).

(a) Proposals in respect of the draft bill were received from the

Hansard

55

Escom: housing

Q. 61. 419 5/3/85

*38. Mr W V RAW asked the Minister of Mineral and Energy Affairs:

Whether Escom provides any houses for its staff; if so, (a) how many houses have been so provided to date, (b) how many of these houses are currently occupied and (c) on what basis are the houses provided to staff?

The MINISTER OF MINERAL AND ENERGY AFFAIRS:

Yes.

(a) 16 374.

(b) 13 950.

(c) Escom provides accommodation to its employees responsible for the operation of power stations or distribution depots as well as mining personnel and the staff of contractors involved with the construction of new power stations or where major maintenance or modifications to power stations are carried out. As the majority of the Escom sites are remotely situated where no or limited accommodation is available, Escom is compelled to provide housing. The houses are let to employees at a monthly rental according to a formula, which amongst other takes cognizance of aspects such as floor area, age, locality and facilities and the rental varies from R18,60 to R64,40 per month. Employees at the Escom head and regional offices must provide their own accommodation and are assisted with loans in terms of Escom's home ownership scheme.

Defence Act

*39. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

(1) Wether any persons have been prosecuted for alleged contravention of section 4 or section 4A of the Defence Act, No 44 of 1957; if so, how many;

(2) whether any persons were found guilty of contraventions in this regard; if so, (a) how many and (b) what was the sentence in each case?

The MINISTER OF DEFENCE:

(1) No.

(2) Falls away.

George Randall High School: projectiles

*40. The LEADER OF THE OFFICIAL OPPOSITION asked the Minister of Defence:

(1) Whether any projectiles fired by a ship of the South African Navy struck the George Randall High School in East London on or about 7 September 1984; if so, (a) where was the ship when the projectiles were fired, (b) how many projectiles struck the school and (c) what were the circumstances surrounding the incident;

(2) whether a board of inquiry has been appointed to investigate the incident; if not, why not; if so, (a) when and (b) who is the president of the board of inquiry;

(3) whether the board has completed its investigation; if not, when it is anticipated that it will be completed; if so (a) when and (b) what were the findings;

(4) whether any steps will be taken as a result of the incident; if not, why not; if so, what steps;

(5) whether he will make a statement on the matter?

The MINISTER OF DEFENCE:

(1) Yes.

(a) Approximately 1 km from Orient Beach.

(b) 3.

(c) The ship was engaged in a night firing exercise.

(2) Yes.

(a) 25 September 1984.

(b) Lt P. Smith of the SA Navy.

(3) Yes.

(a) 24 October 1984.

(b) That the Petty Officer in charge of the machine gun from which the ammunition which struck the school was fired, failed to comply with orders pertaining to the safety of the weapon and permitted an inexperienced crew member to handle the weapon.

(4) Yes. Disciplinary steps were taken against the Petty Officer who was in charge of the weapon.

(5) No.

5/3/85

Black males from Transvaal brought to Western Cape

Hansard Q. 61. 421

*41. Mr K M ANDREW asked the Minister of Co-operation, Development and Education:

Whether any Black males in the employ of the State or any Development Board were brought to the Western Cape from the Transvaal in February 1985; if so, (a) how many, (b) for what purpose, (c) on whose instructions, (d) for what period are they to be in the Western Cape and (e) where are they living?

The MINISTER OF CO-OPERATION, DEVELOPMENT AND EDUCATION:

Yes.

(a) 350.

(b) To transport material for the development of the site on which informal housing will be permitted and to assist with certain construction work at the site. Also to be available to assist any person who wishes to settle in Khayelitsha.

(c) Instructions were given by me.

(d) Unknown at this stage.

(e) Khayelitsha.

Hansard Q. 61. 422

Langa/Guguletu/Nyanga: swimming facilities

5/3/85

*42. Mr K M ANDREW asked the Minister of Co-operation, Development and Education:

(1) Whether any additional swimming facilities were provided in (a) Langa, (b) Guguletu and (c) Nyanga during the latest specified period of 10 years for which figures are available; if not, why not; if so, what facilities were provided;

(2) whether any additional swimming facilities are planned for (a) Langa (b) Guguletu and (c) Nyanga; if not, why not; if so, (i) what facilities and (ii) when are they to be provided;

(3) what was the total combined *de facto* population of the above three Peninsula townships (a) in 1975 and (b) as at the latest specified date for which figures are available?

The MINISTER OF CO-OPERATION, DEVELOPMENT AND EDUCATION:

(1) (a), (b) and (c) No, not during the ten year period ending on 31 December 1984. Requirements were to a large extent met by the existing facilities. Improvements to other facilities for sports and recreation enjoyed greater priority.

(2) (a), (b) and (c) No. The honourable member is referred to my statement of 21 February 1985 about the future of these townships.

4 Cape Times, Wednesday, March 6, 1985

Parliament and Politics

R519m Koeberg 'cost over-run'

Cape Times 6/3/85 (55)

Political Staff

HOUSE OF ASSEMBLY. — There had been an estimated cost over-run of R519 million on the Koeberg nuclear power station project, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said yesterday.

And he also disclosed that Escom faced foreign exchange losses of R137,2 million on commitments payable at various times up to 1989.

Revised cost

In reply to questions by the Progressive Federal Party spokesman on Mineral and Energy Affairs, Mr Brian Goodall, Mr Steyn said the estimated cost of Koeberg on December 31, 1979, excluding fuel, was R2 492 million.

The revised cost as at December 31, 1984, excluding the additional costs incurred by the sabotage incident, was R3 011-million.

The increase comprised R10 million in capital, R131 million for a price adjustment due to inflation, R46 million for overheads and R332 million of interest capitalized.

Annual accounts

"The increased capital costs, overheads and interest arise from approved modifications and additions to the original contract as a result of improvements in design, increased security measures as well as delays to licensing problems and the late delivery of fuel," Mr Steyn said.

The costs incurred up to the end of 1983 were included in Escom's published annual accounts, and the 1984 amounts would be included in the 1984 report.

In reply to questions by Mr Goodall on Escom's foreign exchange losses as a result of the fall of the rand, Mr Steyn said: "Escom's accounts for 1983 included a realized profit of R11,7-million on foreign exchange transactions which was credited to finance charges, and the unaudited accounts for 1984 indicate that a net profit of R72 735 will be realized on foreign exchange transactions for 1984.

"Unrealized losses, valued at the rate of exchange ruling at December 31, 1984, amounted to R137,2 million. This unrealized loss is in respect of commitments payable at various times up to 1989."

Call for SA oil embargo

(55)

Star 7/3/85

The Star Bureau

LONDON — The ANC and Swapo have joined forces in calling for worldwide oil sanctions against South Africa to speed the downfall of apartheid.

The call was made in a joint statement issued by ANC president Oliver Tambo and Swapo president Sam Nujoma.

Their appeal, issued from Lusaka in Zambia, was released in London and in other European, African, Asian and Middle Eastern capitals.

March 13 has been designated "International Oil Embargo Day" with demonstrations, rallies and lobbying planned for in or near most West European parliaments.

GAS EXPLORATION

The cost of Kudu

55

Soekor refuses to say how much it paid the American oil company Chevron to relieve it of the concession which yielded the giant Kudu gas reservoir off the Namibian coast.

Chevron made the find in 1974, some 120 km off the mouth of the Orange River, and spent three years exploring it. The company then capped the well and went away, apparently having been bought off by Soekor.

A Soekor spokesman tells the *FM* that it is "not company policy" to divulge such information, despite the fact that it is a State-owned company using taxpayers' money. Neither will the agency disclose when it took over the concession and what the conditions were.

Swakor, the Namibian counterpart of Soekor, referred all *FM* questions on Kudu to Soekor.

Government has only recently given Soekor the go-ahead to develop the gas reservoir, despite the fact that Chevron's oil rig, Sedco 135, capped the well in April 1974 and found the pressure too high to measure accurately.

It is clear that exploitation of the find has been held in abeyance until clarity emerges on the constitutional status of the territory.

Soekor MD Piet van Zijl said in a 1979 report (only recently made public) that if the reservoir proved to be as large as preliminary findings suggested, it would have reserves of at least two trillion cubic feet of gas. That makes it one of the biggest gasfields in the world, worth in the region of R8 000m. It could make Namibia one of the wealthiest countries in Africa.

Van Zijl said that recommendations of his 1979 report had not been implemented because of the political situation in SWA. "Now it appears that the political situation is not of such importance. Now we will have to see if anyone is interested in carrying out the exploration. Previously they were all jittery, but now I don't think a non-political company will be nervous about becoming involved in SWA prospecting."

Although Foreign Affairs spokesmen have declared that the Kudu reservoir will not be exploited for SA's benefit but that all revenue would go to Namibia, the whole operation is firmly in SA hands. A spokesman tells the *FM* Swakor is a private company controlling all oil and gas exploration in the territory. It was registered in Namibia on January 1 1979. All its shares are held by the First National Development Corporation (Enok), which is an agency controlled by the Administrator General, SA's ruler in Namibia.

Swakor's chairman is Nico Stutterheim, who is also chairman of Soekor. Other members of the SWA agency's board are Soekor MD Van Zijl, Enok MD Johan Lerm, SWA Water and Electricity Commission (Swawec) MD Polla Brand, Namibian Secretary of Finance Johan Jones and the territory's director of geological survey, Roy Miller.

The Soekor spokesman tells the *FM* that Kudu has not been tested since 1974. Soekor is presently looking for a partner to drill four more wells. "After that, the extent of the find can be gauged. If the wells are successful, viability studies will be done. If it is found viable, permission will have to be obtained from the authorities in SWA to continue with production. We are talking of a process that could take several years."

The spokesman declined to say whether the find will be privatised.

☐ Escom received a welcome contribution to its network from the Ruacana hydro-electric scheme following the shutdown of Koeberg's reactors. Swawec MD Polla Brand tells the *FM* Ruacana is delivering some 700 000 kWh/day to Escom via the Keetmanshoop-Aggeneys powerline. Swawec has so far earned R6,4m from sales to Escom. After ample rains in southern Angola, Ruacana is generating some 150 MW. Its total capacity is 240 MW. Since the Angolan war of 1975, the sluice gates of the regulating dams in Angola cannot be operated properly.

POLITICAL GESTURES

Deciding to suffer

Recession-hammered businessmen might be forgiven for dismissing the 3% paycuts accepted this week by all MPs and President's Council (PC) members as tokenism. However, there are indications that this "drop in the ocean," as PFP leader Frederik van Zyl Slabbert put it, is the forerunner of a meaningful assault on public service paypackets.

Political sources say the primary targets are the "13th cheques" and overtime payments of public servants. The Cabinet is apparently considering cutting the bonus cheque in half and extending public service working hours without increasing pay. The annual bonus payments cost the taxpayer roughly R900m a year. It is, however, highly unlikely that actual salaries for public servants will be cut.

The 3% cut for MPs and Ministers is therefore seen as a political gesture aimed at preparing the ground for cutting public service peripheral payments. Observers point out that government could hardly approach public servants with paycuts unless MPs had taken a drop themselves.

The cut, announced by State President P W Botha in Parliament, will cost ordinary MPs R67,50 of their R3 000-plus monthly salaries and reimbursive allowances. Botha will take a R210/month drop, while Ministers (whose salary package is R78 000, consisting of R59 000 salary and R19 000 allowances) will lose R147,50. Deputy Ministers, who receive a package of R64 000 (R45 000 salary and R19 000 allowances) lose R112,50. In total, the 3% cut will amount to R340 000 over 12 months.

At least two provincial councils, the Cape and OFS, have already volunteered similar cuts and the remaining two are likely to follow suit.

The appointment by the President of a committee to investigate remuneration and facilities for MPs arises out of the changed nature of parliamentary processes under the new constitution. There is a long-standing cross-party conviction that the current system, whereby all ordinary MPs receive the same pay, is inequitable. Some obviously carry greater responsibility than others.

President Botha also says the new constitution has changed and increased the burden on the State President, Ministers and deputies, MPs and PC members — mean-

State President P W Botha . . . cutting into public service costs.

55

8/3/85

Call to stifle SA's new gas fields

Post Correspondent

LONDON — Swapo yesterday asked for international action to prevent South African exploitation of the Mossel Bay natural gas fields as part of renewed joint calls with the ANC for a total oil embargo.

Swapo's London spokesman, Mr Peter Manning, said South Africa's "total determination" to sabotage all efforts towards independence for Namibia/SWA could be answered with effective action against plans to exploit the Mossel Bay gas fields.

He said South Africa was seeking partners abroad to invest about $1 350 million (about R2 800 million) for plants to convert the gas reserves, estimated at two billion cubic litres, into oil.

He said the world community should act to starve South Africa of the technology it needed and make the exercise "as expensive as possible".

He claimed their had been a sudden recent spate of South African military and political activity in Namibia which pointed to a possible new invasion of Angola and further setbacks to peace prospects.

Mr Manning said Swapo was acting jointly with the ANC in calling for the worldwide enforcement of an oil embargo against South Africa because of evidence that Pretoria was set on a path of "absolute intransigence" on the subject of quitting SWA/Namibia.

Swapo president, Mr Sam Nujomo, was due to appear with ANC president, Mr Oliver Tambo, in Lusaka to call on all nations to enforce the oil embargo against South Africa on the grounds that Pretoria was now more vulnerable than ever.

SASOL

Settlement at last

FM 8/3/83

55

Four months after the November stayaway and the mass dismissal of 5 100 employees at Sasol 2 and 3, the company and the Chemical Workers' Industrial Union (CWIU) have reached a compromise agreement on the re-employment of the dismissed workers.

According to a joint statement on Tuesday, "at least 70% of the ex-employees who applied for jobs" will be taken back. Sasol has also undertaken to consider "the further employment of ex-Sasol employees." The *FM* understands that about 4 500 workers have applied, which means that a total of more than 3 100 will be re-employed. Many are already back at work.

In addition, an attempt has been made to normalise the relationship between the company and the union, with a commitment to bargaining in good faith in future. Existing procedural agreements will remain in force, an agreement relating to the status of shop stewards has been negotiated and a negotiating committee has been established. The CWIU has agreed to withdraw its application for a conciliation board to settle the dispute.

The settlement has also averted the possibility of a general strike by members of 24 unions which had threatened the action in the event of a deadlock.

(55) FM 8/3/85

LEGISLATION

Oil Act tightened

Some might say it's a little like shutting the stable door after the horse has bolted. Nonetheless, the State Oil Fund Amendment Bill, tabled in Parliament last week, is a welcome piece of legislation designed to tighten control over government's role in crude oil procurement.

It's no secret that the Bill, which has already been welcomed by Opposition spokesmen, is a direct result of the controversial report to Parliament last year by the Advocate General (AG) into allegations of corruption in oil procurement.

Mineral and Energy Affairs Minister Danie Steyn's explanatory memorandum on the Bill says it all: "The objects of the Bill are to create, in pursuance of the recommendations of the AG in his report regarding the alleged misappropriation of State funds, a better co-ordinated control structure by means of which government involvement in the procurement of crude oil can be evaluated." The Bill follows the AG's recommendations virtually to the letter. Even though he found no evidence of corruption, the AG was clearly unhappy with the control structure for oil procurement.

The central provision in the Bill is that the whole process of crude oil procurement will in future be subject to parliamentary control. State funds involved will be audited by the Auditor General, who will in turn report to Parliament. This will be done by means of creating a new structure to handle oil deals.

As recommended by the AG, the Bill proposes the establishment of a new overall control body operating along the same lines as the Atomic Energy Corporation. This body will be called the Central Energy Fund Pty (CEF) and will, says Steyn, "subject the whole structure of crude oil purchases and other connected financial transactions to effective control, with provision for the auditing, by the Auditor General, of State funds involved therein, and for the submission of a report to Parliament."

CEF will be created by renaming the existing State Oil Fund (SOF) and its controlling company, SOF Pty, to CEF and CEF Pty. A "statutory control structure" in the form of a board of directors for CEF Pty will be appointed, and they, as well as a "formally appointed accounting officer," will be responsible for controlling crude oil purchases.

It is significant that the directors will control not only the CEF, but also the Equalisation Fund presently controlled by the Strategic Fuel Fund Association (SFFA) "and all other transactions of CEF Pty and the SFFA."

The nature of the SFFA and the SOF was at the heart of last year's allegations and subsequent investigation, with the Opposition demanding that government concede that money controlled by these bodies is in fact public money. Steyn argued that neither organisation should be subject to the Auditor General's control.

As the *FM* pointed out (*Currents* July 6 1984), this is a weak argument, since both companies are controlled by government nominees and funded by public money.

Now, thankfully, that is all to be swept away. The SFFA will become an operating subsidiary of CEF Pty, subject to the same process of parliamentary control and central audit. So, the proposed legislation in fact represents a welcome *volte face* by Steyn, which is not surprising, since the AG was explicit in his report that cash involved in oil deals was "public monies."

The legislation is also intended to broaden the scope of activities of the CEF. Says Mineral and Energy Affairs spokesman Theuns Burger: "We see the CEF as a kind of energy bank involved in all sorts of major energy projects. The funds could be used for assisting research and development projects, financing new energy activities, providing energy incentives and so on. It all fits very well into our overall energy policy objectives."

Comments the PFP's John Malcomess, who led last year's assault on government over the alleged corruption: "We welcome this legislation, although issues like the *Salem* affair are still not settled."

face to face

Escom to spend R68m on EL

(55)

D. Dispatch 9/7/85

EAST LONDON — Escom is to spend R68 million in improving the electricity supply to the East London area by 1988 as part of an eventual R200 million expansion programme planned for the Eastern Cape.

This was disclosed in a statement issued by the corporation yesterday after recent meetings held by the new Eastern Cape manager, Mr Ken Garman, to inform civic and business leaders in East London and Port Elizabeth of Escom's plans and commitment to the area.

The main points of the expansion programme are:

- Reinforcement of the transmission system to the East London area. An estimated R68 million will be spent in building nearly 300 km of extra-high voltage lines and an in-feed sub-station. The project is expected to be completed early in 1988;
- Construction of a new line between De Aar and Port Elizabeth to serve the electrified railway system. The final section of the 450 km line will be completed later this year and the total cost is nearly R31 million;
- Duplication of the transmission system of about 300 km from De Aar to Cookhouse, scheduled for completion later this year at a cost of R51 million;
- Erection of about 250 km of very-high voltage lines and 17 sub-stations between Bloemfontein and East London to provide for the electrification of the railway system. This project is still a few years away and the cost, at present values, is about R15 million;
- Erection of about 120 km of extra-high voltage lines and an in-feed sub-station to reinforce the supply to the Port Elizabeth area. Escom says this is likely to be required by the early 1990s and present estimates are that it will cost R35 million.

By ANDRE JORDAAN
Business Editor

In addition, Escom said, it was involved in smaller reticulation projects, especially in rural areas. At present some 1 200 km of line and numerous sub-stations were built annually at a cost of nearly R30 million. In 1984 about 1 400 new consumers were connected to the Eastern Cape system.

Escom said difficulties in raising capital in the current recession had in many cases delayed projects. "Nevertheless by careful economic management Escom expects to be able to satisfy the consumers' needs. It should be stressed that power generation and network projects receive priority."

Power demand in the Eastern Cape had increased by "a noticeable five per cent" and in spite of the depressed economy it had become essential to reinforce the major transmission lines to the Eastern Cape.

The statement also clarified Escom's decentralisation policy in terms of which the Eastern Cape region will become known as the Eastern Cape system, functioning within a future Cape region.

The policy is to strengthen the three Cape regions by amalgamating them into one Cape region. The head office in Cape Town will perform some of the functions previously carried out at the national head office in Johannesburg.

Further decentralisation would be necessary in so large a region and this would result in the formation of an Eastern Cape and Northern Cape system. However their boundaries and functions would remain the same, with the two systems reporting directly to the regional head office.

On the decision to retain East London as the Eastern Cape base of Escom, Mr Garman said that the adverse economic climate meant that the Eastern Cape system had not expanded as previously anticipated and staff growth had been lower. The need for a new headquarters building had therefore decreased.

Mr Garman said the decision to retain the East London headquarters did not mean that Escom would not erect other buildings as the need arose in other areas.

The amalgamation of the Cape regions had meant that Escom was able to rationalise computer installations and administrative services in East London and Kimberley at a total saving of about R4 million a year. "The establishment of a new office in Port Elizabeth and the transfer of staff to such an office can also be avoided as a result of this rationalisation," Mr Garman said.

Escom's present offices in Buffalo Street were too small for present requirements and the overflow would be accommodated by development of Escom's Beacon Bay property. It is understood that the development will be of a limited nature at this stage.

Escom expressed regret that the East London-Port Elizabeth issue had become a political one and said its decision was based on purely economic grounds.

Mr Garman said he regretted the disappointment caused to Port Elizabeth, "but the projects at present underway in the area are proof of Escom's commitment to keep on serving the Eastern Cape to the best of our ability."

New Bill lifts the veil on SA's petrol dealings

ARGUS 13/3/85 (55)

Political Staff

THE rigid secrecy surrounding information on petroleum products is eased in a Petroleum Products Amendment Bill introduced in Parliament today.

But, in another Bill, the Police Act protection of the SA police against the publication of "untrue matter" is to be extended to the Railway Police.

A clause in the new South African Transport Amendment Bill contains the same provisions as section 27b of the Police Act.

It makes it an offence to publish "untrue matter" about the Railway Police without there being reasonable grounds for believing that the statement is true.

Suspicion

The onus of proof rests on the person publishing the matter. Penalties of up to R10 000 or five years or both are provided for.

The Petroleum Products Amendment Bill represents a major reform by the Government and is aimed at reducing public suspicion about petroleum transactions concerning South Africa.

It may do away with absurdities whereby information previously published overseas and available to the country's "enemies" could not printed by South African media.

In the new Bill, the blanket prohibitions of the 1977 law are substituted by a section which enables the Minister of Mineral and Energy Affairs to ensure secrecy only when, in his opinion, it is necessary.

The Bill also aims, however, to prevent secrecy provisions being circumvented.

Zambian boy has heart surgery in city

Staff Reporter

Flashback . . . Dereck arriving at D F Malan.

THREE-year-old Dereck Mubita from Zambia who was brought to Cape Town for heart surgery, has been operated on.

The medical superintendent of Red Cross Children's Hospital, Dr J G L Strauss, said today Dereck had surgery yesterday to correct a congenital deformity.

"The operation was a success and the prognosis is good — so far," Dr Strauss said, adding that Dereck's condition was fair.

A combined effort by the national councils of the Zambian and South African YMCAs raised the funds to bring Dereck and his mother, Miss Esther Mundia, from Kitwe to Cape Town.

Ex-editors support Die Matie's 'critical' rôle

Education Reporter

NINE former editors of Stellenbosch University's student newspaper, Die Matie, say they are worried that Press freedom could be eroded if there is interference with its editorial independence.

In a statement, the nine, who served as editors over the past 11 years, said they hoped any decision taken at tonight's meeting of students would not be "at the expense of the newspaper or Stellenbosch".

The meeting has been called to discuss the future of the campus newspaper.

The editors said the paper had a duty to write about the good as well as the bad — things Stellenbosch University was proud of, and issues requiring investigation.

"To try to prevent Die Matie from doing this was to curtail Press freedom.

"We would like to believe that Stellenbosch students are already in a position to fulfill their roles as responsible citizens in a society offering enormous challenges.

UNHINDERED

"In this respect. it is necessary for Die Matie to play its part unhindered," the statement said.

"Die Matie has a long and proud history of critical reportage and comment."

Koeberg will be back in action soon, says Escom

ARGUS 14/3/85

(55)

Staff Reporter

KOEBERG nuclear power station, shut down on January 21, will be operating again within two to three weeks, Escom spokesman Mr Etienne du Plessis said today.

He said in a statement that the problem of iron particles found in stainless steel piping "is now understood and is regarded as acceptable in the short and medium term and probably acceptable in the long term".

Escom believed the two reactors at Koeberg could go back into service "subject to the satisfactory completion of present work."

INSPECTION

Late in January Escom said the station was being shut down for a few days for inspection and maintenance. But the shutdown was extended when an iron particle was discovered on the surface of a stainless steel pipe in Unit 2.

It was decided to investigate "preliminary indications" that more pipes might contain iron particles.

Mr du Plessis said intensive investigations were carried out by Escom's quality-insurance organisation, by the French contractor at Koeberg, and in Escom's metallurgical laboratories at Rosherville, Johannesburg.

Specialists supported the belief that the pipes would not be affected by the "possible presence of laminar inclusions".

"SATISFYING"

"Escom's current efforts are directed towards satisfying itself, the AEC and the Council for Nuclear Safety within two to three weeks that the integrity of the plant remains unaffected," the statement said.

"Because there is two to three weeks' work to be done to restore Unit 1 to operational readiness, certain activities have already commenced.

"These include replacing the lagging removed to facilitate inspection of a number of pipe-elbows, and bringing the chemical conditions in the plant to the state required."

"This work is now to be subjected to final tests before start up."

(55) E. Post 14/3/85

No oil strike yet off Kini Bay

Post Reporter

SOEKOR's oil rig, Sedco-K, which has been drilling off Kini Bay since the beginning of February, has not found "anything significant".

However it would continue on the same well, a spokesman said today.

Mr Mike Leibbrandt, Soekor's public relations officer, said if the rig did make a significant strike, the public would certainly see it — a 20-metre flame would roar out.

However, he said, if this did not occur and the rig pulled up anchors and left, the public would know the well was dry.

He said the well being drilled off Kini Bay was "routine" and "exploratory". It was one of several that had been drilled in the area, although the others had all been further off-shore.

Meanwhile the Antinia rig, which created a stir when it produced South Africa's first oil strike off Mossel Bay on February 28, had moved on to another location, Mr Leibbrandt said.

The successful well had been plugged following the completion of tests and the rig was now seeking the vital hydro-carbon indicating the presence of oil/gas elsewhere in the Mossel Bay and Plettenberg Bay areas.

State control of oil questioned

55

Cape Times 20/3/85

HOUSE OF ASSEMBLY. — It was time to question whether it was necessary for the State to continue to procure South Africa's oil requirements, Mr Brian Goodall (PFP Edenvale) said during the Second Reading Debate on the State Oil Fund Amendment Bill.

The PFP supported the bill, which put the Auditor-General, the watchdog of Parliament, in ultimate control over what secret funds should be released for the purchasing of oil.

This support should, however, not be construed as support for the present structure of oil purchasing in South Africa, Mr Goodall said.

"One can understand that in the crisis years of the mid- and late 1970s there was a need for emergency measures.

"But today the world situation has changed dramatically ... has the time not come when we can leave it to the oil companies to procure South Africa's oil supplies in the normal way?

"We believe the minister should be consulting the private sector now to see if they cannot take over this function from the State. The sooner we begin to remove the tentacles of the government from the economy, the better it will be for the economic development of South Africa."

And, as the row over South Africa's procurement of oil continued in the House of Assembly, Opposition spokesmen fired a salvo of questions at the Mineral and Energy Affairs Minister, Mr Danie Steyn.

The MP for Constantia, Mr Roger Hulley, said there were a number of questions still outstanding and the Auditor-General should consider it part of his task to go back in the records of the SOF to find answers to these questions.

Among these questions were:

- ● Did South Africa pay more for oil than was necessary and if so were there irregularities and who had benefited?
- ● Had a former minister of mineral and energy affairs, Mr F W de Klerk, issued a directive to the Strategic Fuel Fund Association to deal with specific dealers, and if so, why?
- ● Did Dr Marino Chiavelli play a role?
- ● What was the full story behind the Salem affair, in which South Africa had allegedly been defrauded of R30 million, and why had there had still been no prosecution?

Welcoming the fact that levies paid into the State Oil Fund were now to be subject to audit by the Auditor-General, Mr Goodall said this had always been the view of the PFP.

He said he believed there was no doubt that in the past funds paid into the SOF "were not subject to the degree of scrutiny they should have been".

The situation had arisen, he said, where the Auditor-General was placed in a position where he had to rely on a certificate from a firm of auditors who had not been able to verify contracts and prices.

Untrue

Replying to the debate, the Mr Steyn said the Advocate-General's report last year had shown the allegations of irregularities to be untrue.

He said members of the PFP who had got hold of anonymous documents concerning the Salem Affair had misused their privilege as members of the House for ulterior motives.

In reply to a question, Mr Steyn said no money had been recovered lost as a result of the "Salem affair".

And, he added, while the case had been brought to the attention of the South African Police by the Strategic Fuel Fund, no formal complaint had been laid as the alleged accused were overseas. — Sapa and Political Staff

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CAPE ARGUS 22/3/85

NATIONAL/CITY

58

'Blooming nonsense': How Escom spent R10-m on flower power

Political Staff

ESCOM spent nearly R10-million last year on "floral and herbaceous decorations, landscaping and gardening".

But some Members of Parliament have slammed the spending — Mr Ralph Hardingham (NRP Mooi River) called it "extravagance of the highest magnitude".

The Escom viewpoint emerges from a memorandum to the Minister of Mineral and Energy Affairs, Mr Danie Steyn, who confirmed this week that the organisation had spent more than R28-million on plants and gardening since 1980.

The memorandum says Escom believes thorough planning and design can give many installations a "visually more positive impact" on the South African landscape.

"Escom regards it as part of its social responsibility optimally to integrate man, nature and machinery to the advantage of the consumer and its own employees," the memorandum says.

Use of plants inside administrative buildings is primarily functional and not purely decorative.

At power stations and other installations, the workmen who "reduce visual disturbance" consist of maintenance staff who have to be available anyway to cope with emergencies.

And much of the maintenance work — such as cutting grass and fighting weeds — is done for security reasons, Escom says.

It goes on to explain that the dams and ponds it builds contain fish which serve to keep insects and plant growth under control.

A lot of this is blooming nonsense, according to some MPs.

Mr Hardingham, whose questions in Parliament drew the cost figures, said: "The aims surely don't justify such extremely extravagant expenditure.

"Escom properties must of course not be allowed to run down into slum conditions but the question now arises of how its whole expenditure programme has functioned in recent years.

"With the Rademeyer affair and other allegations there have been suspicions of gross misuse of funds.

"Is this not just another indication of the lack of financial control that has existed at Escom for some time?"

Escom says, however, that its spending on plants and landscaping is low.

Its botanical running costs for 1983 amounted to 0,15 percent of total running costs, while capital expenditure on flora came to 0,1 percent of total capital spending.

CAPETIMES 23/3

US lawmaker wants inquiry into Escom

WASHINGTON. — A House of Representatives sub-committee chairman asked this week that a criminal investigation be launched into reports that highly-skilled US nuclear technicians may have illegally taken high-paying jobs in South Africa.

Democratic Representative Mr Edward Markey of Masssachusetts, who heads the Energy, Power and Commerce sub-committee, made the request after the Tennessee Valley Authority, a US Government agency that operates a vast hydro-electric system, told him it had indications that 21 of its skilled reactor employees had been recruited since 1980 by Escom.

Illegal

In a March 8 letter to Mr Markey, TVA chairman Mr C H Dean said 11 of the technicians may have joined Escom in 1984, the year after the US Congress made it illegal for United States citizens to work in nuclear programmes of certain nations without specific approval of the US Energy Department. The 1983 law applies to countries such as South Africa that have not signed the international treaty against nuclear proliferation.

Mr Dean said Escom may have offered the former TVA technicians up to R400 000 a year in salary — about four times what they would earn in the States — plus broad fringe benefits.

Mr Dean told Mr Markey that TVA had received an as-yet unverified report that some of the technicians who left last year were recruited by a former TVA employee who went to South Africa in 1980. He said: "The recruiter is reputed to have received a R9 000 bonus for each licenced individual hired.

"There is some indication that the compensation package offered by Escom included a salary range of R173 000 to R384 000 and fringe benefits such as profit-sharing, housing allowances, relocation bonuses, free round trips to the United States for leave and the payment of South African taxes."

Mr Markey wrote to US Engergy Secretary Mr John Herrington yesterday asking that he turn the matter over to the Justice Department for an FBI investigation. He said that while letters to the department from some technicians "indicate they were unaware of the law", an Energy Department employee's notes from a March 6 meeting with Escom officials indicates the South Africans told the Americans of the law.

● In a statement released in Johannesburg yesterday, Escom said it follows the letter of US law when recruiting American workers.

"We have always believed that in a free market people can sell their skills," said Escom spokesman Mr Etienne du Plessis.

Mr Du Plessis said in an interview that 52 Americans are employed by Escom at the Koeberg nuclear power station outside Cape Town.

"Twenty of these are from firms who have Department of Energy approval. Some of those 20 do not participate in activities that fall under the law. We are talking about 32 people who are on a temporary contractual basis who do not have approval."

The spokesman said eight of the 32 do not work in jobs covered by the US law, and the remaining 24 have applied for Energy Department permission. — Sapa-AP

(55) So Star 24/3/85

Sasol keeps SA well-oiled

Jaap Boekkooi

SOUTH Africa's three Sasol plants, the last one completed 18 months ago, have made the country virtually self-sufficient in energy, supplying more than 85 percent of all road fuels, says a new American study.

"The Resourceful Earth," the last book by the prominent American think-tank futurologist Herman Kahn, says the Sasol process of synthesising fuel from coal on a large scale, is the world's most successful.

Kahn, with co-author Julian Simon, says in the book that the completion of Sasol 3 at Secunda would reduce South Africa's dependence on oil imports to less than 15 percent.

In practical terms this means that no world oil boycott can materially affect road transport in this country, the major consumer of liquid fuels.

Previous government estimates said that the three Sasols would supply less than half the country's requirements.

Inquiries in the United States indicate that the late Herman Kahn's estimates of South African fuel sufficiency were based on a study by R W Johnson, a prominent consulting engineer, in the authoritative monthly "Coal Mining and Processing".

The Johnson article describes the Sasol process in detail and says the US could produce petrol at about 25c a litre (at 1981 rand-dollar conversion rates) if it used the process.

Johnson says the South Africans "are willing to share their 25-year technology with the US," Sasol having even gone as far as to process test batches of Texas and Wyoming coal.

He says the question is: "Will the United States accept this help, or will Washington continue pumping more deficit billions into a federally owned Synthetic Fuels Corporation?"

SS

Top-level talks in City on SA oil

Cape Times 26/3/86

Chief Reporter

A TOP-LEVEL two-day symposium starts in Cape Town tomorrow on the practicalities of producing oil and gas from wells discovered off the South African coast.

Such production would open up a completely new and sophisticated technology in this country and could make a considerable impact on the economy.

A number of overseas organizations concerned with the production of offshore oil and gas will be represented at the talks and the keynote address will be given by Dr P J van Zijl, managing director of Soekor, South Africa's State-sponsored oil exploration company.

Soekor is hoping for a Cabinet decision in June, on production from wells off the Southern Cape coast that have yielded promising results recently.

Earlier this month it was disclosed that the first oil in "fairly large" quantities had been found south-west of Mossel Bay and that this well was producing 2 600 barrels of light crude and a million cubic feet of gas a day.

The production symposium, to be held at a Sea Point hotel, has been organized by the 400-member SA Institute of Marine Engineers and Naval Architects (SAIMENA).

More than 100 delegates are expected, and matters to be discussed will almost certainly include the possibility of establishing an offshore oil and gas production platform off the Southern Cape coast.

A spokesman said yesterday that the SAIMENA was convening the symposium "to enable a wide spectrum of South Africans to familiarize themselves with the magnitude and complexity of systems that have been used elsewhere, in the interest of avoiding the mistakes of others and to make valuable contacts with specialists in their field".

Saldanha area wants a piece of gas, oil action

55

Cape Times 27/3/85

Chief Reporter

THE Minister of Mineral and Energy Affairs, Mr Danie Steyn, has caused deep disappointment in the Saldanha area by stating, in a letter to the local council, that any industrial processing of gas and oil from wells off the Cape coast will be done in the Mossel Bay area, not at Saldanha.

Prominent businessmen and others in and around Saldanha feel that the West Coast harbour, with its under-utilized infrastructure developed over the past decade, would be the logical centre for a processing plant, and they are still pushing hard for this.

They are convinced that wells that have been investigated off the West Coast are richer in gas, and possibly oil, than those in the Mossel Bay area and that it would make economic and logistic sense to site the processing plant at a point that is central to both production areas.

Soekor, the State-sponsored oil exploration company, is expecting a Cabinet decision to be taken in June, on whether the recent offshore oil and gas finds south-west of Mossel Bay should be commercially exploited.

Meanwhile, the pro-Saldanha lobby continues to make a strong case for industrial processing to be done on the West Coast.

Mr Johan Hofmeyr, a former mayor of Saldanha, was this week given the go-ahead by the management committee of the West Coast Regional Development Association, of which he is a prominent member, to make a direct approach to the Administrator-General of SWA/Namibia, concerning any exploitation there may be of wells that have produced promising results to the north of the Orange River Mouth.

ARGUS 27/3/85 (55

Guilty verdicts in Salem case

Argus Foreign Service

AUSTIN (Texas). — Frederick Soudan, charged as a principal in the Salem tanker swindle involving the sale of stolen oil to the South African Government, was found guilty on 17 counts of the 22-count indictment against him in Houston.

The charges covered fraud, conspiracy, perjury and tax evasion.

The court found Soudan not guilty on the first five counts involving wire-fraud, but they found Soudan's cousin, Abdul Wayhab Al Ghazou, guilty on all three of the counts against him. These involved laundering through foreign banks the money Soudan gained from the oil transaction to avoid paying US taxes.

Maximum

US district judge Mr Carl Bue set a hearing for April 22, when the court will pass sentence on the two men.

The maximum sentence, if Soudan had been found guilty on all 22 counts against him, would have been 111 years.

With five of the counts dismissed, it could still run as high as 86 years.

The first five counts of wire-fraud, on which Soudan was found not guilty, involved telex messages sent before his visit to South Africa on October 15 1979, to discuss the oil deal. Other counts involving similar messages after the South African visits brought guilty verdicts.

Supertanker

Mr Bruce Locke, who with Mr David Berger defended Soudan and Ghazou, said an appeal against the verdict would be made for Soudan and possibly for Ghazou.

The case involved the use of the supertanker Salem to transport stolen oil from Saudi Arabia to Durban, where it was unloaded and sold to the South African Government. The tanker was later sunk at sea to cover the fraud.

The swindle cost the South African Government more than R60-million, which had to be paid to Shell International Trading Company, real owners of the oil.

The trial in Houston involved about 70 witnesses and saw 1 500 documents submitted in evidence.

Cape Times 30/3/85

55

Koeberg closed a few more weeks

By RENEE MOODIE

THE Koeberg nuclear power station is to remain closed for another few weeks because the Atomic Energy Commission has requested Escom to inspect a wider range of pipes than those already inspected.

This was announced in a statement released in Johannesburg last night.

Koeberg, which was due to come on stream again soon, was shut down on February 21 after iron particles were discovered in stainless steel pipes during an inspection.

The statement said it remained for Escom to satisfy itself, the AEC and the Council for Nuclear Safety that the integrity of the plant remained unaffected.

A spokesman for Escom last night said: "Escom has submitted its report regarding the start of Koeberg to the Atomic Energy Commission.

"Escom is satisfied that the plant meets the safety criteria to which it was designed. However the licensing branch of the Atomic Energy Commission has requested that the inspection be extended to a wider range of pipe fittings which serve the primary circuit before approval for start up can be granted.

Ultrasonic

"This inspection, which will make use of ultrasonic equipment, will take a further few weeks."

● Mr Michael Kantey, a spokesman for Koeberg Alert, responded to the latest statement by saying: "My initial response is to ask one question: Do they know what is going on?

"In the larger context, I would like to ask if we really need Koeberg. After all the confusion surrounding the plant, the costs involved in the shutdown and the doubts about the safety of the plant, is this not the opportunity to simply stop the whole thing dead and address the real issue, which is the supplying of appropriate energy to all the people of South Africa."

(~~1444~~) (~~250~~) (155) Star 3/4/85

Sasol: new industrial milestone hailed

By Sheryl Raine

[redacted]

When Sasol fired 6 000 workers last November a world-wide ripple of reaction threatened South Africa.

Now Sasol and the Chemical Workers Industrial Union have buried the hatchet.

Their settlement was this week hailed in labour circles as a milestone.

The trouble began with a worker stayaway which resulted in the firings.

On February 1 negotiations reopened with Sasol over the Chemical Workers Industrial Union demand for re-instatement of the sacked workers.

In mid-February the union was presented with a final take-it-or-leave-it offer from Sasol; there were many who anxiously awaited the union's response.

It could have resulted in a world war of labour relations.

The union, affiliated to the Federation of South African Trade Unions, had already mobilised its international connections.

Anti-apartheid pressure was mounting in America.

Sasol and South Africa did not need more bad publicity.

Instead of a war the union took Sasol's offer back to its members.

On March 2 at a union congress attended by all shop stewards it was decided to accept Sasol's offer.

The official journal of the Federation of South African Trade Unions this week said the settlement, signed on March 5 between the union and Sasol, would surely go down as a milestone in South African labour history.

It was, said the journal, remarkable that the union even survived this attempt by a semi-state company to crush worker organisation, let alone come out of it with better worker rights.

Sasol is now re-employing 70 percent of the workers who were sacked, including 16 of 48 shop stewards.

The South African Labour Bulletin says early indications are that 75 percent of workers have already regained their jobs.

Fosatu Worker News reports that Sasol has agreed in principle to hire a further 5 percent of the workers and has said the door is not closed on the other 25 percent.

The union will continue to represent those not re-employed.

Previous rights gained by the union are to be continued and new rights have been entrenched.

These include unlimited access to hostels; notice boards; meetings with management on a regular and emergency basis; a full-time office in the hostels (as opposed to an office on only three days a week).

Shop stewards will have the right to hold a monthly caucus meeting in working hours and have access to telephones, facilities crucial to union organisers in plants the size of Sasol.

Union shop stewards will be recognised and given letters of accreditation signed by the personnel department and initialled by individual foremen.

These shop stewards will represent workers in grievance and disciplinary hearings and get time off for such tasks.

A 10-day-a-year union training scheme has been approved, and Sasol has agreed to pay union trainees for five of those 10 days as well as grant additional unpaid time.

In addition a union negotiating team of eight officials and shop stewards will be established to negotiate with Sasol management.

Now the union is concentrating on rebuilding worker organisation within the Sasol II and III plants.

To the uninitiated the about-turn in the Sasol saga may appear to have been a curious exercise.

What does it all mean?

Johannesburg Industrial Relations consultant Mr Gavin Brown believes it has revealed a significant degree of sophistication on the part of the union.

Rather than get involved in an external labour war, the union chose to settle and live to fight another day from within the company.

Apart from Mr Brown, other labour experts are still pondering who gave the original mass sacking order.

Did it come from the Sasol boardroom . . . or direct from the Government?

Many would be surprised, given Sasol's relatively informed position in the field of labour relations, if the order came from the boardroom.

Labour experts believe that once the situation had got out of hand the reins may once again have landed in the hands of the board, which then engineered the present milestone settlement.

155 Star 3/4/85

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(55) E. Post

6/4/85

Good news on M Bay oil due shortly?

By Louis Beckerling

Business Editor

SOUTH AFRICA is poised to produce between 19 000 and 25 000 barrels of oil a day from the natural gas fields 90km due south of Mossel Bay.

An announcement lifting the lid on one of the country's best-kept secrets — the exploitation of a viable offshore oil source — is expected within months and is likely to fundamentally alter economic and political prospects for the country.

This confident prediction, contained in a recent report to clients by stockbrokers Ed Hern, Rudolph on the oil search conducted off the South African coast by Soekor, has been reinforced by:

- ● The appointment by the State of a feasibility study from Foster Wheeler Energy and Batemen Engineering into the onshore plant and infrastructure required to convert the Mossel Bay gas field into liquid fuel.
- ● An investigation into the necessary off-shore installations by Emso, a joint partnership of Engineering Management Services and J Brown Engineers.

Both reports are scheduled to be completed by the end of next month and the Government is expected to give the green light for the exploitation of the Mossel Bay field in June or July.

The likelihood that Port Elizabeth will be chosen as the location of a R2 000-million gas conversion plant appears remote, however, and the Hern, Rudolph report argues only the relative merits of Cape Town and Mossel Bay as potential sites for the project.

The Midland Chamber of Industries this week revealed that it plans an indepth examination into all the issues surrounding the exploitation of the Mossel Bay gas field project at a special meeting of its industry development committee on April 23.

Executive director Mr Brian Matthew cautioned that PE should not seek its own immediate self-interest in this regard, and that economic, rather than "political" considerations should decide the location of the plant.

Nonetheless the city may have a legitimate economic argument favouring the construction in the Port Elizabeth harbour of the massive offshore installation required to exploit the field.

The Hern, Rudolph report says Soekor is on the verge of proving South Africa's first viable gas field (the Mossel Bay field, it says, is considerably smaller than the Kudu field just within the SWA/Namibian border).

Assuming a project life of 20 years and 330 days of production each year, it anticipates a diesel equivalent output from the converted and refined gas and condensates in the Mossel Bay field of between 19 000 and 25 000 barrels of oil a day.

"The anticipated percentage contribution to SA's present liquid fuels consumption under each scenario is therefore approximately 8,4% and 11,1% and the annual foreign exchange saving (based on an international oil price of $27/barrel and an exchange rate of $0,55/rand) will be between R425 million and R560 million."

Ironically it is the recent major decline in the rand's foreign exchange value which has "substantially enhanced the potential viability of this project".

Placing the Mossel Bay field into context with oil and gas finds elsewhere in the world, the report says "it will never be of [international] significance.

However it is likely to be of great significance to South Africa for at least three reasons:

- ● "It will increase indigenous fuels output by approximately 20%, further reducing our vulnerability to oil sanctions;
- ● "It will provide the long-awaited opportunity of diversifying South Africa's industrial activity away from the Witwatersrand.
- ● "(It) will almost certainly pave the way for similar gas field developments both in South Africa and possibly also in neighbouring countries . . ."

Cautioning that savings could be achieved on the capital expenditure required to convert the gas into fuel by converting the existing Caltex refinery in Cape Town, the report analyses the alternative costs of commissioning an entirely new plant and arrives at a projected total figure of some R2 000 million (a figure which has subsequently been confirmed as substantially accurate by Soekor chairman Dr Nico Stutterheim).

According to the report "there would appear to be two potential locations for the gas conversion plant — the Mossel Bay/George area, and Cape Town".

While "rumours" indicate that a "political" decision may already have been taken favouring a site in the Gouritz River mouth area near Mossel Bay, Cape Town, it says, "would prove a preferable site".

While the Mossel Bay/George area lacks the infrastructure of Cape Town, it says "the Government could endeavour to justify the use of that area for any of the following reasons:

- ● "Decentralisation aspects.
- ● "Lengthy on-shore pipelines are a potential target for terrorists.
- ● "Proximity to the country's main consuming markets.
- ● "The Western Cape's fuel requirements could ultimately be supplied from a similar project on the West Coast (the Kudu field)."

Economic implications of exploiting the gas field, points out the report, include a reduction in the import bill within the next five years of some R500 million, the promotion of foreign investment capital, improved Government finances flowing from tax payments, less exposure of the economy to volatile gold prices, and the encouragement of regional diversification away from the Witwatersrand.

Political/strategic implications are that the country would become "largely independent of increasing political pressure and fluctuations in the rand prices of oil imports".

And since a newly-developed natural oil industry will complete a full range of energy resources (combining with a synthetic fuel industry and developing expertise in nuclear power technology), "the net result would be, subject to continued political stability, a country probably very attractive to foreign industrialists and investors".

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Five jailed in Salem fraud

Cape Times 9/4/85

PIRAEUS, Greece. — A Greek court yesterday jailed a shipping agent and four seamen for complicity in scuttling the oil tanker Salem in 1980 as part of an insurance fraud.

It upheld charges that the 92 228-ton Salem, which sank off Senegal, was sunk for the insurance and that by unloading most of its cargo in Durban, the seamen had embezzled oil from its rightful owners, Shell.

The prosecution said the tanker was bought for the purpose of making an illegal delivery from Kuwait to Durban in defiance of an Arab ban on oil sales to South Africa, after which it would be scuttled.

The defence argued that Shell was a party to the South African delivery, and then alleged the tanker had been scuttled because the vessel had sunk accidentally and Shell feared exposure of its role in sanctions-busting.

The court jailed shipping agent Nikos Mitakis for 11 years for causing a shipwreck, embezzlement and insurance fraud. Four crewmen, charged with complicity, were given sentences ranging from four years to two years two months.

Seven foreigners charged in their absence received three years' jail each. Among them were Lebanese-American Frederick Soudan, the Salem's owner who has been convicted of fraud in Houston, Texas, and Dutchman Anton Reidel, who is due to stand trial in Rotterdam.

The ship's master and another seaman, both tried in their absence, were each given 10-year sentences, and seven crew were acquitted.

Explosives

The prosecution said the crew used explosives to sink the ship. It argued that the seamen were suspiciously well-prepared for the sinking when it happened and they made no attempt to send out SOS signals.

The defence rejected the idea that Shell had been victims of theft. They said a third of the 180 000-ton cargo was given to a Shell division as soon as it arrived in South Africa.

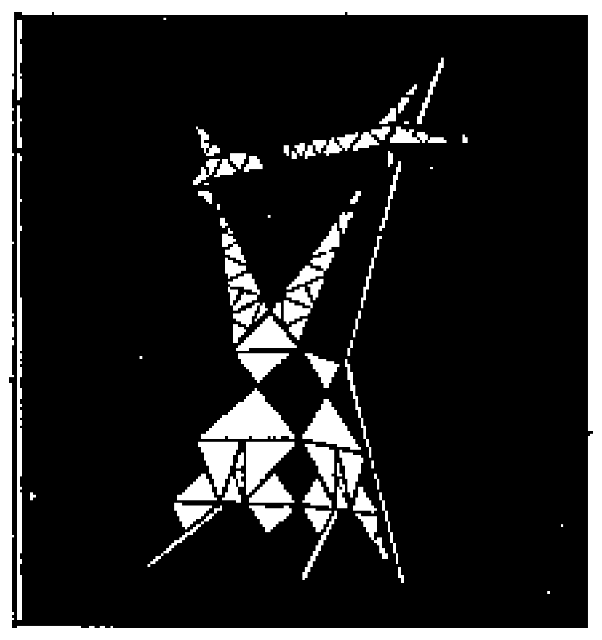
The court was told Reidel and Soudan made a deal late in 1979 to supply South Africa with oil. — Sapa-Reuter

ESCOM

Are the critics on beam?

(55)

Escom has come in for some misplaced criticism recently. It has been tripped over misfortune and misdemeanour. There is a danger now that what really does require public concern — future electrical generating capacity — will get lost in the caterwauling.



There is a certain sensitivity noticeable when you talk to Escom chairman Jan Smith about the R28m flower bill of which he stands accused by a few newspapers and some others. And, indeed, so large an amount is involved that it is tempting to dedicate to him the fifth stanza of Marvell's *Thoughts in a Garden.**

But that would be a gross distortion. The R28m was spread over five years, averaging, therefore, R5,6m/year, which is less than 0,16% of Escom's annual revenues.

It was spent, moreover, keeping the surroundings of 29 power stations in reasonable nick. Very little was spent on the playing fields of Megawatt Park in Sandton, whence Escom is ruled.

Without it, says Smith, "the environmentalists would be on my back." After spending it, he has electricity consumers in the same place.

Having said that, there is certainly something about the volumes that have been written on Escom lately that call to mind the metaphysical poets, of whom Marvell was one. Burton, in *The Anatomy of Melancholy* (1621), referred to their "neat construction, strong lines, hyperboles, allegories" and their "affection of big words, fustian phrases, jingling terms . . . that like Acastes' arrows caught fire as they flew."

Out of proportion

Simply put, some of the criticism of Escom is dangerously close to being out of hand, out of proportion and maybe even out of mind.

Take, for instance, the matter of Gert Rademeyer, who whisked R8,4m of the commission's money into his own accounts. It is the first time anything like this has been done over 60 years by any of Escom's 65 000 employees.

Two thorough investigations of Escom's affairs — by the De Villiers Commission and, before that, a Board of Trade inquiry — found nothing wrong with Escom's present accounting control system. It has on three occasions won *Sunday Times* accounting awards.

Yet, one newspaper has said that if the De Villiers Commission's recommendations had been implented by government more swiftly, the Rademeyer incident would never have occurred. This is even more puzzling, because the commission's report deals mainly with matters like capacity forecasting.

The next criticism of Escom concerns its foreign exchange losses. Speculation has put these as high as R300m in 1984. The fact is that Escom writes off each year a proportion of a possible forex loss relative to the life of a loan or commitment. Each year this is revalued according to prevailing currency values.

Last year, there was a direct loss of R9,6m. Part of this is in respect of covered commitments. They arose as a result of currency price movements during the few hours that it takes the Reserve Bank to provide the actual cover required.

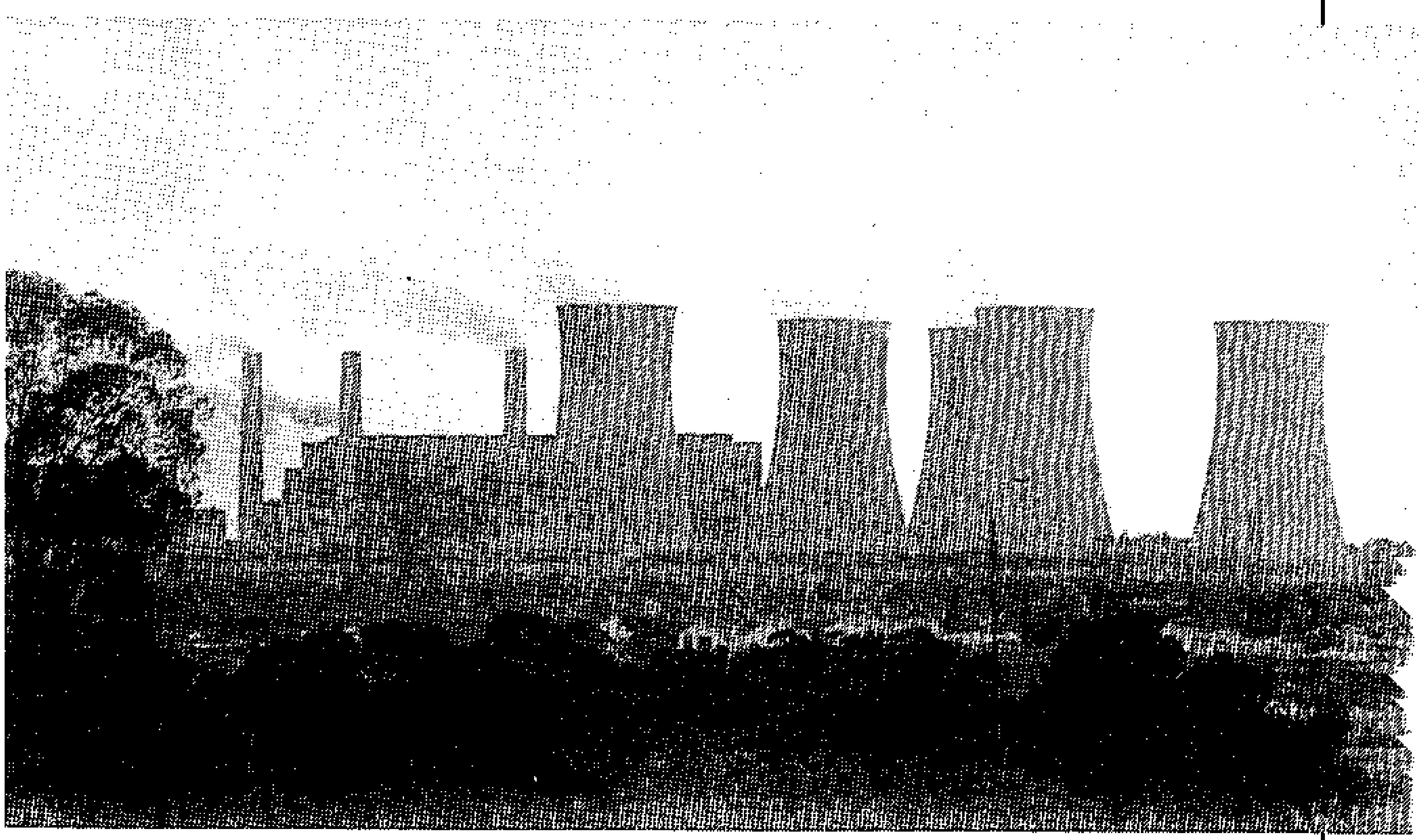
However, at present, Escom calculates that it has a deferred unrealised loss of R141,6m in respect of its known foreign commitments up to 1989. This amounts to 2,57% of its R5,5 billion foreign liabilities, of which R3,7 billion is in the form of loans and bonds and R1,8 billion in import financing and extended credits.

Compare that with the position of some other corporations. The ratio for General Mining was 14,9%, for Tedelex 37,4%, for Barlow Rand 8%, for Sentrachem 22%, for Toyota 25,8% and for Messina 50%.

Taking loss provisions as a percentage of total assets, Escom's were 0,7%, Toyota's 5,3%, Barlow Rand's 0,38%, Sentrachem's 4,2%, Tedelex's 22,7%, Gencor's 2,1% and Messina's 14,8%.

Escom requires each year far more capital than can be obtained in the local capital market. For its capital requirements it has to go abroad, where the cost of forward cover is expensive. To the extent that it buys this cover against the dollar from the Reserve Bank, the bill has partially to be met anyway by SA taxpayers during those years that the rand's value depreciates.

Escom's foreign loans generally have lives of eight to 10 years. Decisions on forward cover have to be taken annually, because 12 months is usually the longest period over which cover can be brought. The costs and risks that have to be weighed each time this is done vary considerably. Smith points out that over the last four years Escom actually made a profit on its foreign currency obligations. So, its decisions over time have not been wide of the mark, and it is common cause that last year in the currency markets was exceptional.



Are power stations too big for optimal performance?

The "cost" of temporarily closing the Koeberg nuclear power station has led to the publication of some wild estimates (R1,8 billion was mentioned) based on the cost of servicing the capital borrowed to build it.

Smith points out that these finance charges for the nuclear station have to be paid, whether the station is in use or not, in exactly the same way that the capital costs of a coal-fired station have to be met.

Moreover, the cost of power from a nuclear station is higher than that from a coal-fired one. The price Escom now pays for local uranium is much higher than the world

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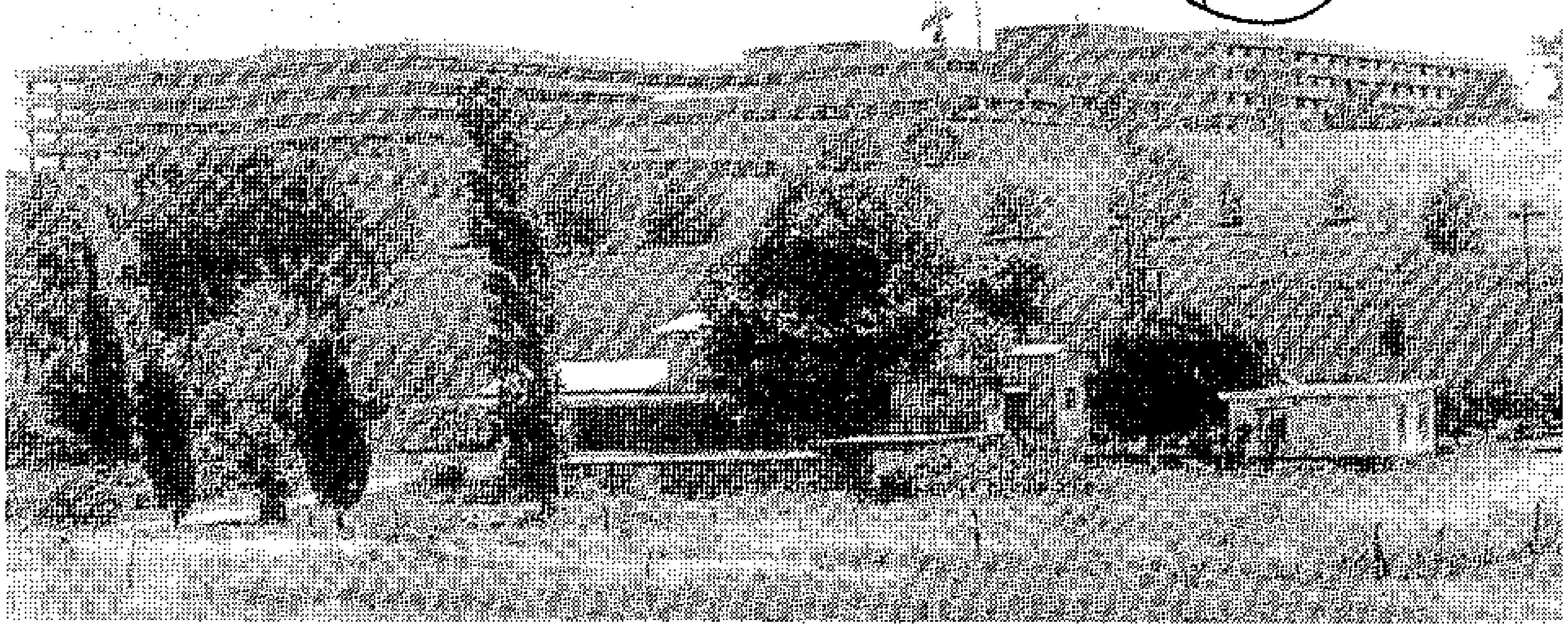
* What wond'rous Life is this I lead.
Ripe Apples drop about my head;
The Luscious Clusters of the Vine
Upon my Mouth do crush their Wine;
The Nectaren, and curious Peach,
Into my hands themselves do reach;
Stumbling on Melons, as I pass,
Insnar'd with Flow'rs, I fall on Grass.
Thoughts In a Garden by Andrew Marvell (1621-1678)

(2860) (55) FM 12/4/85



The playing fields of Escom's Megawatt Park headquarters.

ment structure were intended to bring to bear differing views on the need for additional capacity and cost control that would be implicit in — and more effectively applied by — a competitive market place.

Escom is one of the towering heights of the SA economy. It is large even by world standards. It is bound often to come under public scrutiny. According to Escom, its electricity is about the cheapest available anywhere: in real terms (that is, after deducting the inflation rate), the price of electricity now in SA is the same as it was 25 years ago. That cannot be too bad a record.

The problem, of course, is that no manager, let alone one who steers Escom, can afford to take his eyes off the future and dwell on past, or even present, successes. He cannot avoid making sensible estimates of what will be required in the years ahead.

The danger is that if too much attention is paid by politicians and other pressure groups to recent critics of Escom, the view of the electricity needs of the future that might prevail could equally be in the realm of metaphysics. That would not be in the best interests of sound and sustainable economic growth. ■

[illegible] 55

Star 12/4/85

Escom to aid Mozambique

Escom will supply the Mozambique's electricity supplier with 40 transmission towers to replace those damaged by storms, Escom announced yesterday.

Mr I C Macrae, senior general manager, said shipment of the R 800 000 towers would start this week.

"It is normal practice for Escom to co-operate with electricity suppliers in neighbouring states.

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Soekor wins Algoa drilling rights

53

E. Post 24/4/85

By DIRK VAN ZYL
Political Correspondent

CAPE TOWN — South Africa's semi-State oil exploration organisation, Soekor, has been granted off-shore drilling rights for natural oil and gas within a 70km radius of Port Elizabeth until June 22, 1987.

Foskor has been granted rights to prospect for phosphate in the same area until June 15 this year.

This was said in the House of Assembly yesterday by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, in answer to Mr Andrew Savage (PFP, Walmer).

He said conditions attached to the rights covered various aspects and were embodied in lengthy lease documents which could be inspected at the office of the Registrar of Mining Titles, Johannesburg.

Prospecting had to be carried out "in a manner and on a scale satisfactory to the Minister of Mineral and Energy Affairs", but there were no specific conditions regarding the rate of prospecting, Mr Steyn said.

Various contractual obligations and conditions were stipulated.

● In answer to another question, Mr Steyn told Mr Savage that oil prospecting rights had also been granted to Soekor on land in the Algoa basin until October 16, 1988.

A number of contractual obligations and conditions covered such aspects as testing of first discoveries of oil or gas, lodging of reports, safekeeping of samples and the keeping of relevant records.

● Mr Steyn said in answer to Mr John Malcomess (PFP, Port Elizabeth Central) that the Government had decided that all concessions in respect of the Kudu gas field off the SWA/Namibian coast should be transferred to Swakor.

All decisions concerning the exploitation of the resources and related matters would therefore be taken by the SWA/Namibian authority.

Mr Steyn drew attention to a Press statement the Department of Foreign Affairs issued on January 31 to the effect that whatever gas and/or oil resources there may be in SWA/Namibia, or off its shores, were the property of the territory and all such resources would be developed for its benefit.

(Report by Dirk van Zyl, Press Gallery, Parliament, Cape Town.)

'No hope' of June fuel price decrease

NM 25/4/85

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CAPE TOWN—South Africans were stunned yesterday when the Government made it clear there was no hope of a petrol price cut in June.

The best Minister for Mineral and Energy Affairs Danie Steyn could offer was a promise the price of petrol and petroleum products would not be going up then.

He dropped his bombshell during the committee stage of his vote in the House of Representatives.

At the time of the last increase, the minister pointed out, the Government decided to subsidise petrol by 0,4 c/ℓ at the rand-dollar value of 46,5 c.

Had the rand not improved a further 4 c/ℓ would have had to be put on to the price.

Improved rand

Other products, which were more heavily subsidised, such as paraffin, agricultural and marine diesel and passenger road transport, would have had to absorb increased costs as well.

However, as the rand had improved to 52,5 c and the dollar price of crude had remained constant, an increase was not necessary.

The oil companies had recouped losses accumulated before the price hike.

'The future ratio of the exchange rate and naturally the price of crude oil, will be the determining factors whether a price increase for all consumers will be averted, or if a general price reduction is possible,' Mr Steyn said.

He said the Cabinet reiterated its support for the principle of market related prices and that he would make an announcement about that in due course. — (Sapa)

NM 22

Petrol substitute project

~~222~~ 55 ~~183~~

NM 25/4/85

Parliamentary Correspondent

CAPE TOWN—A pilot project to produce synthetic fuel from coal as a substitute for petrol is already underway, Minister of Mineral and Energy Affairs Danie Steyn announced yesterday.

Speaking on the Mineral and Energy Affairs Budget vote in the House of Representatives, Mr Steyn said his department was keen to see progress being made converting non-conventional fuel such as methanol to petrol and diesel.

In this respect the multinational AECI is undertaking a productivity study to be released at the end of the year.

The new process required less refining and was economically lucrative, Mr Steyn said.

AECI was considering entering the pilot project with a consortium of firms.

NTERNATIONAL ARGUS 30/4/85 (51)

Texan gets 35 years for Salem oil fraud

Argus Foreign Service

AUSTIN (Texas). — Texas businessman Frederick Soudan was today given a 35-year jail sentence in Houston for his role in what has been called the oil fraud of the century.

The case involved the theft of a cargo of oil from the 119 000-ton supertanker Salem, its sale to South Africa and the subsequent scuttling of the tanker at sea to cover the fraud.

He was also ordered to make restitution payments of R9-million out of bank accounts he holds in Switzerland and the Bahamas.

COUSIN

Abdul Al Ghazou, his cousin and brother-in-law, was given a five-year sentence for attempting to conceal Soudan's illegal profits from the US tax authorities.

The order of US District Judge Carl Bue requiring Soudan to make restitution applies only to payments that the prosecution was able to trace directly to him.

His R80 000 Houston home and his business — a Mercedes dealership — have been repossessed.

Before passing sentence the judge threw out a defence motion asking for a new trial. It is understood that an appeal is being prepared by another Houston lawyer — not one of those who defended Soudan in the trial just ended.

10 DAYS

Notice of appeal must be lodged with the court within 10 days of sentencing.

Lebanese-born Soudan, 41, and Syrian-born Al Ghazou, 47, were found guilty on March 26 on 17 counts of a 22-count indictment involving fraud, conspiracy, perjury and tax evasion.

The jury deliberated for about 12 hours before reaching a decision.

Soudan was acquitted on five remaining counts.

Fuel price may go down, but . . .

Second power price increase expected

55 B. Day 15/7/85

By GERALD REILLY

A POWER price increase — the second this year — is expected to be announced next month, Pretoria sources say.

The extent of any increase will be recommended to the Government by the Electricity Council, the body which will replace the Electricity Supply Commission.

Council members are expected to be appointed by Minister of Mineral and Energy Affairs Danie Steyn within the next two weeks.

Establishment of the council, as part of a two-tier control structure, was a recommendation of the De Villiers Commission, which submitted its report on Escom last year.

When Steyn announced a 10% increase in electricity charges in January he referred to the likelihood of a mid-year increase.

He added the decision would be taken against a background of prevailing economic conditions.

A departmental source said yesterday Escom had asked for a substantially bigger increase than the 10% granted in January.

The Cabinet, however, decided to stagger the increase with an interim adjustment later in the year.

Meanwhile, the Department of Mineral and Energy Affairs is closely monitoring the performance of the rand against the dollar in relation to the fuel price.

When Steyn announced the 40% petrol price increase earlier this year, he said another 4c/*l* increase would be necessary in June if there were no marked improvement in the dollar/rand exchange rate of 46,5c to the dollar at the time.

With the strengthening of the rand, the threat of another increase has receded and there was a good possibility of a fuel price decrease if the rand remained fairly constant at about 53c to the dollar, a departmental source said.

FM 17/5/85

OIL DEMAND

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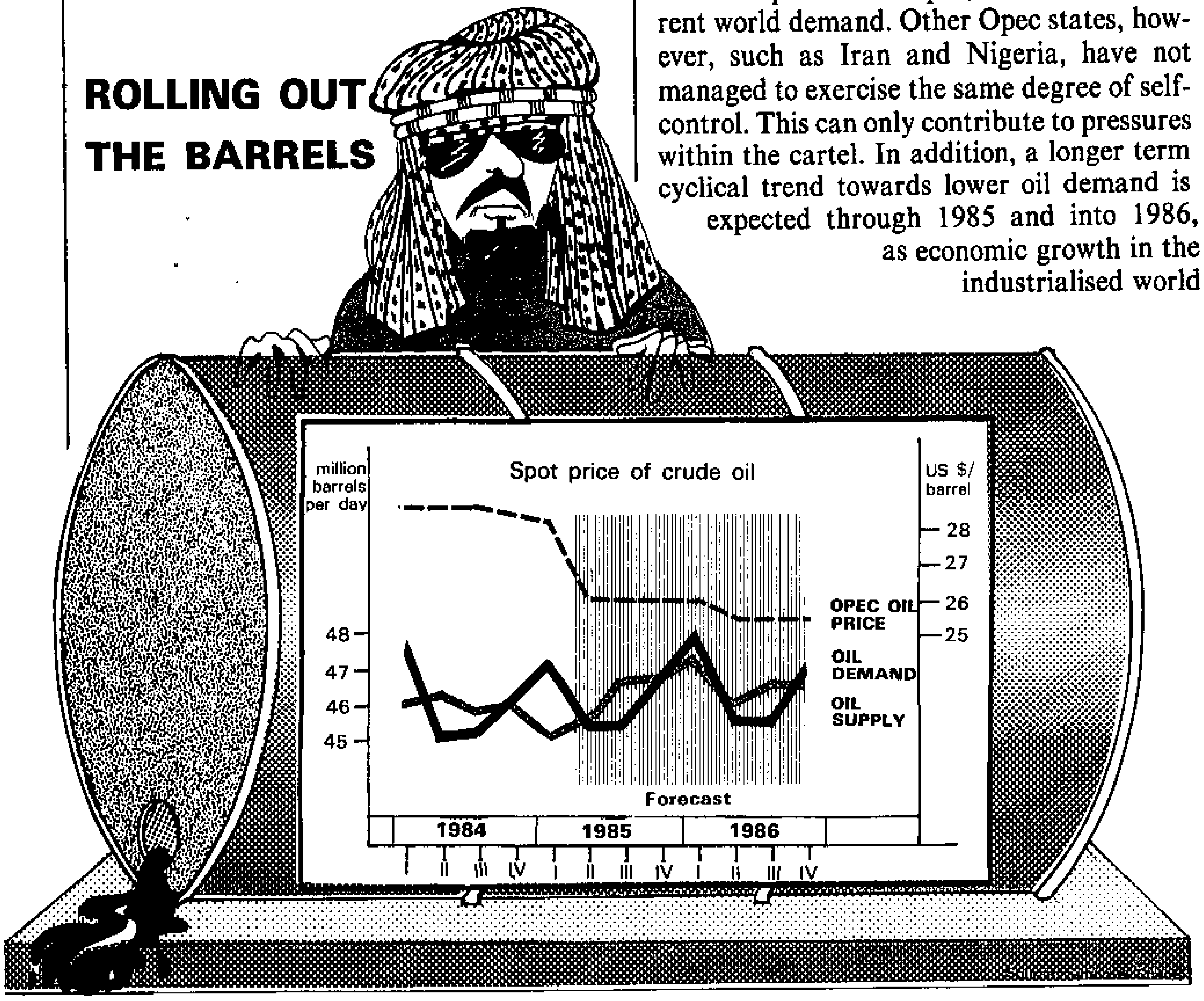
Long term slack

The spot oil price has remained remarkably resilient over past weeks — a factor that has certainly supported gold.

But the medium- to longer-term outlook is decidedly bearish for oil producers, as both seasonal and cyclical factors are likely to put the squeeze on prices (see *World).* Although, on balance, the effects of a lower oil price are likely to be detrimental to SA.



The next three months will see a seasonal reduction in demand for oil in the Northern hemisphere (see graph). During 1984 demand dropped from nearly 48m barrels/day in the first quarter to 45m barrels/day in the two warmer middle quarters before increasing again. A similar pattern is expected this year, and UK stockbrokers Simm and Coates forecast a fall in demand to between 45m and 46m barrels/day for the middle six months of 1985.

This seasonal movement has already been discounted in the forward price of oil. Prices for future oil delivery are already below the spot price — indicating that the market expects prices to drop as time progresses.

As demand weakens for seasonal reasons, of course, there is, correspondingly, less need to hold inventories of oil. In addition, a forward oil price lower than the spot price means it is more economical to buy oil for future delivery. And this also avoids holding a stock that would devalue in line with a falling spot price.

Whether the downtrend in prices is sustained depends, of course, on the Opec cartel. Up to now, production restraint has been relatively successful, although such restraint has been achieved by some countries at the expense of others.

Producing less

Saudi Arabia, for example, is currently thought to be producing less than one quarter of its potential output, about 5% of current world demand. Other Opec states, however, such as Iran and Nigeria, have not managed to exercise the same degree of self-control. This can only contribute to pressures within the cartel. In addition, a longer term cyclical trend towards lower oil demand is expected through 1985 and into 1986, as economic growth in the industrialised world slows.

On the basis of these probabilities, oil prices are expected to exhibit fairly constant demand tendencies over the next 18 months. ■

Cpt Times
21/5/85

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Court told of R8m Escom 'fee'

SYDNEY. — South African-born Gert Johannes Rademeyer, an Australian citizen wanted in South Africa for fraud, was paid about R8 million to get around an international boycott against selling enriched uranium to South Africa, a defence lawyer said in court here yesterday.

Mr Rademeyer is facing extradition proceedings to South Africa to answer charges that he defrauded the Electricity Supply Commission (Escom) of R8-million late last year. He was arrested by Australian police last February under a hastily-prepared extradition arrangement with South Africa.

Mr John Agius, for Mr Rademeyer, told the court the prosecution was political and that extradition would leave him at the mercy of South Africa's rigorous nuclear energy secrecy laws, which carry jail terms of up to 20 years.

He said Mr Rademeyer obtained the money as commission for securing enriched-uranium contracts, contrary to an international ban because of South Africa's refusal to sign the Nuclear Non-Proliferation Treaty.

Koeberg

He said Mr Rademeyer was recruited by Escom senior general manager Mr Isak van der Walt, and put suppliers of enriched uranium in contact with Escom general manager (finance) Mr Leendert te Groen — for which he was paid.

Mr Agius said the Koeberg nuclear power station used enriched uranium procured by his client.

Mr Agius sought an adjournment yesterday to allow him to obtain further details of the settlement, including statements from Mr Van der Walt and Mr Te Groen.

He said his client wished to have contacts from the United States, Portugal, Spain and France called as witnesses. The further information would detail the prices paid for uranium imported into South Africa and the parties involved.

The magistrate refused the adjournment and remanded Mr Rademeyer in custody. — Sapa-Reuter

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AA warns on driving licences

Cape Times 55
22/5/85

Escom policy reversal?

Political Staff

ESCOM may be forced into a major policy reversal with its acknowledgement that, in future, planning will probably have to be tailored to available financial resources.

Chairman Mr Jan Smith says in the 1984 annual report, tabled in Parliament yesterday, that Escom had to change its approach in 1984 to account for, and manage, the large decline in the rand's value.

"It became apparent that it may be unwise to continue regarding financial requirements as an outcome of the planning process that ensures and adequate electricity supply.

"The opinion is expressed by some that in future the availability of funds, and not the actual demand for electricity, will become the crucial determinant in deciding on growth rates in electricity sales."

Escom evidence 'selective'

SYDNEY. — South Africa put selective evidence before a court hearing an extradition case against South African-born Gert Rademeyer, an Australian citizen, his lawyer said in court here yesterday.

Mr John Agius, for Mr Rademeyer who is wanted in South Africa on $3,6-million fraud charges, said the prosecution had excluded differing sworn testimony by people whose statements the prosecution tendered yesterday.

"There's a very selective choice of what's been put before this tribunal," Mr Agius told magistrate Ms Rosemary Smith.

The court heard statements from the senior general manager of South Africa's Electricity Supply Commission (Escom), Mr Isak van der Walt, its general manager (finance), Mr Leendert te Groen, and an accountant, Miss Margaret Hefer.

Mr Agius said the same three people had given affidavits for sequestration proceedings against Mr Rademeyer which differed from those tendered by the prosecution.

The statements tendered yesterday were made at the behest of the Transvaal's Attorney-General, Mr Klaus von Lieres, who was present in court.

Mr Agius submitted that Mr Rademeyer did not defraud Escom but was paid the $3,6-million as commission for securing enriched uranium to fuel South Africa's Koeberg power station.

He said an international ban on selling nuclear fuel to South Africa necessitated Mr Rademeyer's recruitment by Mr Van der Walt and Mr Te Groen, now no longer with Escom.

Mr Rademeyer was remanded in custody and the case is due to continue today. — Sapa-Reuter

Electricity is likely to cost more

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22/5/85 E. Post

JOHANNESBURG — A further increase in electricity tariffs was likely later this year, Escom chairman Mr Jan Smith said in his annual report tabled in Parliament yesterday.

"The 10% increase, which came into effect last January, will not cover expected increases in charges against revenue during the current year," Mr Smith said.

Demand for electricity was unexpectedly high during 1984, with total electricity sales increasing by 8,8%, compared with an average growth rate of 5,8% a year in the five-year period to 1984. However, with the cost of generating electricity continuing to rise faster than the price charged to the consumer, Escom's accumulated deficit increased to R420 million.

Mr Smith said electricity supplied by Escom last year was selling for 4,3% less than it cost to produce, despite considerable cost savings and productivity gains. However, the price of electricity had been rising more slowly than inflation.

In the last six years tariff increases averaged 12,3% a year, which was slightly below the inflation rate during the period as measured by the Consumer Price Index (CPI). In 1984, the 6,7% tariff increase was less than half the rate of increase of the CPI.

Under the terms of the Electricity Act, Escom is not allowed to have either a surplus or a deficit for an indeterminate period, so the accumulated deficit must be eliminated. The only source of funds for that purpose is revenue, or tariff income. Consequently, either revenue must be increased substantially or internal financing levels should be reduced.

He said the electricity tariff in South Africa was among the lowest in the world. At the same time, the level of capital expenditure financed from internal resources, mainly through the Capital Development Fund, was also among the lowest in the world and has been declining.

One of the major programmes underway was rural electrification. Last year a total of 5 920 new farm supplies were provided, 10% more than in 1983.

Mr Smith said the outlook for the South African economy and the electricity supply industry was healthy, despite the short-term problems, provided the major problem of spiralling costs could be contained. — Sapa

Escom to increase its prices

Cape Times 23/5/85

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[illegible]

Environment Reporter

ESCOM is to increase the price of electricity again this year — to pay off a deficit of R420-million which the company says was accumulated by selling electricity at a loss.

The reasons for the increase were outlined by Mr Jan H Smith, chairman of the Electricity Supply Commission, in his annual report presented to Parliament this week.

Mr Smith said demand for electricity had been unexpectedly high during 1984, with total electricity sales increasing by 8,8 percent compared with an average growth rate of 5,8 percent a year in the five-year period to 1984.

However, with the cost of generating electricity continuing to rise faster than the price charged to the consumer, Escom's accumulated deficit increased to R420-million.

He said electricity supplied by Escom in 1984 was selling for 4,3 percent less than it cost to produce, despite considerable cost savings and productivity gains.

A problem was that the price of electricity rose more slowly than inflation. In the past six years tariff increases averaged 12,3 percent a year, which was slightly below the inflation rate during the period as measured by the consumer price index.

In 1984 the 6,7 percent tariff increase was less than half the rate of increase of the consumer price index.

"The 10 percent increase, which came into effect last January, will not cover expected increases in charges against revenue during the current year," Mr Smith said.

He said that in terms of the Electricity Act, Escom was not allowed to have either a surplus or a deficit for an indeterminate period, so the accumulated deficit had to be eliminated.

The only source of funds available for that purpose was revenue or tariff income. Consequently, either revenue must be increased substantially or internal financing levels should be reduced.

"It is not possible to increase revenue by boosting the volume of sales of electricity, particularly in the present economic climate. Nor should internal financing levels be reduced further. The only option open to Escom is a second tariff increase later this year," Mr Smith said.

POWER SUPPLY

ARGUS 23/5/85 5-5 ~~[illegible]~~

Salt River to the rescue

With the shutdown of Koeberg the old Salt River power station is ready to provide power in the winter months. Staff Reporter VERNON MATZOPOULOS visited the station.

WHILE much criticism has been radiated by the the continued shutdown of Koeberg's Number One reactor, not everyone is unhappy.

Within the red brick walls of the old Salt River power station, one detects a definite spring in the step of Mr Frans J Wijtenburg, power station manager.

For in its 30th operational year the steadfast workhorse has been called out once again to help in a time of crisis.

Stocks of coal are being laid in for the winter months and should Koeberg not be repaired in time Salt River power station will rumble into life, its volts whizzing through the power grid to where they are needed most.

With 10 boilers bubbling away, turbines spinning furiously, Salt River produces up to 240 megawatts. This is child's play compared with the 1 800 megawatts pushed out by Koeberg but it always delivers the goods.

Merit award

This year, for the third time in seven years, the ugly coal muncher won the annual Escom merit award for reliability and efficiency — a proud record considering it is competing against the finely tuned technology of showpiece stations in the Eastern Transvaal.

But to speak only in terms of efficiency and reliability would be a disservice to this landmark and would neglect the vital human factor.

Inside its walls is a structure of remarkable complexity, where every twisted tube, contorted pipe and watching dial has a specific role.

And coursing ant-like through the innards of this behemoth, ministering to its needs, nursing it through shutdowns and releasing its tension with blasts of steam from the chimney stacks are the men who give the station a unique and distinct personality.

For instance, power station boss Mr Wijtenburg is a man in tune with the seething technology.

"I have been through every process after all my years here and I can hear what happens in the power station.

'Vibrations'

"From my office I feel the vibrations and if there is trouble I know immediately," says Mr Wijtenburg.

"This is not a clean, cool and quiet place like Koeberg," he says in his precise Dutch accent, gesturing lovingly at the expanse of the boiler house and the turbine hall.

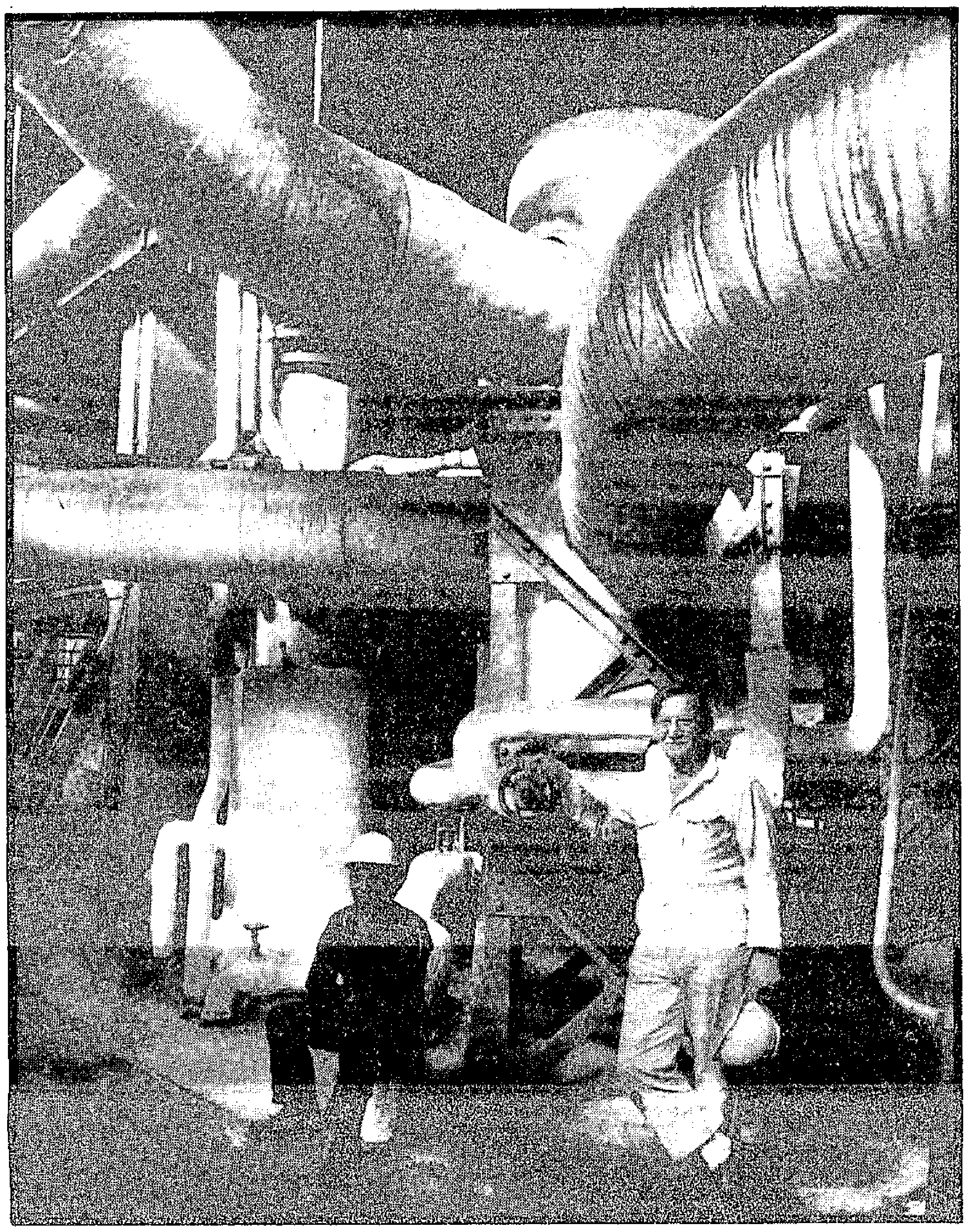
"When we're on full steam here the temperature jumps up the scale, there is soot, great clouds of steam and men perspiring — we give it everything we've got."

For him and his team, their function is simple and clear-cut — electricity on demand.

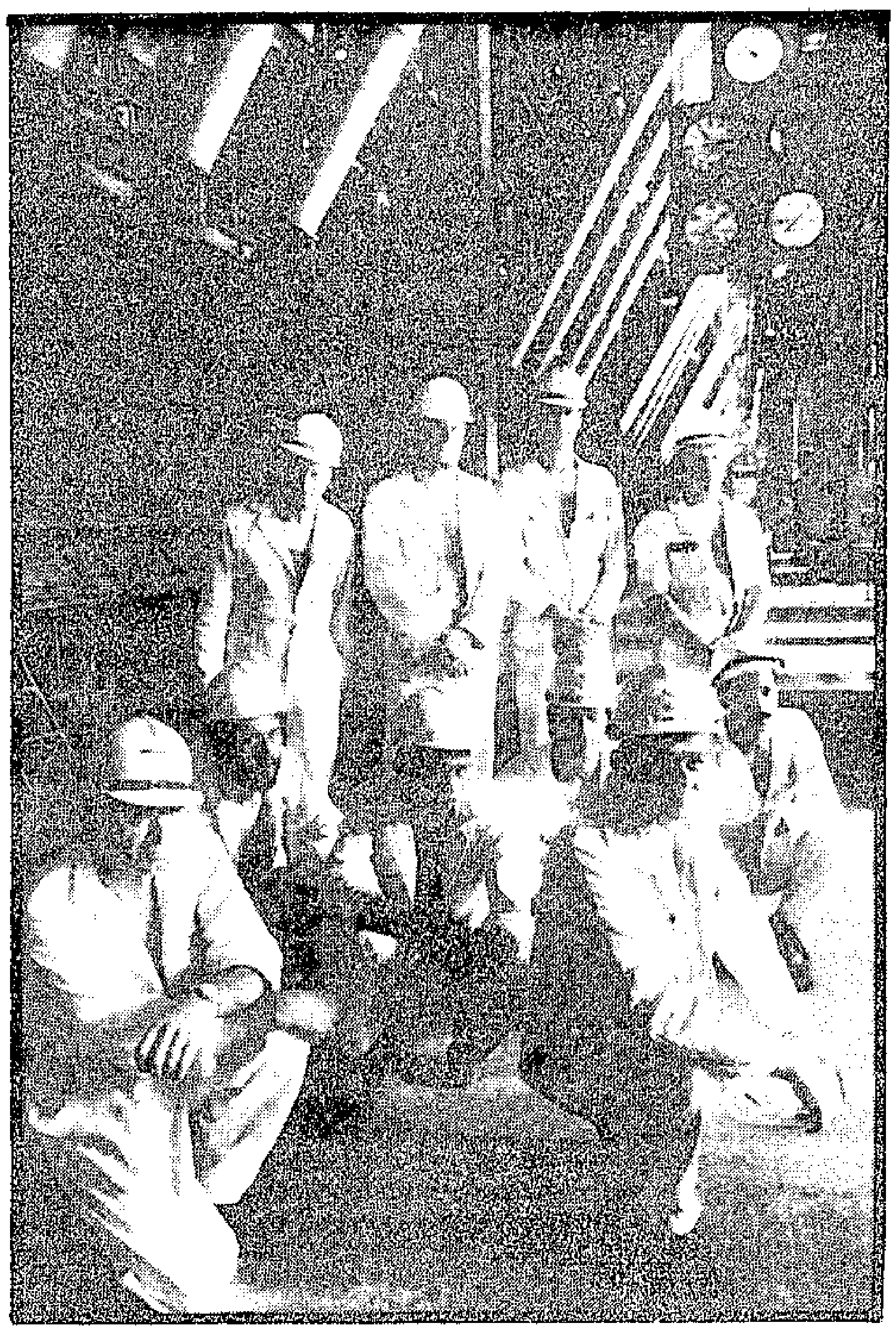
"People don't understand," he says. "We have to produce the electricity immediately the consumers demand it. We cannot make it and store it."

His top assistants are highly skilled and reliable men who have been "pumping volts" for years.

Many have been with the station since its inception in 1955, some were at its adjacent older sister, Salt River One, which was closed down in 1979 after 51 years' service.

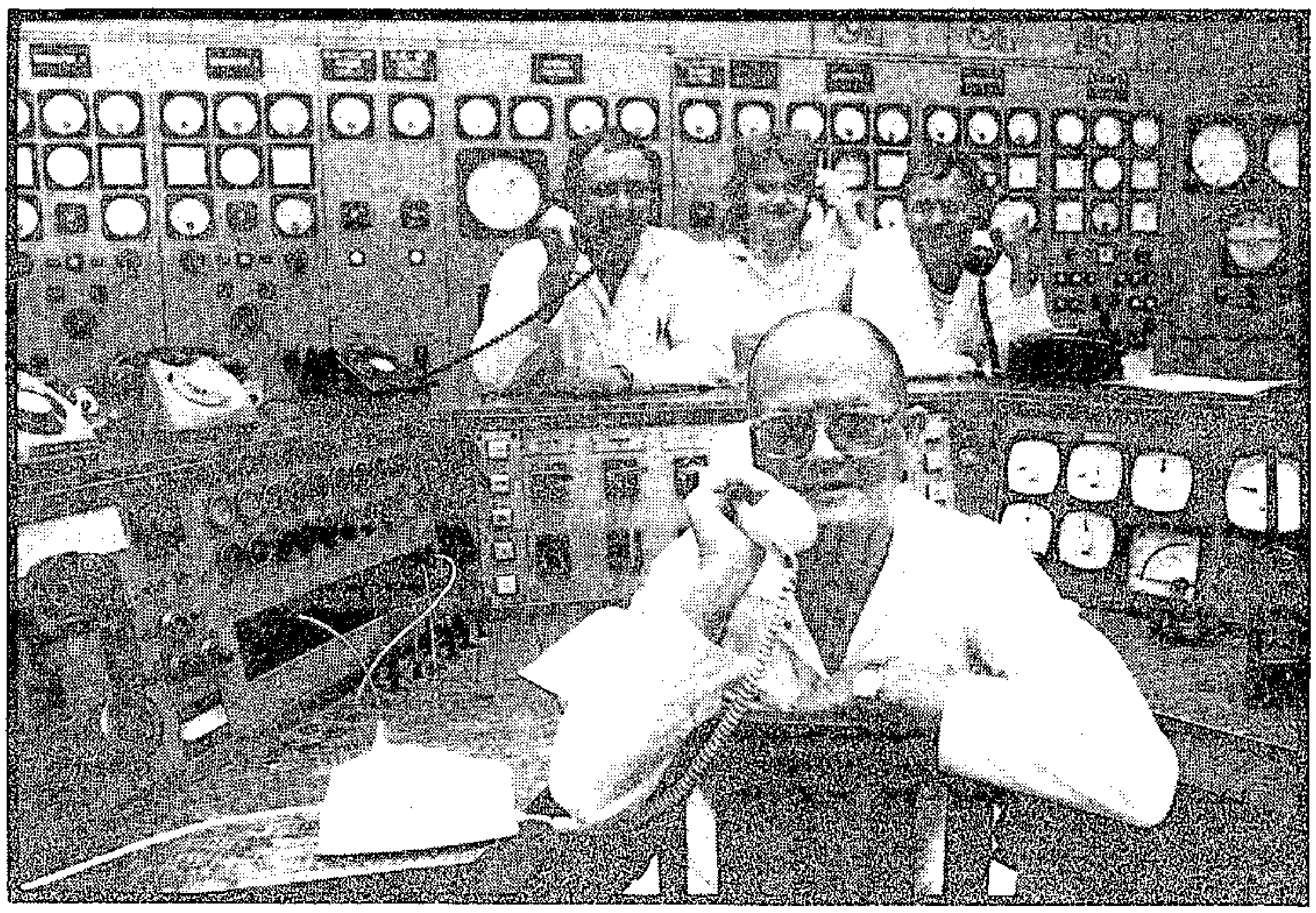


Dwarfed by the huge pipes of the steam separators of the Salt River power station are Mr Ronnie Saville, left, an overseer, and Mr Ken Stevens, technical supervisor of the turbines.

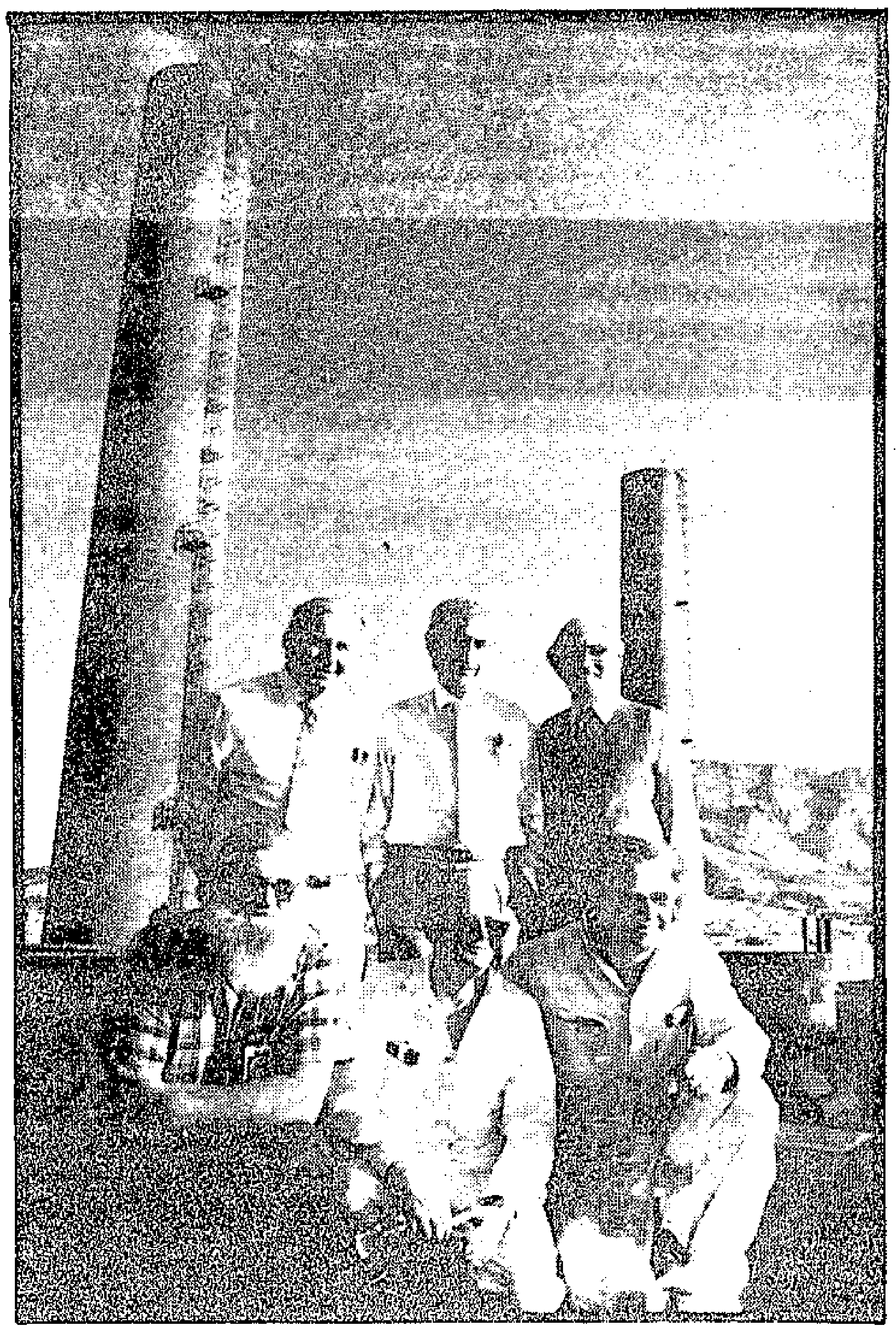


Pictures: DOUG PITHEY, The Argus

Mr J Basson, front right foreground, principal plant operator, crouches with his shift in front of number four boiler.



From the control-room lined with dials and levers, senior shift supervisor Mr W Jemmett, front, assisted by (back, from left) Mr K van der Merwe, Miss A Heusdens and Mr D Lawrence, keeps in touch with the rest of the power station.



Between them these men have nearly 200 years' experience in power stations. From left, back: Mr T Green, Mr D Parker, Mr F Wijtenburg. Front: Mr J Smith, Mr W Jemmett, Mr A Heusdens.

Among them there is a light and easy camaraderie and a distinct affection for their long-time companion.

Gathered together the stories and reminiscences flow thick and fast.

Mr Tommy Green, 59, superintendent of engineering services, who has been with Escom for 43 years, remembers when the waves at Woodstock beach lapped at the foot of the power station.

"We used to go off at lunch and swim and fish," he said.

"Speaking of fish, remember the time the jellyfish got into the inlet pipe and clogged it up? We had to make a special scoop and and it took hours to get them all out," added Mr Albert Heusdens, 59, technical supervisor of the boiler plant.

"And that time when oil got into the condenser and we thought the best way to get rid of it would be to light it ..." cackled senior shift superintendent Mr W Jemmett, 62.

"Sssh, better not talk about that," said Mr Wijtenburg as the group spluttered helplessly at the memory.

There was also the time Albert Heusdens got married in a boiler — to a woman in Holland, by proxy.

Power stations will get bigger, more efficient and more economical but it is unlikely thatthey will generate as much human warmth as this one.

Cape Times

24/5/85

55

Maree heads new power council

Political Staff

HOUSE OF ASSEMBLY. — Barlow Rand's Mr John Maree has taken over as executive chairman of the new Electricity Council.

He is backed by a high-powered team of top businessmen, academics and State officials and scientists.

Among the prominent members of the council are Dr Joop de Loor, director-general of the Department of Finance, Mr B J Groenewald, deputy general manager of the SATS, Dr D C Neethling, chief director for energy at the Department of Mineral and Energy Affairs, and Dr J W L de Villiers, executive chairman of the Atomic Energy Corporation.

The appointment of Mr Maree and 15 members of the newly-established council was announced by the Minister of Mineral and Energy Affairs, Mr Danie Steyn, during his budget vote yesterday and was immediately welcomed by opposition parties.

The Electricity Supply Commission has been replaced by a body of the same name, controlled by a two-tier authority comprising the council and a management board.

The council will determine policy and be responsible for strategic planning and overall control, and ensure that management operates on "sound business principles".

CAPE TIMES 24/5/85

55

Coal: SA 'over-reliant'

Political Staff

HOUSE OF ASSEMBLY. — South Africa needed to find an alternative to coal power and nuclear energy was one it should be investigating, Mr Brian Goodall, chief opposition spokesman on mineral and energy affairs, said in Parliament yesterday.

The country did not need to rush to find an alternative but there was a danger in being "over-reliant" on coal, he said during the debate on the budget vote for the Department of Energy and Mineral Affairs.

"But, I believe we should be looking for an alternative amd obviously, nuclear energy is one of them."

Mr Goodall said he was well aware of the problems attached to nuclear energy, such as waste disposal and radiation, and he knew too that it was expensive.

It had been estimated that the cost of nuclear energy in America was 65 percent more than coal.

Nuclear plants were expensive and internationally the cost of nuclear energy was doubling every four years which seemed to indicate there was little advantage in it at present.

It cost more in South Africa too.

"Koeberg's electricity costs 5,6c per kilowatt hour and electricity generated by an inland power station would be 4,3c and our average cost at present is 1,9c," he said.

The US had become disenchanted with nuclear energy but Japan, "despite Hiroshima and Nagasaki", would have 34 percent of its electricity supplied by nuclear energy by 1986.

Taiwan would have 38 percent and South Korea was expected to have 50 percent. France already obtained 40 percent of its electricity from nuclear energy and was aiming at 75 percent by 1990.

Dangers to the environment

South Africa could learn something from the overseas experience.

"I believe there is one point we sometimes forget," said Mr Goodall. "We are all aware of the dangers to the environment of nuclear power stations but we forget that coal power stations are also dangerous.

"They emit radiation and they dispose tons of sulphur waste — acid rain — over South Africa.'

It was estimated that Escom released 3 000 tons of sulphur dioxide into the atmosphere each day.

ARGUS 28/5/85

Oil from gas project studies wait Cabinet approval

55

Staff Reporter

FEASIBILITY studies on a multi-milliion oil from gas project at Mossel Bay are nearing completion but Cabinet approval for the project appears unlikely before the next parliamentary session starting in September.

Mr Mike Leibbrandt, Soekor liaison officer, said yesterday the studies covered every aspect of the possible project, including finance and manpower.

But as the current session of Parliament ends within weeks it was unlikely that the feasibility studies would be considered before that.

After Cabinet consideration, if favourable, the project is expected to get the go-ahead fairly rapidly.

Soekor cannot disclose the extent of gas reserves already proved, but the organisation has said several times that it would consider one trillion cubic feet of gas as commercially viable to produce about 22 000 barrels of oil a day for 20 years.

Left with

New

Koeberg reactor may operate again soon

Cape Times 28/5/85 55

Science Reporter

KOEBERG nuclear power station's Unit One reactor may be back in operation "some time next month", according to an Escom spokesman.

The reactor was closed down by the Atomic Energy Corporation (AEC) in late January this year when iron "inclusions" were discovered in some of the plant's stainless steel pipes.

The Escom spokesman said yesterday that they would soon submit a report to the AEC detailing manufacturing techniques used by overseas stainless steel suppliers.

A decision "some time within the next month" was expected from the AEC on whether Unit One could go back into full operation. If the go-ahead was given, the count-down to the full operation of Unit Two would also be restarted.

'Safe'

However, as far as Escom was concerned, both units were safe and only AEC approval was awaited, said the spokesman.

● "Additional and unforeseen costs" associated with Koeberg, such as losses on the sale of nuclear fuel, delays following the sabotage attempt in 1982 and cost overruns, had amounted to R519 million, according to Mr Jan H Smith, Escom's chairman.

Giving details in the 1984 annual report, Mr Smith said the refusal of US authorities to released enriched uranium to Escom had cost R56,8 million.

The delayed commissioning of Koeberg as a result of the sabotage attempt had, including interest on loans, led to R68 million being written off the income statement for 1984 with further amounts to be written off "over the next few years".

Of the total cost overrun on the R3 000-million power station, which was built between 1975 and 1984, R463 million was attributable to "inflation and higher interest charges which were capitalized", said Mr Smith.

Petrol war could mean loss of 40 000 jobs

55

NM 29/5/85

PORT ELIZABETH— Petrol companies did not want a price war as it would ultimately lead to monopolies and the possible loss of 40 000 petrol attendants' jobs, the Director-General of Mineral and Energy Affairs, Dr Louw Alberts, said yesterday.

He was delivering the keynote address at the Sectoral Motor Congress and said oil companies had put it to him directly that they did not want market-related price competition in South Africa.

'Refineries are operating at approximately 60 percent of capacity and a price war can easily be triggered which will leave only one or two strong survivors,' he said.

'In addition, such competition will lead to cost-cutting efforts such as automatic self-service which, in turn, will threaten 40 000 petrol attendants with unemployment — something this country can least afford.'

A further development would be the elimination of small garagemen faced with the competition between filling stations coupled to other large undertakings such as chain stores. This would create further undesirable results.

Petrol would also become particularly expensive in remote areas.

The Motor Industries Federation's report on conditions in Europe also recommended that the status quo be maintained. 'The problems in certain European countries where petrol is sold without any controls, are legion,' he said.

The reasons he had given could be rejected but he hoped they were convincing enough to indicate that before one spoke too readily of State interference in the petrol industry, the well-meant reasons for such interference needed to be considered.

'The Department of Mineral and Energy Affairs derives no pleasure from unnecessary control and officialdom.

'Should certainty be achieved that the private sector's profit motive is coupled to a social conscience so as to serve the entire South African society — which after all, ranges from third to first world culture — fairly and efficiently, then control can be removed with pleasure, Dr Alberts said.

He believed this was the ideal to strive for. — (Sapa)

Ethanol

nol plants decision ~~es~~ faces sugar industry

55

~~3 Sugar~~

Jon Beverley
Finance Editor

NM 30/5/85

bstantial capital spending on setting up ethanol plants and additional refin-
industry Mr Frank Jones, chairman of the S A Sugar Millers' Association
annual meeting yesterday.

Sugar brokers have been indicating a shift in demand by world sugar users for refined rather than raw sugar and this has also been shown by the higher refined sugar premium.

If this continues, says Mr Jones, the industry would have to give serious consideration to substantial new capital investment in refineries.

With structural changes taking place in the local sugar industry the miller's are looking at ethanol production and whether it would attract 'the sizeable capital investment' needed.

Review

Presenting his annual review of the industry Mr Jones said that it did not appear that there would be a recovery in the world sugar price before the middle of 1986.

South Africa's export proceeds had been rescued by the slide in the rand against the dollar; but the industry was facing the lowest price in 15 years and the lowest in real terms ever of $83 a ton.

Prospects for the crop were that unless there were good soaking rains soon there would not be a large crop. Estimates were for about 2,1m tons of sugar.

Last season saw a record 2,3m tons.

Mr Jones said that rising costs indicated that South Africa has no prospect of making any return on capital and will 'indeed face a deficit on its cost recoveries.'

Cane quality could be improved, Mr Jones said, indicating that this would receive attention as there was room for improvement of up to 20 percent.

While it would be unrealistic to believe that the gap could be closed entirely there 'is room for meaningful improvement.'

Other points were:

- ● Mills had very good recovery figures — the highest since 1979 of 88 percent in the boiling house and 97 percent extraction;
- ● Domestic market sales rose 4,23 percent, but removing distortions the real growth was estimated at 'nearer two percent,' which was below the long-term average growth of 2,7 percent;
- ● Black consumers (they account for 72 percent of soft drinks) are resisting artificially-sweetened products;
- ● Confectioners' use grew by 5,3 percent and fruit and vegetable canners by 2,1 percent, reflecting better exports;
- ● SATS has built 53 special sugar trucks to take bulk sugar to the Transvaal and will build another 72 in the next three years;
- ● R8,4m has been spent on the bulk sugar project;
- ● The past season had a shortfall of R162m, which was absorbed by millers and growers but which led to a 'financial crisis of unprecedented severity and one in which many producers faced disaster.';
- ● Mills received R11,8m in compensation for the scrapping of tramlines and changes to other transport facilities, which will lead to annual savings of R4,1m — a three year recoupment period;
- ● Restructuring in the industry (transport and the creation of the pool system) has led to a fall in employment abd 'sizeable number of redundancies over and above natural wastage.';
- ● Pressure is mounting on sugar producers to cut input costs. This is already leading to lower fertiliser applications resulting in lower yields, which would create sugar shortages and thus better prices;
- ● Russian sugar imports are expected to decline and India and Brazil could switch emphasis towards massive exports while China, a potentially major buyer, will probably step up plantings at home.

'A new industry would create more jobs'

Jon Beverley
Finance Editor

ETHANOL production is firmly back on the sugar industry's agenda. It is now evaluating the prospects, according to spokesmen at yesterday's annual meeting of the S A Sugar Millers' Association (SASMA).

The chemical, distilled from sugar cane waste, can be used to extend or replace petrol while research is being done to see whether it can extend diesel fuel.

A proper study of the matter is now needed, with the sugar industry providing the impetus, which would deal with all the aspects and organisations concerned.

Faced with a probable decline (some estimates are up to 10 percent, or 200 000 tons of sugar) in sugar output as the industry reacts more closely to the world sugar price, the millers are searching for ways to maintain throughput.

Technically, says Mr Frank Jones, SASMA chairman, there are no insurmountable problems in making ethanol from sugar cane.

A positive factor is the ability of ethanol to replace highly toxic lead as an anti-knock additive, 'a concept that is attracting support from environmentalists the world over.'

An ethanol industry would create jobs, Mr J D Kritzinger, vice-chairman, pointed out, saying 'substantial benefits could flow from such a venture' for the industry as well as the general population and Government of the day.

It could create an economically more stable area along the border area and in KwaZulu and KaNgwane — 'which must also be of considerable importance to the Government.'

Negative factors, says Mr Jones, are the commitment to producing petrol from coal by Sasol; the need to talk to the oil companies on ethanol distribution; the difficulty of a guaranteed ethanol output as harvests vary; and the current surplus of petrol.

It would seem that its use as a diesel fuel extender would be more practical but the practical aspects have not been researched and 'we could not say with total certainty that it is a commercial proposition.'

Another practical aspect would be the price competitiveness of the raw material — sugar cane — measured against crude oil prices.

W/E ARGUS 1/6/85 (55)

SA leads the energy stakes

Cost of power West's lowest

JOHANNESBURG. — In spite of heavy increases, South Africa's average cost of electricity is the lowest of the 12 major Western countries that appear regularly in the yearly survey conducted by National Utility Services, an international energy consultant.

The survey for the year ending March 1985 shows the unweighted average rate charged by the four major towns, Cape Town, Durban, Johannesburg and Pretoria, as 4,74 cents per kilowatt hour. Second lowest, but with the highest percentage increase, was Sweden at 5,19 South African cents, an increase of 16 percent.

During the period, South Africa, at nine percent, had the second highest increase.

Increases

But with the increases still to come, this should rise to above 16 percent — slightly higher than the rate of inflation — and bring South Africa's cost to about the same as Sweden.

The survey, based on customer size of 45 0000 kw/h per month, shows Pretoria at 3,82c as the lowest of any town and on a par with Manitoba Hydro of Canada, which makes Pretoria the lowest non-hydro supplier in the world.

Second in South Africa is Johannesburg at 4,50c, which makes it third lowest in the survey. Durban costs are 5,27c and Cape Town 5,42c.

Highest unweighted average cost (24 major towns) in the survey was the United States at 12,26c, an increase of 3,9 percent — 0,2 per cent lower than the rate of inflation.

"Obviously, the greatest influence on the major South African centre rates quoted is the cost to them of the Escom supplies," said Mr G Rahr, managing director of National Utility Services.

"Can it be that Escom, realising that their rates are still among the lowest in the West, feel they have elbow room for further steep increases without due consideration to the state of the economy?," he asked.

"Whatever the case, Escom must look for increased revenue from tariff income which must be over and above the rate of inflation," he concluded. — Sapa.

SASOL

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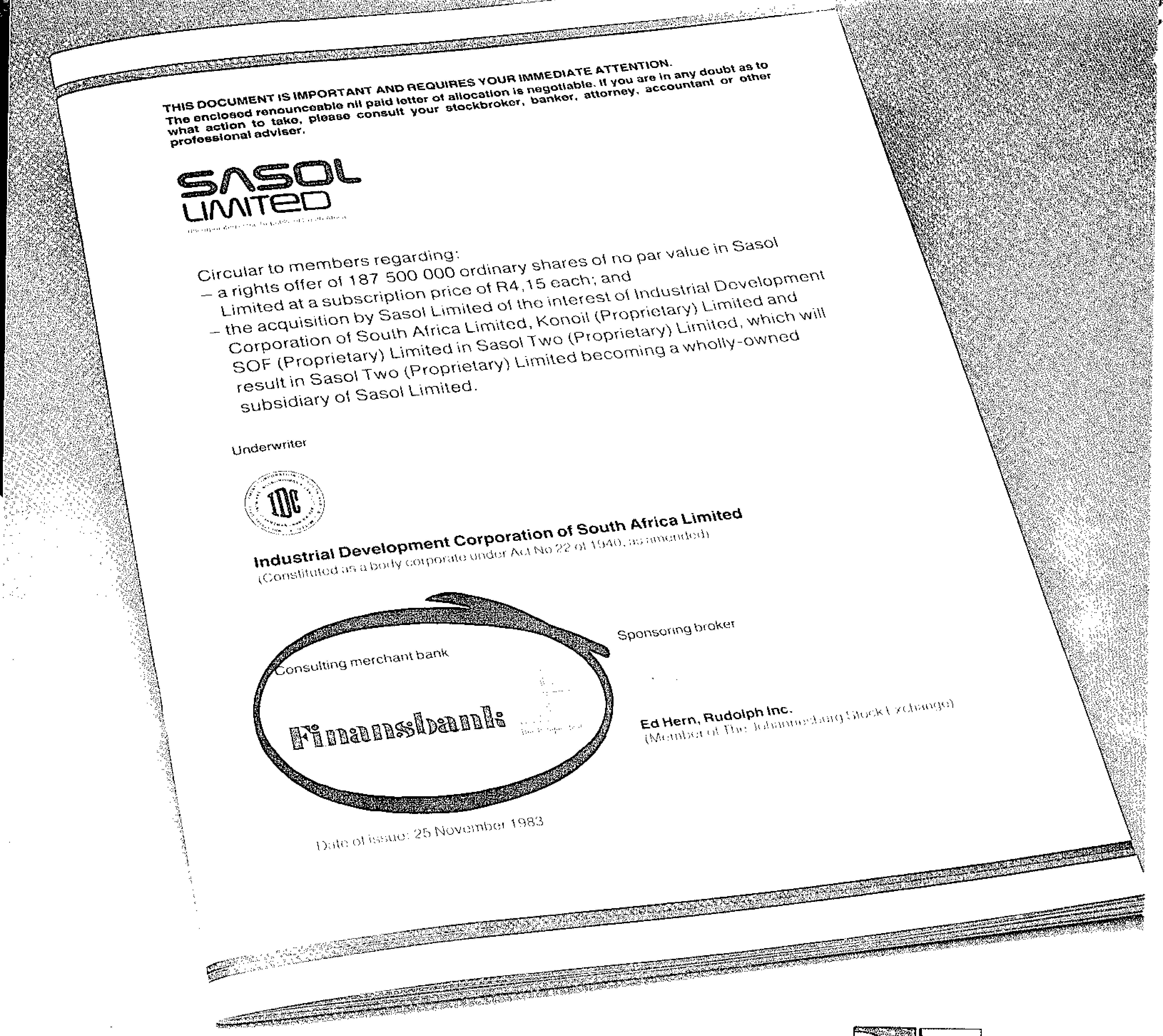
Pumping profits

A corporate report
Supplement to Financial Mail. June 14 1985



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The enclosed renounceable nil paid letter of allocation is negotiable. If you are in any doubt as to what action to take, please consult your stockbroker, banker, attorney, accountant or other professional adviser.

SASOL LIMITED

Circular to members regarding:
– a rights offer of 187 500 000 ordinary shares of no par value in Sasol Limited at a subscription price of R4,15 each; and
– the acquisition by Sasol Limited of the interest of Industrial Development Corporation of South Africa Limited, Konoil (Proprietary) Limited and SOF (Proprietary) Limited in Sasol Two (Proprietary) Limited, which will result in Sasol Two (Proprietary) Limited becoming a wholly-owned subsidiary of Sasol Limited.

Underwriter

Industrial Development Corporation of South Africa Limited
(Constituted as a body corporate under Act No 22 of 1940, as amended)

Consulting merchant bank

Finansbank

Sponsoring broker

Ed Hern, Rudolph Inc.
(Member of The Johannesburg Stock Exchange)

Date of issue: 25 November 1983

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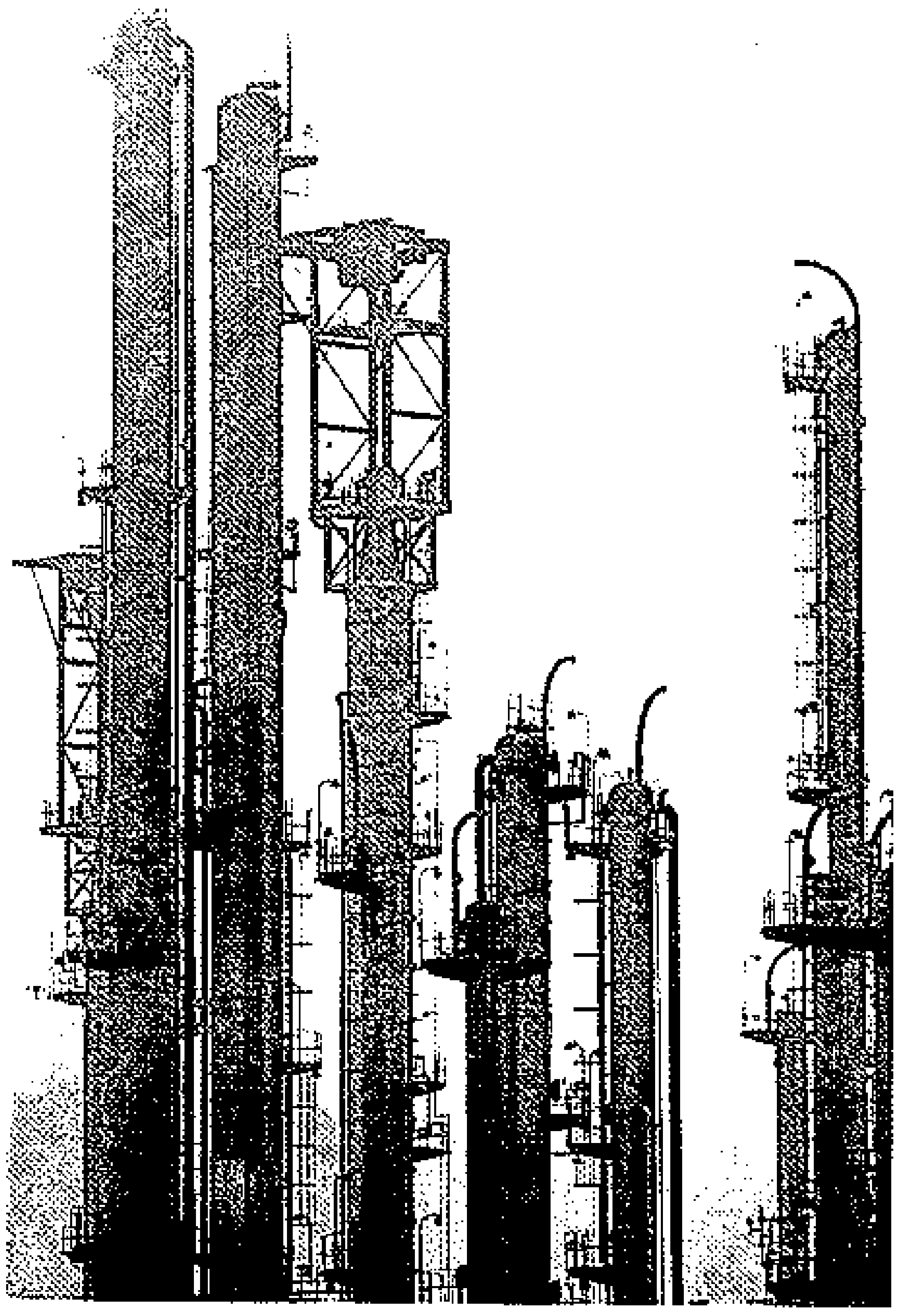
Inside . . .



And what if the fish don't bite?

An extremely wise and very old Chinese gentleman once said: "If you give a man a fish, you feed him for a day; teach him how to fish, and you feed him forever."

AECI has to do a lot more than just hand out the fish and pay for the fishing lessons. We have to tackle our social responsibilities square on, for the community and all our employees.

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We support primary, secondary and tertiary education and award scholarships and bursaries.

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In our sea, there are many schools of fish!

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UNLOCKING THE WEALTH OF SOUTH AFRICA

AECI LIMITED CARLTON CENTRE JOHANNESBURG

SASOL

A world first

What small industrial power has developed a unique and important high-tech industry, one which lacks a counterpart in the US, industrial Europe, Japan or the Soviet Union?

The answer, of course, is SA, and the industry is Sasol. The extent of the achievement that led to the establishment of the "Secunda Twins" — Sasol 2 and Sasol 3 — can hardly be overstated.

Taking the rudiments of synfuels technology from Germany and America, Sasol has turned them into a technically mature process capable of converting our plentiful supplies of low-quality coal into synthetic petrol and diesel and other liquid fuels. *And* on a profitable basis, in sufficient quantities to provide a significant slice of SA's requirements.

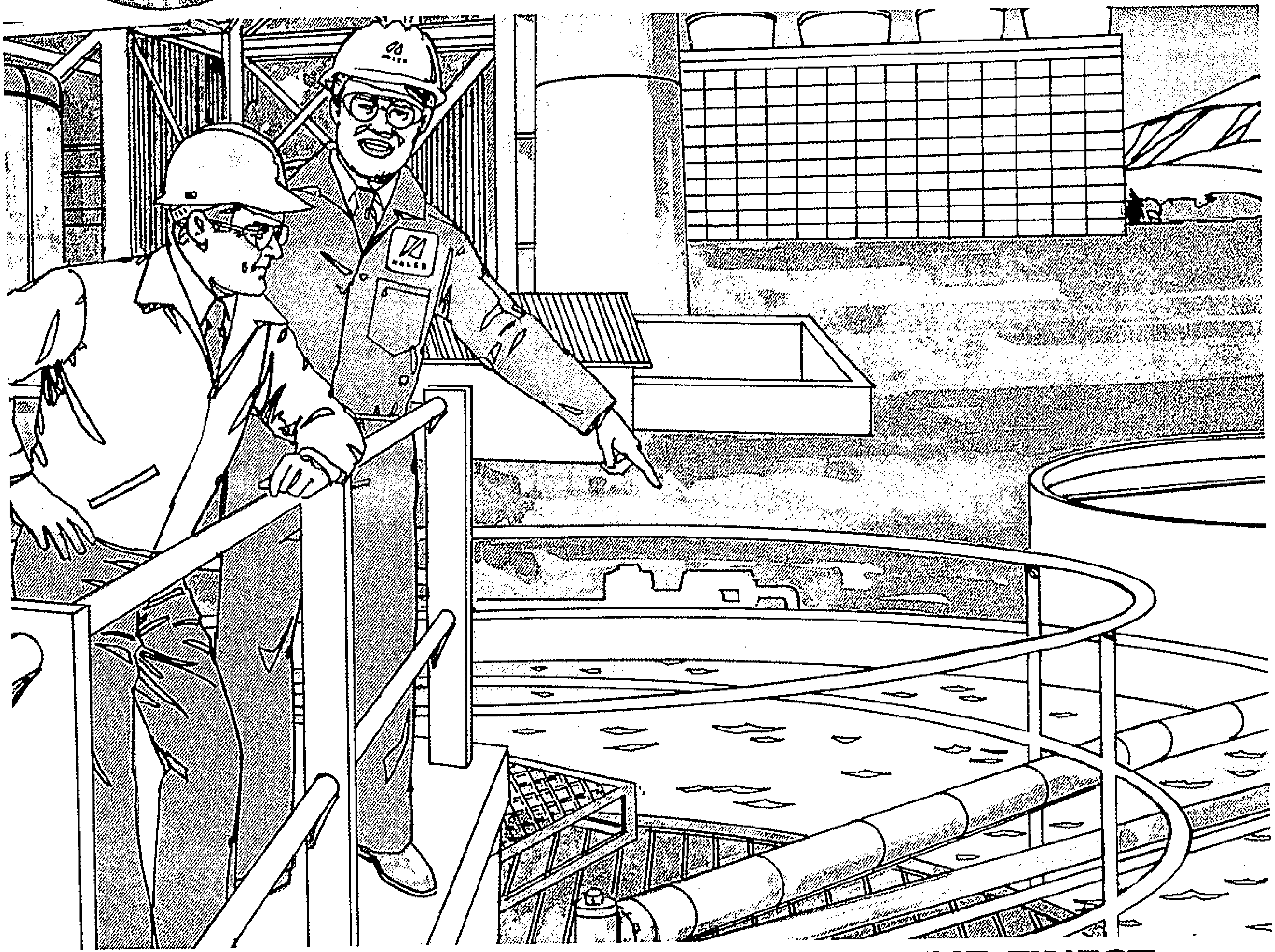
Unlike some import-replacement industries, which rely heavily on imported raw materials or intermediate components, Sasol uses local coal that would otherwise have remained in the ground.

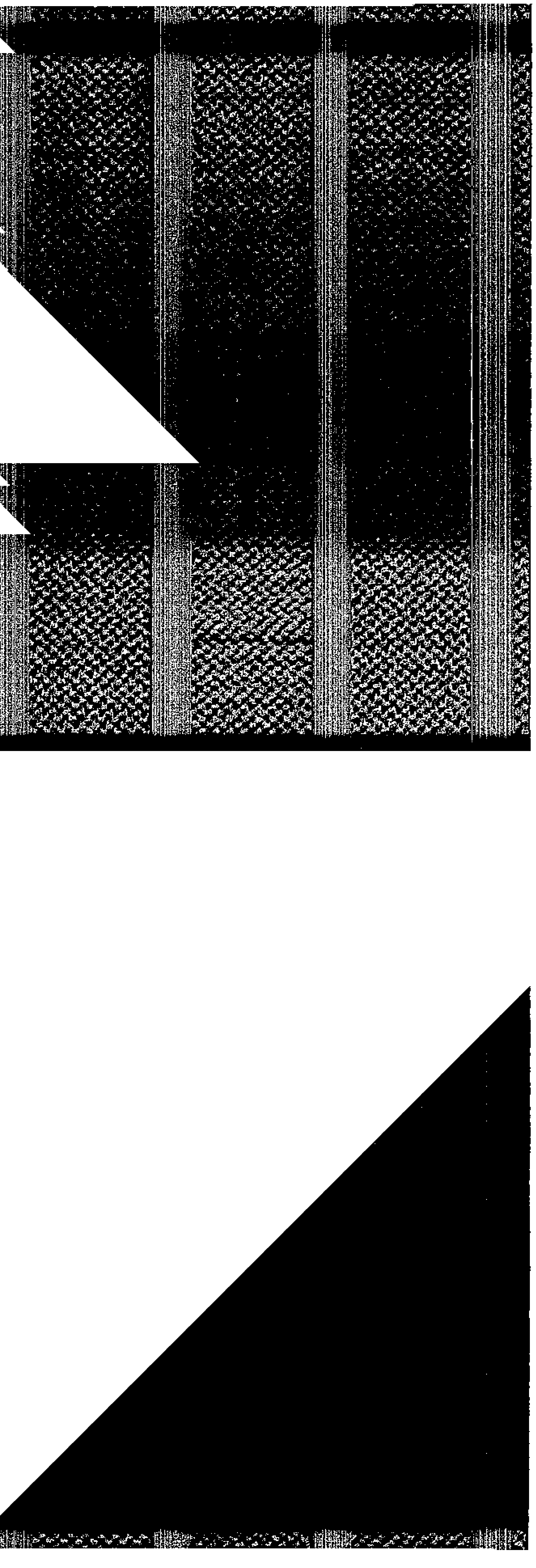
It provides valuable employment opportunities, both for skilled and unskilled people, and the chemical co-products it produces comprise a local source of inputs for the chemical industry. Sasol itself, it should be known, is a diversified chemical producer as well as a synfuels company.

Sure, Sasol has had its problems — and its critics. But Sasol also has a strong case, however one cares to view it: the threat of oil sanctions has been blunted, the balance of payments mightily assisted, and an additional investment medium provided for SA's locked-in private and industrial investors.

The group has given SA a margin of control over its own destiny in an area in which it might have been most vulnerable.

And, for this, SA can be proud of the only oil-from-coal company in the world.





Homegrown

Sasol — SA's very own oil-from-coal corporation — is simultaneously a technological triumph, a political fact of the highest importance and a major macroeconomic factor.

First and foremost, the output of synthetic petrol and diesel pouring out of Sasol's plants reflects a measure of self-reliance in liquid fuels that remains undisclosed, but is officially acknowledged to be a substantial proportion of current requirements.

Aside from Sasol's current capacity to produce synthetic liquid fuels, SA also has a vast underground stockpile of imported crude oil which is conceivably large enough on its own to satisfy several years' consumption at normal rates.

Sasol and the natural oil stockpile — as "forces in being" — provide immense discouragement to those aiming at SA's economic jugular in the name of enforced political change.

So, thanks largely to Sasol, SA still retains control of its political destiny, especially the vital elements of the pace and precise direction of reform, in a manner which might very well have been excluded if the imposition of oil sanctions had remained a mortal threat.

SA recognised, more than a generation ahead of other Western countries, the political dimension implicit in taking oil from the Middle East.

Thirty years ago, Sasol was formed by the State as a normal company (not as a State corporation) to develop and exploit coal liquefaction technology.

Over the course of a generation, at the Sasol 1 plant near Vereeniging, the technology was perfected to the point where a modest but neverthless reliable commercial-scale output of synthetic petrol and diesel flowed.

By 1974, when the first oil price shock reverberated round the world, Sasol was ready to launch a vastly expanded synthetic fuels plant at Secunda which was able to supply a useful proportion of SA's needs.

Some five years later, Sasol was able to duplicate Sasol 2 at the same site, so almost doubling the country's synthetic fuels capability. Meanwhile, Sasol had been floated on the JSE, with a concomitant strong infusion of capital from the private sector and the prospect of complete recoupment by the State of its immense financial commitment to Sasol 2 and 3.

To this day, neither the United States, the Soviet Union, Japan, Germany — nor anyone else for that matter — operates a commercial-scale coal liquefaction plant. Sasol remains the unique achievement of a small but sophisticated industrial economy located at the southern tip of Africa, and is likely to remain so for the foreseeable future.

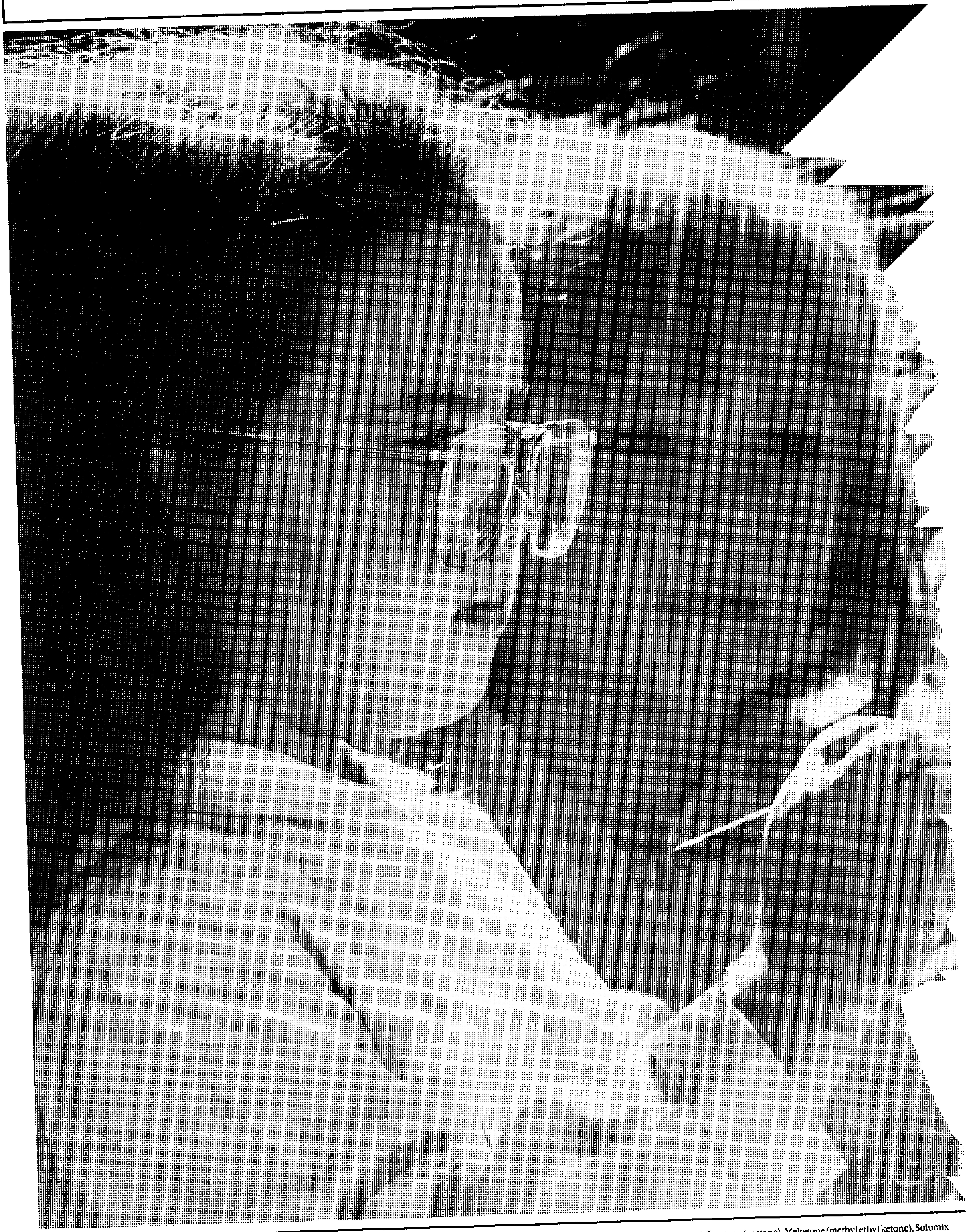
The ingenuity, courage and persistence so vindicated are perhaps the best sort of guarantee for the survival of that small country.

What of Sasol as an economic factor? Reading between the lines, a tutored guess of SA's current consumption of crude oil or its equivalent in synthetic products might be of the order of 120m barrels/year, of which Sasol might (on further, conservative guesswork) be capable of producing the equivalent of some 50m barrels.

At a price of perhaps R55 equivalent landed cost, the saving to SA in foreign currency could be more than R3 billion/year. This reflects import replacement with a vengeance, and currently is achieved protection-free!

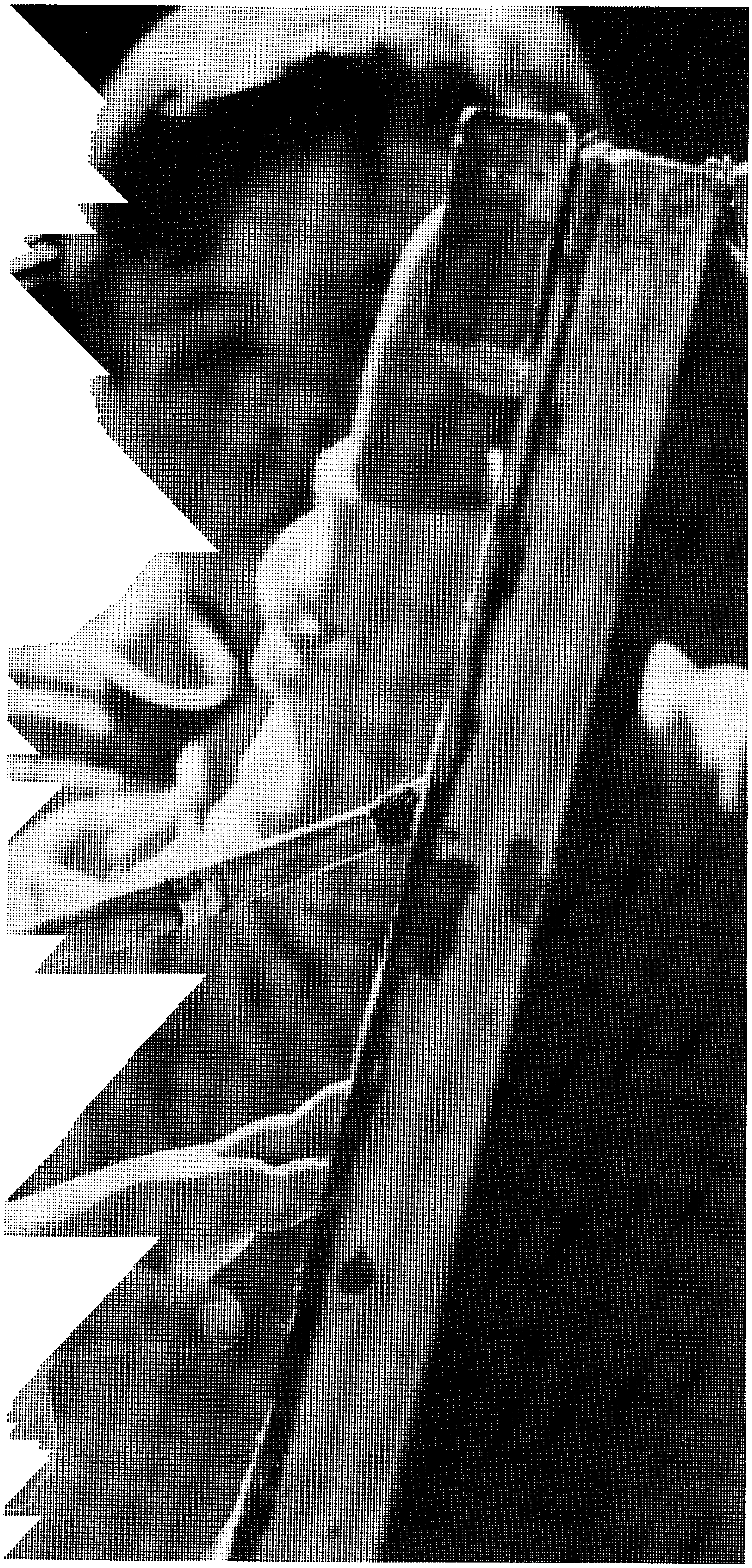
All this is to exclude mention of an asset base of some R5 000m, annual turnover of R2 200m, and group profit after tax of R412m. These parameters make this high-technology company, apart from national considerations, one of the largest and financially most remarkable South African ventures ever undertaken.

Our challenge began with coal.



*Sasolchem solvents: Ethylol (ethanol), Propylol (normal propyl alcohol), Sabutol (normal/isobutyl alcohol), Pentylol (mixture of amyl alcohol isomers), Sasetone (acetone), Meketone (methyl ethyl ketone), Solumix

Hers begins with a blank canvas.



Carol isn't just dabbling.

She's exploring a whole new world of expression. A world where creativity, innovation and achievement begin to mingle and become one.

In her own small way she is reflecting the challenge facing Sasolchem – the challenge of grasping the raw materials of the imagination and transforming them into an improved quality of life.

But Carol shares more with Sasolchem than a commitment to achieve.

Her paints were created using Sasolchem solvents*. A tiny fraction of a considerable range and volume, all created from a single source – coal.

The alcohols that are used in the printing inks on this page, the acetone that finds its way into varnishes and adhesives – even the nail-polish remover her mother used this morning. And a host of invisible applications that touch her life, and yours, in a thousand different ways.

The challenge to create new and better solvents never ends. Because the raw materials of innovation, expertise, dedication and imagination are here in unlimited quantities.

We employ them to help kids like Carol accept her challenge today.

So her kids can meet the challenge of tomorrow.

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Setting the scene

When Sasol made its appearance in the mid-fifties, only SA was seriously worried about future political threats to supplies. Elsewhere, oil remained plentiful and cheap for nearly a generation. So cheap in fact, that America had to erect quotas to keep out a flood of Middle East oil to protect its high-cost domestic producers. But concepts of price and cost have changed somewhat since those halcyon days when US oil sold for $3 a barrel and Middle East oil for $1,50 to $2,00.

Even more to the point, the Middle East was still under the strong political influence of Britain and America, so that the concept of political boycotts had hardly arisen.

This paradise for the industrial nations has long since faded into history. Opec has enjoyed its decade-long price binge and political threats to oil supplies range from revolution and near-chaos (Iran), protracted war between two members of Opec (Iraq and Iran), to an embargo on supplies to SA by many members.

The worst crisis for world oil came in 1979 after the fall of the Shah. Since then the situation has cooled noticeably. But many problems remain, including those relating to volatile currencies and the equally volatile Gulf region, which represents a vital proportion of free world supplies and reserves.

Sasol MD Joe Stegmann agrees that the world energy scene has changed almost beyond recognition since 1979, the high point of the second oil crisis, when the way out looked extremely difficult. "No one at that time contemplated the effect on demand, present or future, of the explosive rise in oil prices," he notes, "especially as the effect of price elasticity of demand was hardly noticeable in the period 1973-1979."

Over this period, the readjustment to the price shock of late 1973 brought demand patterns back to the pre-1973 levels from which exponential growth was again expected.

In fact, the effect on oil consumption of the second oil price shock of 1978-1979, within a few years caused energy economists, not to mention oil company managements, to change their tune completely.

"The marketplace itself forcibly imposed the realisation that there is a relatively high long price term elasticity of demand for oil. It is even conceivable that there are further long-term responses to high oil prices still working their way through the system — for example in automotive engineering. Automotive fuel consumption, after all, is still one of the big segments of the oil market."

It's important to see Sasol in relation to the world oil market. Because oil is an exciting, crisis-prone business

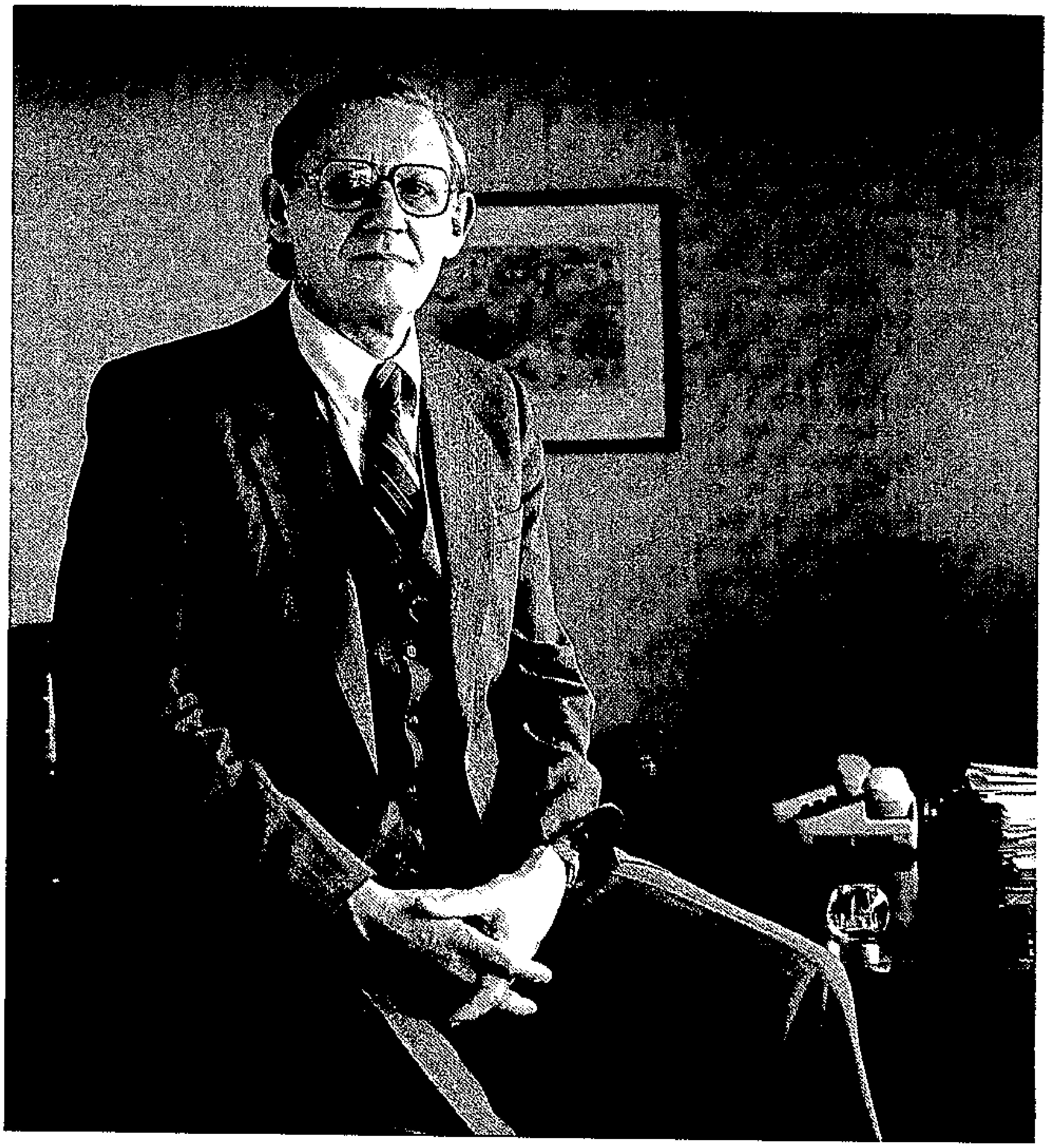
Today, says Stegmann, it is "common cause" that the world is over-supplied with oil. But people in the West, he argues, "remain extremely sensitive" to the geo-political factor in oil. Too much oil is on offer from countries which are "either unstable or actually or potentially hostile to the West.

"It is of no reassurance to the consuming countries that there are more than enough low-cost oil reserves in the Middle East to keep the world going for a long time."

If political factors had not "played a major role" — the cases of the Iranian revolution and the subsequent Iran-Iraq war — then there would in all likelihood have been no oil crisis in 1978-1979.

"The issue is political control over oil resources, especially over large, low-cost oil resources," says Stegmann.

An interesting aspect is whether rich Opec members like Saudi Arabia will be forced for financial reasons to produce at higher levels than they have been doing in recent times. Says Stegmann: "Until a few years ago they had large cash surpluses and therefore an incentive to keep oil in the ground. But they



Sasol MD Stegmann . . . monitoring world oil

UNDERSTANDING SASOL

The chemical challenges facing Sasol in the early Fifties were daunting. And perhaps readers who don't have a strong grip on chemistry may find its comprehension equally daunting.

This broad overview of what Sasol has to do to provide SA with a good proportion of its liquid fuel needs, might help.

Petrol or diesel fuel are effectively mixtures of hydrocarbons in closely limited boiling ranges, petrol being more volatile than diesel, and with kerosene as intermediate.

To describe a chemical compound as a hydrocarbon is to say that it is made up of a chain of carbon atoms to which hydrogen atoms are attached. The longer the carbon chain, the higher the boiling point of the substance. Very long chain hydrocarbons are solids at ordinary temperatures, and would be recognisable as soft jellies (vaseline) or with still longer chains, as waxes.

On the other hand, the simplest hydrocarbons, like methane, which has only one carbon atom, are gases at ordinary temperature and pressure.

If the carbon chain is a straight (unbranched) one, then we are talking about a "normal" hydrocarbon. If it is branched, then the prefix "iso" is attached. Straight chain hydrocarbons have a low octane number, whereas branched chain hydrocarbons have better octane numbers.

On the other hand, straight chain hydrocarbons have better diesel ignition properties (high "cetane rating").

Once this is understood, it can be appreciated that formulating petrol or diesel fuel of high quality from natural crude oil involves quite clever chemical juggling. It can also include the addition of lead anti-knock compounds to petrol.

What are olefins?

Olefins are a variety of hydrocarbon chains containing less than their maximum quota of hydrogen. The unsatisfied combining power ("valency") of the carbon atoms in the chain is satisfied by doubling up one or more of the bonds which the carbon atoms make with each other.

Examples of simple olefins are ethylene, styrene and butadiene (the last of which has two double bonds). The attraction of olefins lies in their ability to combine "with themselves" or polymerise, through opening up the carbon double bond under suitable chemical conditions.

This ability makes them valuable intermediates for synthesising plastics, which are long-carbon chain molecules.

Olefins are also useful to the oil refiner, as they can be used to build carbon chains in the diesel boiling range.

Oil from coal

Coal is an awkward starting material from which to make synthetic hydrocarbons. At the molecular level, coals are essentially complex nets of linked carbon atoms in an elaborate and variable interlocking structure. Coal does contain some hydrogen as well as small quantities of impurities like nitrogen and sulphur. And sulphur can go to several percent in many coal types around the world.

To convert coal into liquid hydrocarbons, the chemical engineer must first break the large coal molecule into small, manageable units, add enough hydrogen to counter the initial deficiency, and then build the small units into chains of petrol or diesel length.

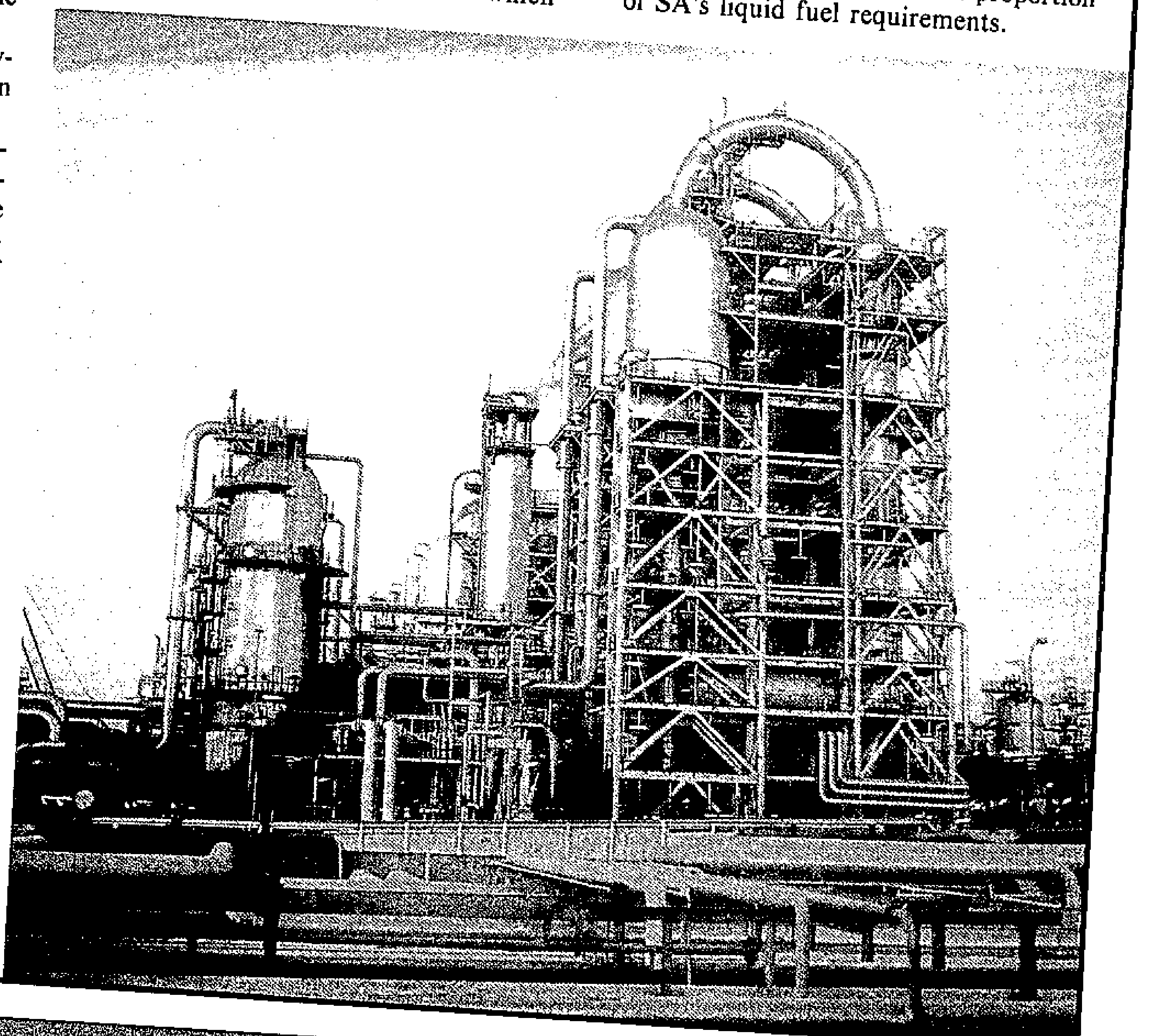
The "indirect" method that Sasol has perfected has these two stages. Coal is treated with steam and oxygen at high temperature and pressure. Under these conditions, a mixture of carbon monoxide and hydrogen is produced — the so-called "Synthesis Gas." This gas, when passed over certain catalysts, is converted to hydrocarbons. This is the "Fischer-Tropsch Reaction" for liquid fuel synthesis.

Sasol uses vast gasifiers designed by the German firm Lurgi, into which crushed coal, steam and oxygen are passed, and from which the ash content of the coal and raw synthesis gas are extracted.

The unwanted impurities — which would be either inert during the synthesis step, or would poison the catalyst, have to be removed as a preliminary. The major impurity is carbon dioxide along with smaller quantities of ammonia, hydrogen sulphide and many other substances, including surplus steam from the gasification step. All of these substances are first removed from the gas stream, which is then sent on to one of two types of reactor.

The Arge type of reactor uses a "fixed bed" in which the synthesis gas is passed over a catalyst lying static in a reactor vessel. This reactor produces long-chain hydrocarbons for the most part; it also cannot be easily scaled up. So the Arge is in use only at Sasol 1, and primarily as a source of chemicals like the famous Sasol waxes.

On the other hand, a reactor in which the catalyst circulates with the synthesis gas — the Synthol Reactor — produces a good yield of liquid hydrocarbons and has proved capable of scaling up to a colossal size. The two Sasol giants at Secunda — Sasol 2 and 3, use just the Synthol route to produce a significant proportion of SA's liquid fuel requirements.



QUALITY — A FINAL POLISH

The search for perfection continues unabated at Sasol. To this end, early in 1985, MD Joe Stegmann, launched a "Sasol Quality Improvement Process" (SQIP) at Sasolburg, Secunda and Johannesburg.

SQIP is a programme of "quality management education and implementation." In inaugurating the programme, Stegmann cautioned: "There is nothing more dangerous than for us to rest on our laurels and decide that the future will look after itself. Sasol has had remarkable success in almost every venture it has undertaken over the last fifteen years.

New challenges

"Unlike other industries, Sasol is fortunate that its existence does not seem to be threatened by the present economic recession." But this fortunate situation has its dangers — "only the strong and disciplined with financial foresight can improve efficiency during a period of relative prosperity."

Two external factors beyond Sasol's control have a decisive effect on the group's prosperity — the international oil price and the international value of the rand. Present indications for international oil prices "do not give Sasol reason for optimism in the next few years." But these circumstances "should not be seen as a threat but as a challenge."

Japanese quality control . . . emulating the East

The hostile environment for industry so caused "will place every demand on Sasol's ability to survive and to excel."

The crucial role for quality in management has been proven world-wide, "especially in Japan, where quality is a lifestyle." But "SA, with its mixture of First and Third World economies" does not compare favourably. There are "two opposing forces in the economy. First the gravitating force of the Third World, wanting to take things easy and setting watered-down standards. On the other hand, we have the upward attracting force — a very small but very successful First World economy. The only way to ensure our future is to out-balance the gravitating force."

Asset management

To achieve this goal within Sasol itself, he reckons, it is essential that a period of explosive growth be followed by a period of consolidation. During this period there must be corporate "cultural change towards improved quality and improved management of assets." In pursuit of this goal, he says: "Sasol is fortunate in having the calibre of people with the propensity to excel."

In implementing the SQIP programme, the group's branches will direct the programme according to local needs, utilising existing reporting and consultative structures as far as possible. Concludes Stegmann: "Each operating unit will function as an autonomous quality branch with the emphasis on participative management."

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have so over-committed themselves with big capital projects, including infrastructural projects, that even Saudi Arabia is now looking for additional oil revenue."

"Until now, the Saudis, as the major 'swing' (that is, discretionary) producer in Opec, have exercised a great deal of production discipline, knowing that they can draw on external cash reserves if necessary."

But as much of their foreign investments comprises long-term and relatively illiquid holdings, "they too are beginning to look hard at the marginal barrel of output," says Stegmann.

This could aggravate the current weakness in Opec, which is producing in the region of only 16m barrels a day against almost twice that rate before 1973.

However, Stegmann refuses to believe that oil is less of a strategic commodity than it was three to four years ago. "Oil is the most crisis-prone business that I know." Look how unpredictable was the Shah's downfall.

Stegmann also qualifies the present weakness of the oil price by pointing out that it is partly a reflection of the strength of the dollar. Oil prices in Deutschemarks, French francs and sterling have risen since 1982.

"But we cannot argue away the basic market weakness simply by referring to the dollar," says Stegmann. "Opec has lost much of its power to make oil prices, and much of the explanation lies in the production levels achieved outside Opec, especially in 'producer-consumer' countries like Britain, Norway, Mexico, Canada and the US.

"The four non-Opec countries which can exercise considerable influence on the oil price today are the US, Canada, Britain and Norway."

There is a viewpoint in America that $28 or $29 a barrel is excessive from the standpoint of their economy, but there are also definite views on floor prices. "We cannot forget that many US banks are over-exposed to Latin American oil-producing countries, including Mexico."

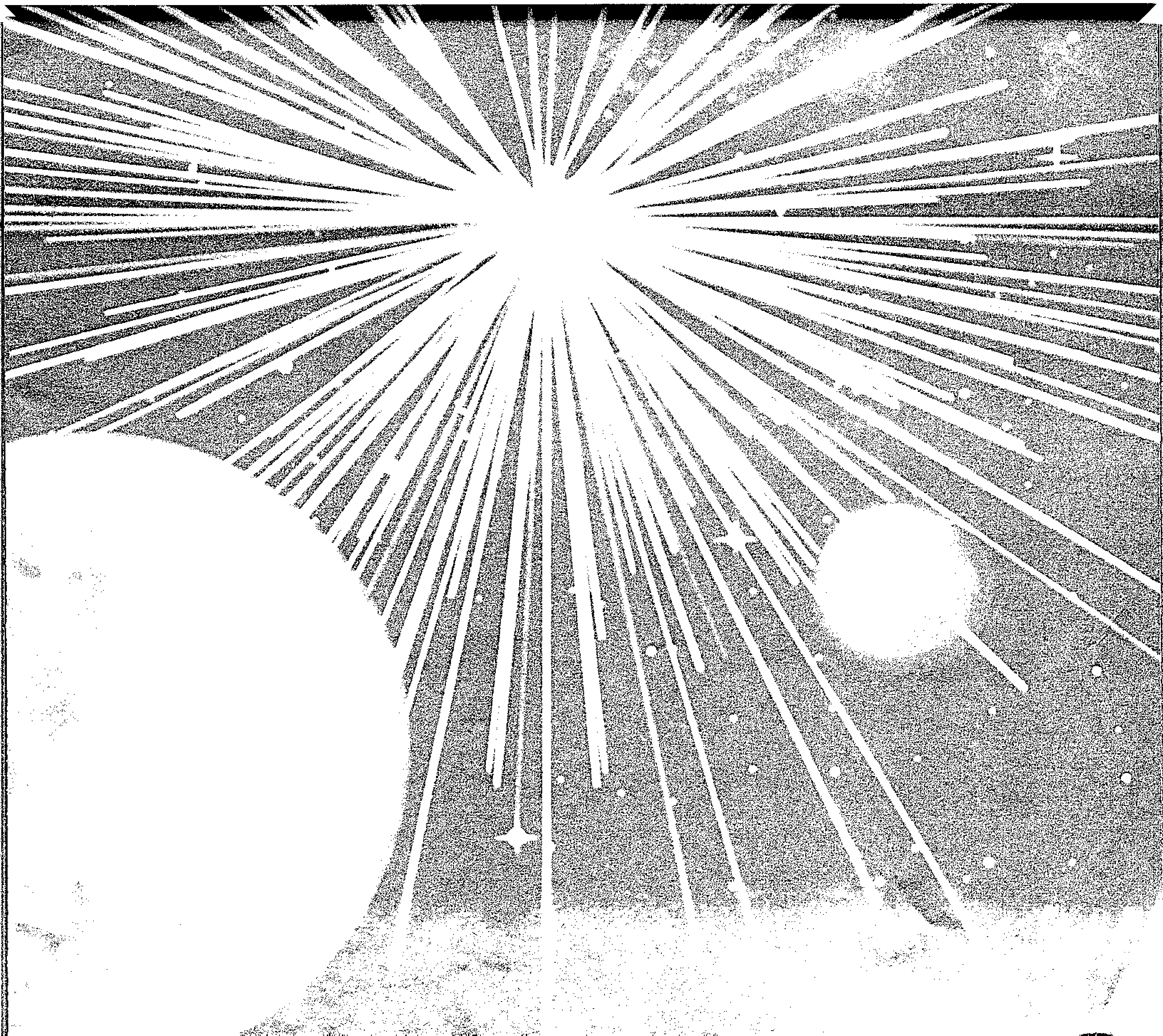
In the *FM*'s opinion, this sensitivity to the banks' exposure connects with the recent high values of the dollar and US monetary policy. If monetary policy becomes more expansionary to counteract the now-apparent deflationary effects of the high dollar on the US economy, the dollar could fall. If so, the downward pressure on dollar-denominated prices of all kinds would be relieved, and so at once remove, the pressure on US banks.

Stegmann notes that the weakness in the oil market is having "its most highly leveraged effect on high-cost oil projects in politically safe but geographically harsh areas, notably the newer development areas in the North Sea where costs can exceed $25 a barrel.

"The same goes for Alaska and the Beaufort Sea in the Canadian Arctic. In these areas, the difference between a possible $20 and a possible $30 is crucial, and — at current oil prices — the oil majors have already been closing the book on many of these projects for the time being."

Another factor, of current significance outside SA, is substitutes for oil, whether they be nuclear power or other energy forms. "Synfuels are not visualised as important overseas at present for a number of good reasons," says Stegmann. "These include the US belief — in the light of earlier over-optimistic projections of crude oil demand — that they would, by the end of the Eighties, need around 2m barrels a day of synthetic oil production to keep a reasonable balance between domestic and imported oil."

Those projections "are not very credible today" because of the high long-term price elasticity of demand already noted.



"Exxon shelved its shale oil project when the oil price started to drop in 1982-1983. The Federally-owned Synthetic Fuels Corporation (SFC) found its position reversed. From having too many potential projects on its hands, it suddenly had too few. And of course there was a new administration with a free market approach, preferring to leave the initiative to private enterprise."

"Curiously enough, the Reagan administration did not take all the money away from the SFC, leaving it with $8 billion of the $16 billion originally voted. Even now there are a few billion dollars unappropiated to synfuels projects. So even the present administation is taking a relatively long-term view."

Internationally, synfuels "rank a long way behind high cost but politically safe new oilfields" as an incremental source in the eyes of the majors at present.

"But when the US turns to synfuels, shale is likely to be first, before coal liquefaction." Stegmann considers intermediate sources like Venezuela's heavy oil "either as a high cost natural oil or as a kind of synthetic. You need to go half-way into synfuels technology because it is rather difficult to extract."

Then there are the tar sands, already being exploited on a limited scale in Canada. Although the Canadian resource is quite large, Stegmann believes its use will not expand greatly until it becomes economically sound to do so, or unless a pressing strategic need arises.

Allowing for the difficulty in making short-term oil price forecasts, there is a consensus in the market place "that supplies will remain adequate for the foreseeable future, taking geopolitical risks into account." And Stegmann points out however that "when there is an industry consensus, experience has shown that it can often be wrong."

So one cannot be sure about more than the short-term position, "which is one of oil price weakness and more than adequate supplies." Internationally, synfuels, in this situation, "stand a long way down the list of priorities." Yet some research and development is still being done by the private sector in Europe and by the SFC in America, and it is gratifying that a longer-term view is also taken. The SFC has "switched its thinking away from immediate synfuel production towards research and commercial development of new technologies."

In the long term, there is a big future for synfuels in America "because of the inevitable depletion of domestic oil reserves." Strategically speaking, if America is to remain a major power, "it cannot allow itself to drift into a situation where it imports most of its oil.

"The first step will probably be into shale oil and later into coal-based synthetics, whether through direct or indirect coal liquefaction or employing methanol as an intermediate," says Stegmann.

SA, he notes, has remedied its great weakness in its energy mix — total dependence on imported crude oil — both through Sasol and through stockpiling.

France remedied a deficiency "which is rather more typical of many of the major industrial economies" — undue dependence on oil for generating electric power — through an "energetic and highly successful" nuclear power programme.

As for oil embargos and sanctions against SA: there is no UN Security Council embargo, but measures have been imposed by individual Opec members. The fact that SA now has a substantial synfuels capacity (and one capable of expansion) as well as a large oil stockpile, "helps to prevent hostile groups of nations from going to the extreme."

"It is precisely SA's capability to withstand the effects of oil sanctions that operates as a powerful disincentive against going to the extreme," says Stegmann.

He believes, therefore, that it is important for SA's present degree of self-sufficiency not to be eroded unduly by market growth, although "there is room for argument about what a reasonable level of self-sufficiency might be."

So Stegmann sees a place for one or more of the synfuels projects now under consideration, subject to their "economic viability." It is "the task of government to ensure — albeit indirectly by creating a suitable framework for private sector investment in synfuels — that an adequate level of local liquid fuel output is maintained."

Ideally, any further expansion of synfuels capacity, whether through Sasol or through other forms like natural gas processing, should hold the promise of economic viability. But, as Stegmann observes: "Strategic factors may well be the determining factor." ■

A matter of policy

Sasol remains a diversified chemicals company, although its major source of revenue will derive from synfuels for the foreseeable future

Like the proverbial meat processor in Chicago, who managed to use everything in the pig "except the squeal," a chemical company must sell or convert every co-product synthesised incidentally to its main stream of operations. That is, it must optimise the use of co-products if it wishes to optimise profits too. And Sasol is no exception. Its chemicals, other than fuels, are of importance too.

Since the construction of the giant synfuels plants at Secunda, the balance between chemicals and synfuels has tilted sharply in favour of the latter. But in the immediate future, and while Sasol is "digesting" the vast synfuels expansion at Secunda, ancillary expansion, especially in fertilisers and explosives, will tilt the balance modestly back towards chemicals.

Yet for all that, synfuels will remain the major source of turnover and profits and their prices are tied to the landed cost (in rand terms) of imported crude. So Sasol must continue to keep careful watch on oil prices and currencies.

Sasol MD Joe Stegmann says there is general consensus in the international oil industry that oil prices will stay soft for the foreseeable future. One scenario which is generally held is that the dollar price of oil will continue to erode in the next few years.

Another is one of a rapid and substantial reduction or so-called "free fall" in oil prices. In any one of these scenarios, there are many factors, says Stegmann, which will tend to act as a barrier to arrest the price movement and which may even cause a recovery.

"The international industry itself has strong reasons for wanting to maintain prices at levels sufficient to justify long-term development of high cost oil. There are many other parties in whose interest it is to main-

Sasol . . . more than a Synfuel producer

tain the *status quo*.

"So even if the dollar oil price were to go down for a short while to the lower twenties or below, it should recover in the medium term to somewhere around present levels."

In this framework, Stegmann is not too concerned with the longer-term effect on Sasol of transiently lower oil prices in dollar terms.

As for exchange rates, although Sasol and SA must be prepared for the contingency that the dollar has peaked and "plan accordingly," experience in recent years has shown that fluctuations in dollar oil prices and in the rand-dollar exchange rate compensate each other to some extent.

The *FM* notes that general economic reasoning leads to the conclusion that, to the extent that the dollar does fall, the deflationary pressure on dollar oil prices will be relieved.

In any event, Stegmann argues: "Sasol is more than a synfuels producer." Apart from its other activities, it has the major share of its own natural crude oil refinery — Natref at Sasolburg.

In the Sixties, chemicals were far more important to Sasol than synfuels. Today synfuels are admittedly the mainstream of the company's business and will remain so as "far ahead as we can see." But one must still avoid the trap of perceiving Sasol as a "one division company," says Stegmann.

In the period ahead, the fact that Sasol is not contemplating any major expansion on the synfuels side will mean a modest shift in favour of chemicals.

But because of the sheer scale of Sasol's current Secunda synfuels output, a return to the ratios of the Sixties appears very unlikely in the foreseeable future.

Concerning those parameters over which Sasol has no control, fluctuations in the international dollar price of oil in dollars and the rand-dollar exchange rate are the most important ones affecting the financial results of the group.

This effect is most direct and severe in the case of synfuels, although not confined to these products, because Sasol is producing commodities in direct replacement of imported oil.

Stegmann argues: "Investors in synfuels accept those risks, however, just like investors in gold mines.

"But there are strong precedents for arguing that these factors are likely to neutralise each other significantly. A strong oil price tended in the past to bring in its train a stronger gold price — and therefore a stronger rand. So the rand oil price remains relatively stable.

Furthermore, Sasol's present position is strengthened under all market conditions by what are clearly favourable internal developments.

Sasol is still marginally increasing its output at Secunda through "debottlenecking." The marginal cost of the increments to production is low, so the gearing to profits is high.

There is also the benefit of the reduction in the interest burden through repayment of loans.

When the long-term loans incurred have been repaid, Sasol will be in a position to take over the remaining 50% of Sasol 3 and so consolidate its profits as well as the profits of Sasol 2.

At the moment, the synfuels industry operates without any protection. (The temporary levy imposed on Sasol output in the last Budget has now been removed by government.) The last remaining tariff protection was the old "Satmar incentive" which was about 0,9c/*l*. In fact it could be argued that Sasol's indigenous production is subject to "negative protection."

SA, even today, pays small premiums on imported oil, so there is a slight bias in favour of oil importers, as the premium is not reflected in the indigenous producer's prices.

As for soft money, when Sasol took over Sasol 2 it repaid to government every cent it had put in, including full back interest. Interest on the long-term loans raised for the take-over of Sasol 2 is paid at a rate of 1,5% over the five-year "Escom rate." This is, long-term, a normal commercial market rate. Since the benefit of interest-free loans was calculated and compensated for and included a price for Sasol 2, "there is not a cent of soft money in Sasol Ltd at the moment." And Stegmann is confident this state of affairs will be maintained when Sasol 3 is taken over.

According to Stegmann, the "miracle of an economically competitive synfuels industry in SA" was achieved because of favourable timing, excellent project management, the use of proven Sasol technology and the successful commissioning of the main plants at Secunda in quick time by a dedicated operational team.

It is not generally realised that the Sasol 2 project was decided on in 1974 because of the sharp increase in oil prices, not out of a political or strategic stimulus. Of course, the potential strategic value of such a project was fully understood.

Before 1974, government had several times planned a synfuels expansion. Sasol had advised then, time and time again, against expansion because the economics were so unfavourable in those days.

What Sasol did was to advise government to stockpile oil, a process started as far back as 1966-1967.

The decision to launch Sasol 3 in 1979 was quite different, as it was a response to the cut-off of oil supplies from Iran, which was SA's main supplier at the time. But the potential economics of the Sasol 2 and Sasol 3 projects were nevertheless so attractive that the Sasol group could be privatised at the same time.

Stegmann does admit that Sasol 3 would not have been tackled until well into the Eighties if it not been for the embargo factor.

Economically, the decision to go for Sasol 3 did turn out "to be very well timed," remembering that the oil price increased substantially after the launch decision was taken.

Sasol at that time recommended to government that there should be tariff protection — of the order of 4c/*l*. The protection has since been removed because the fall in the rand made this possible.

But Sasol does have an agreement with government that protection "can be reintroduced if there are adverse changes in the international oil price or in the rand-dollar rate."

Stegmann is reluctant to disclose details. In any event, "temporary setbacks caused by market fluctuations are part of the implicit risks of any investment."

For the long term, Stegmann is extremely bullish on synfuels because he does not think that oil prices will remain weak indefinitely.

The fundamental factors which put an ultimate floor under the price — like the production costs of marginal US producers — "will all tend to rise with the passage of time."

Regarding chemicals generally, including fertilisers and explosives, Stegmann says Sasol does not agree with any contention that it is an interloper. Sasol has been in petrochemicals and fertilisers for more than 20 years — "two areas where we have seen a lot of dust being kicked up."

He points out: "When you build a synfuels plant you do your best to use all the products." The major stream will go into liquid fuels, but to operate with maximum profitability you have to process such co-products as nitrogen, first into intermediates like ammonia, and finally into products like fertilisers or explosives.

As for the technological future of Sasol, Stegmann says that until now "we have had few options." But consideration is being given to alternatives to the Lurgi gasification process followed by Fischer-Tropsch synthesis. No particular route to liquid hydrocarbons "is sacred to us," says Stegmann.

Sasol is proud of being "a private sector company operating in developed markets in competition with other groups." This "competitive thrust" has been its character from its inception. Sasol's board members have always been drawn from the SA business community.

As for the long term, Stegmann believes the SA synfuels industry has advanced to the extent that the State will never have to take on itself the full burden, as it did in 1950 when Sasol 1 was started.

Sasol itself is in synfuels to stay. Although there are no plans for any further major

A BALANCING ACT

A group currently contributing to the current account of SA's bop to the tune of perhaps R3 billion per year, is entitled to be regarded as a major macro-economic factor for that reason alone.

When you consider that Sasol is concurrently a quoted company with a JSE market capitalisation in excess of R3 500m, its weighting in the SA economy becomes even more evident.

From the viewpoint of group management (thinking now, as it must, in terms of production and profit optimisation) or, for that matter, of shareholders, the question of further expansion will not be determined simply by the needs of the SA economy as a whole.

From the viewpoint of government, however, Sasol is large enough for the group's future decisions — or for government's own decisions on synfuels policy — to have important macro-economic implications. And government remains the most powerful influence by far on major investment decisions in large synfuel projects by members of this industry.

SA's current account has become an unruly beast for any government to mount. The most important reason is the volatility of the gold price, notably in dollar terms, but also in terms of a basket of currencies. Then there is the associated problem of volatile capital flows.

At the moment, official thinking is in the process of evolving towards a free market approach. Yet even moderate free market thinkers might be able to contemplate situations where a powerful boost to the economy might be injected by government investment, provided always that the money spent is spent rationally, so as to obtain a return.

When government is next in need of capital-intensive projects to stimulate a lagging economy, what could be better than to invest in another synfuels project or projects? Consider the following advantages:

☐ The resource base — whether of low grade coal or possibly natural gas — will be local;

☐ The market seems assured, as imported oil would presumably be backed out of SA whenever synfuels output is increased;

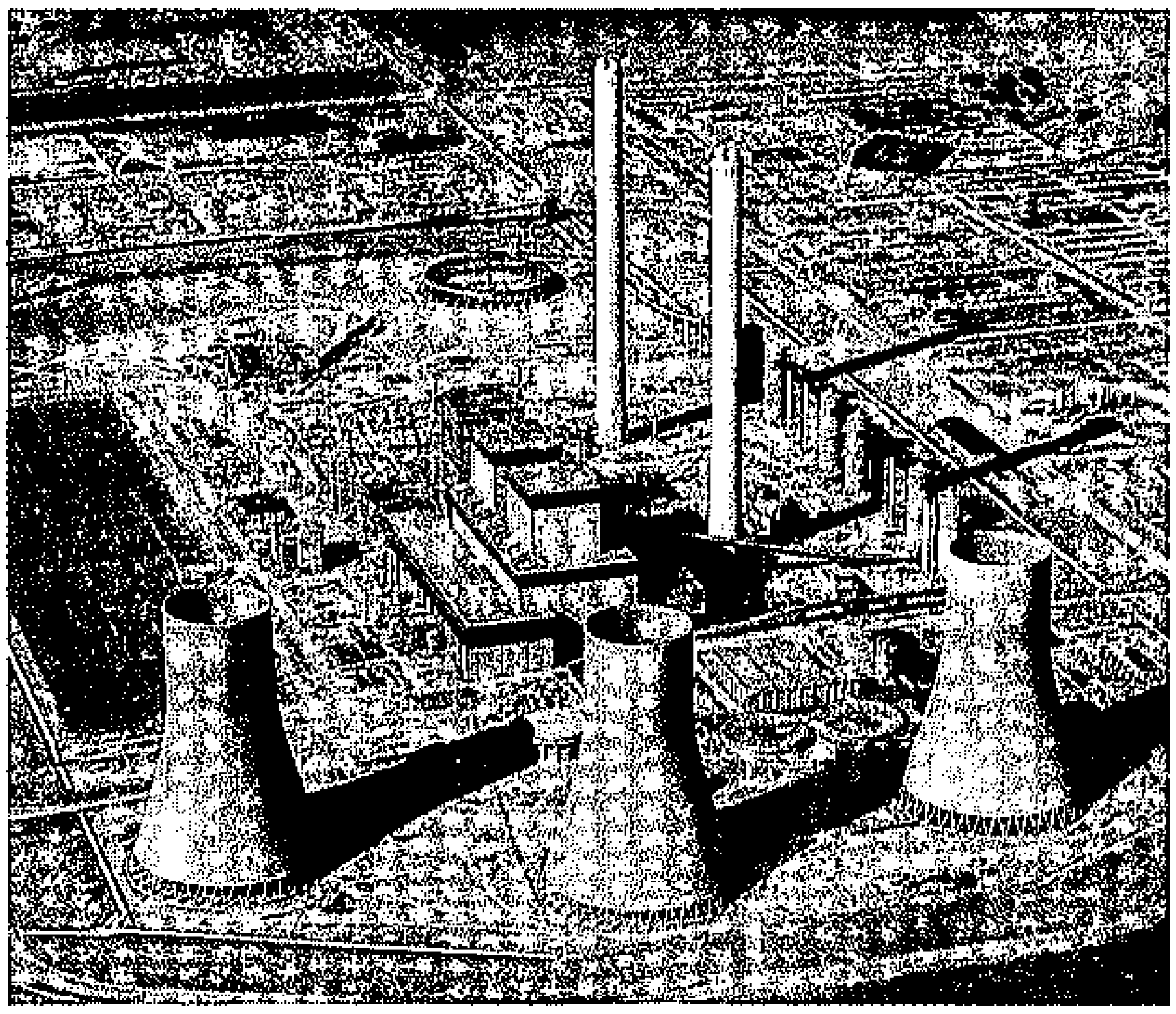
☐ The saving of foreign currency is assured. Depending on the size of the project this saving could be on a massive scale, being a function of the international oil price.

The simplicity of the product line assures a capital-output ratio calculable from the rand/dollar exchange rate and the international price of crude;

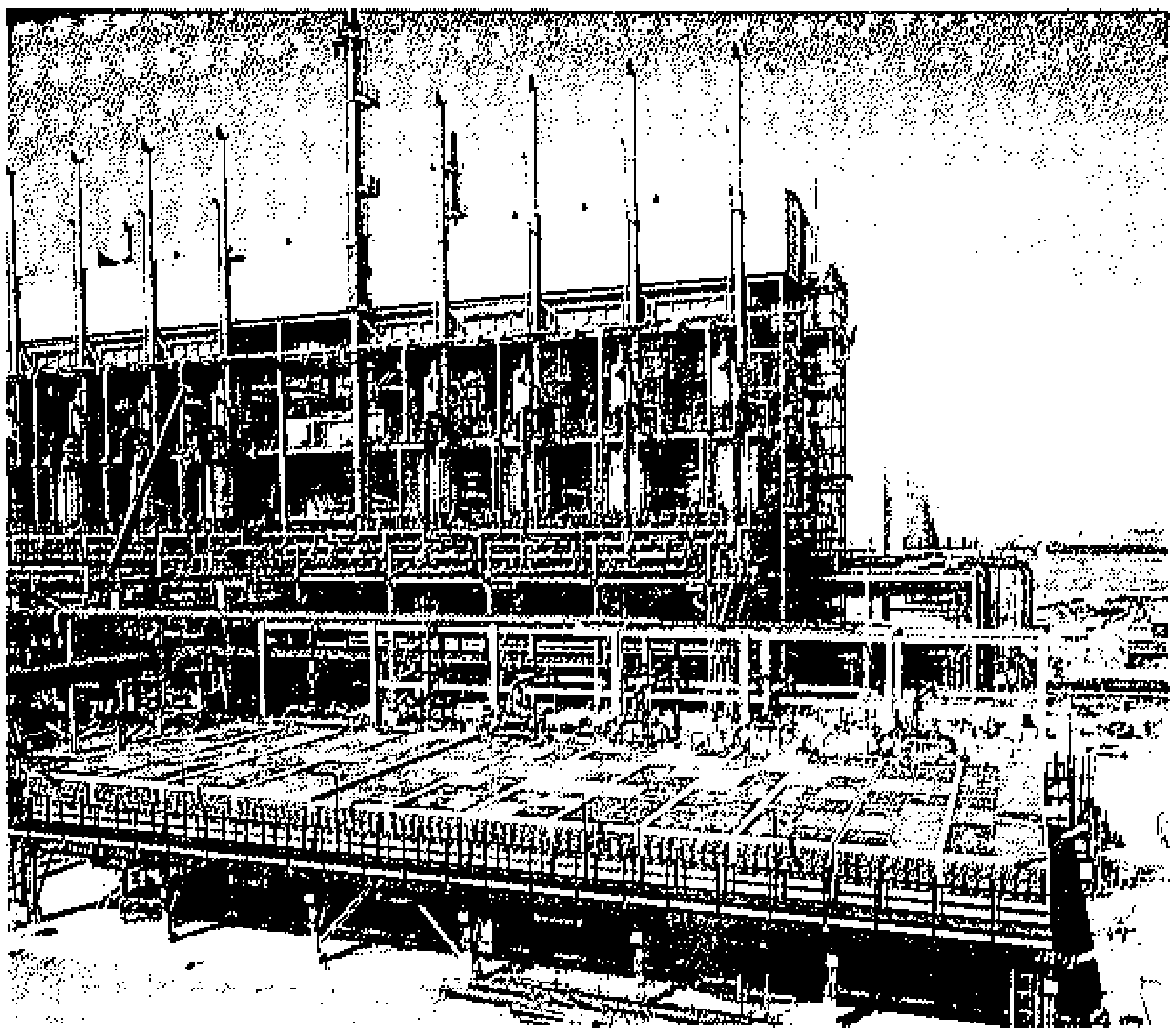
☐ In synfuels the value added to the resource is very large and therefore makes a substantial contribution to gdp; and

☐ If, in new projects, Sasol's achievements can be repeated, there will be no cost to the economy in the form of high protective barriers.

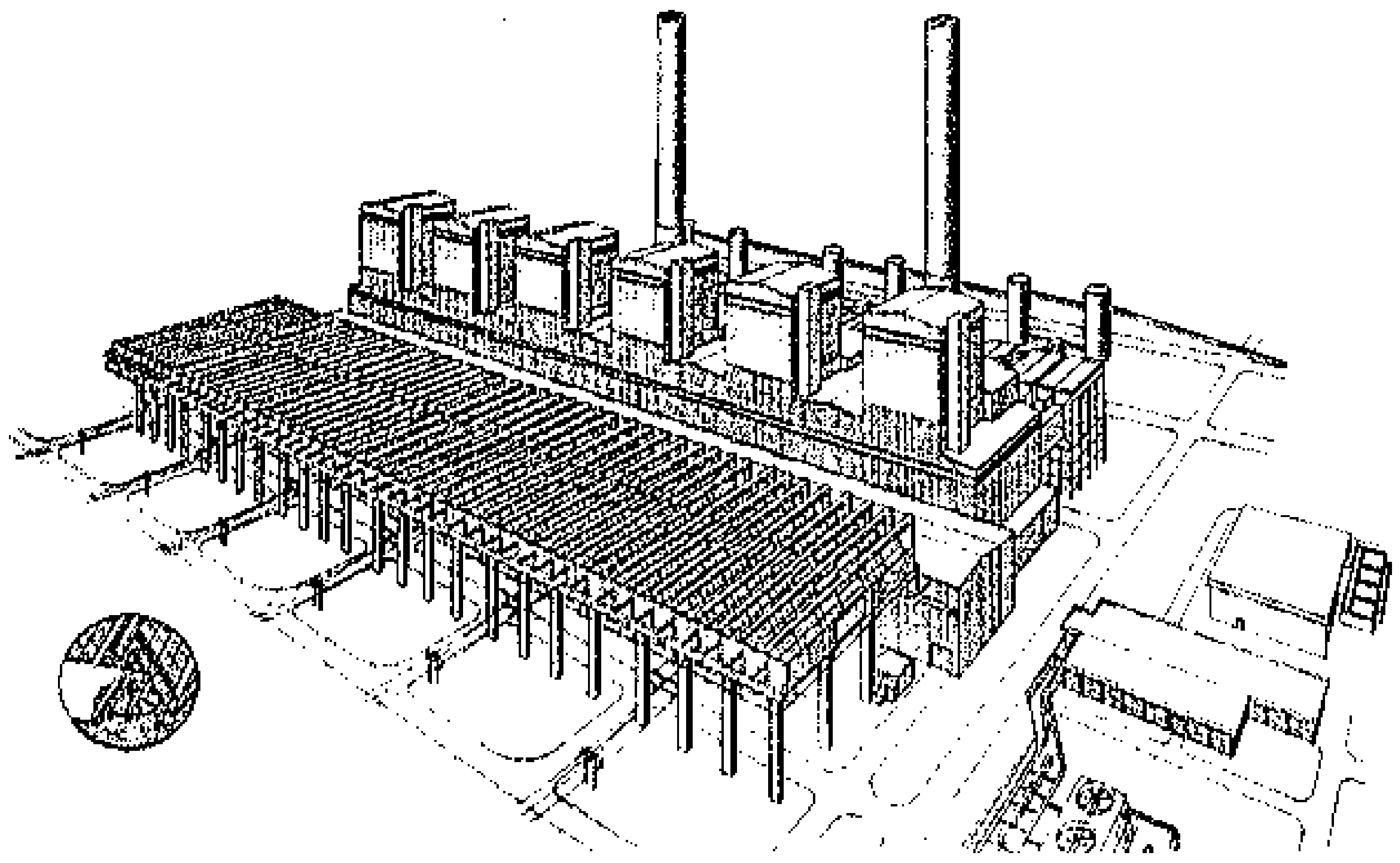
Government should ask itself what other form of local manufacturing could conceivably match even one of these advantages, let alone all.



Tutuka Power Station



Sasol II



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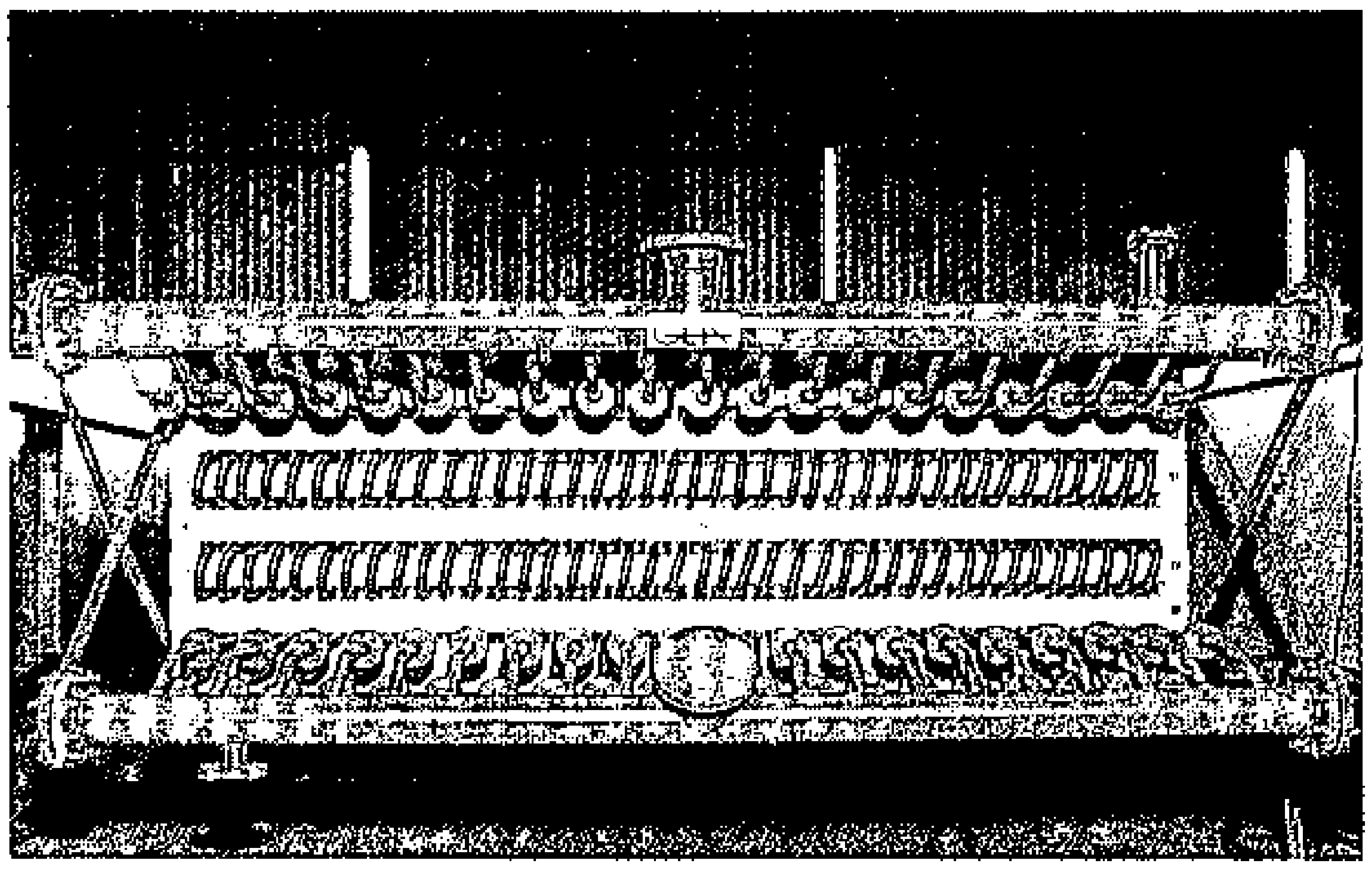

Sasol II

projects right now, the time will come when Sasol will want to add to its synfuels capacity. And then, it will obviously do so as a private sector company.

Meanwhile, if government wants other, smaller synfuel projects currently under evaluation to go ahead, then those projects should preferably also be undertaken by the private sector. What government will have to do is to provide the necessary framework. And, because such synfuels projects are so capital-intensive, government will have to continue to assist with temporary finance. Sasol 2 and 3 are ideal examples. There, government put in funds at a low interest rate or entirely interest-free, ultimately getting back full interest in arrears when the project matured.

Stegmann believes that SA should continue to look to conventional liquid transport fuels, such as petrol and diesel, and stay away from the exotics. New synfuels projects may have to have a bias towards the diesel side. There is no logic for SA to go for pure alcohol fuels. Brazil's approach worked at a price, but only because of special circumstances which do not apply here.

The present position in this country is that there is a balance, if a delicate one, between diesel and petrol output. Any moderate shift

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A good bet

There is no other way to view Sasol: Since its listing in 1979, it has emerged as one of the most solid blue chips on the JSE

By any standards, Sasol has become a massive company. Its market capitalisation now stands at some R3,6 billion. This makes the share a giant on the industrial board. Sasol makes up some 10% of the JSE actuaries industrial index (which is weighted according to market cap), and fluctuations in its share price can influence the index, sometimes misleadingly.

The share has never fallen below its issue price of 200c and since the middle of 1982, it has shown a consistent, long-term upward trend. It moved into line with the industrial sector as a whole in 1983, and has steadily outperformed the market during 1984 and 1985.

Size, of course, isn't everything. The share's performance reflects the solid profit record, and market expectations are that the group will continue to announce dividends in line with, or ahead of, the forecast in the prelisting prospectus, which predicted annual growth of at least 12%/year.

If future distributions are anything like the pattern established so far, investors aren't likely to complain. Earnings a share rose by 37% in 1981, by 19,8% in 1982, by 16,4% in 1983 and by 18,4% in 1984. Dividends rose by 29% in 1981, by 20% in 1982, by 14,3% in 1983 and by 17,9% in 1984.

in demand preference can be accommodated by SA's refineries. Stegmann acknowledges that it would be "silly" to add unbalanced indigenous capacity on the petrol side only.

Stegmann says government appears to be moving in the direction of correcting the structural bias favouring diesel use through the tax mechanism and in other ways.

But it must be realised that it is not always possible to correct a structural bias overnight.

Lastly, Sasol has "a positive attitude" towards licensing its technology to other companies in S.A.

Whether it would enter into joint ventures with other companies to develop a future Sasol 4 "would depend on circumstances at the time and on the potential contribution a partner could make to a joint venture," says Stegmann.

As for physical security, there were sabotage attempts at Sasolburg and Secunda some years ago. The group, discloses Stegmann, has spent some R40m "hardening" security, which is now at a very high level. Of course, it is impossible to eliminate all risk completely by any set of conceivable and feasible measures.

Ultimately, no facility is free of hazard or risk. ■

Inevitably, that record was achieved against a background of change; large new synfuel plants came on stream at Secunda, and world oil markets have altered radically in recent years. When the figures for the six months to end-December 1984 were announced in March, important new variables had again come into play. To some extent, these factors were inclined to confuse the issue.

Sasol, like many large corporations, has occasionally had problems with its image. It recently was criticised by those who believed, incorrectly, that the 40% increase in the fuel price, in January this year, would be used to inflate Sasol's profits.

But if they expected profits to rise sharply they were not wrong. Nor were the many investors who had accumulated the share since July last year, pushing the price up from just over 500c to nearly 600c, ahead of the announcement of the interim results. When the figures were announced in March, the performance turned out to be excellent — and quite against the trend of producers of liquid fuels overseas.

Because of the November 1983 rights issue — when the group acquired the 50% it did not own in Sasol 2, and issued 187,5m new shares — most of the figures in the income statement are not strictly comparable with any previous period. That doesn't apply to the bottom-line: interim earnings a share rose 20%, and the dividend was lifted by 17,9% — on line with past performances.

The figures for this period were important in several respects. They throw useful light on the way that this group works, and they help answer various questions about longer-term prospects. Sasol's primary source of income is oil-from-coal production at the wholly-owned Sasol 1 and Sasol 2 plants, and the 50%-owned Sasol 3. It also has a 52,5% interest in Natref, a refiner of crude oil at Sasolburg; manufactures a wide range of chemical products; and is entering the fertiliser and explosives markets.

In looking at future profitability, an important consideration is the exceptionally high capital intensity, as shown by the end-December figures, when fixed assets and other long-term assets made up 94% of total assets.

Secondly, a very high level of capacity utilisation in the synfuel plants is assured. Effectively, these assets are fully-utilised, and are expected to remain so. With Sasol 2 and 3 fully operational, the synfuel plants dominate total assets, and group operating margins indicate efficiencies are high. Net operating income as a percentage of turnover (excluding excise duty and levies) soared from 28,7% in the six months to December 1983, to 38,9% in the same period last year.

In any such capital intensive business, production volumes and the level of capacity utilisation is usually the most important factor affecting profitability. In addition, however, some R200m is being spent on debottlenecking, and should lift production capacity at Secunda by 6% in 1986-87. Make no mistake, the effect on profits of a 6% increase in volume at these plants is many times greater.

However, the financial results have got to be viewed against the large capital investment involved. As chairman David de Villiers notes, the return on total capital investment remains far from acceptable. At end-September, for example, group profits, including Sasol 3, before interest and tax, on total assets and before allowing for increased replacement cost of assets, was only 10,8%, while the interest rates on long term loans exceeds 15%.

> *The share's performance reflects the solid profit record, and market expectations are high.*

One thing is clear, the sooner borrowings are reduced the better. But the interim performance should have laid to rest worries about the group's ability to service its large issued share capital, and the potential effect on the bottom-line of a further rights issue in a few years. These plants have massive cash generating capability.

However, with synfuel production now largely stabilised, the prices Sasol receives for its products is the pivotal factor affecting profits. This is where the rand/dollar exchange rate played a substantial role in the recent interim performance, and is an important factor to take into account when assessing the outlook.

The producer price of Sasol's synthetic fuel products is linked to the imported cost of crude oil. In international markets, the price of crude oil is quoted in dollars. But for Sasol, it is the rand price, or "import parity", that counts.

To obtain that price, the daily price postings of four refineries — Bahrain, Singapore, Jurong and Pulau Bukom — are averaged, and those averages are converted into rands at the closing rand/dollar exchange rate for the day. To these figures are added freight, insurance, leakage and ocean loss, landing charges, customs duty, the refiners' margin and inland transport costs to the point of delivery.

The effect of this pricing structure was shown last year. Although in dollar terms the oil price dropped by some 15%, the weakening of the rand against the dollar — a drop of some 50% in the comparable period — more than compensated for this. The resulting high producer price became a major factor behind the profit surge at the March interim.

It should be noted that the retail price at the petrol pumps is immaterial to Sasol's earnings — which is why the recent petrol price increase was not relevant to the group's profits. Apart from the Blue Pump, all of Sasol's fuel products are ultimately sold to consumers by marketing companies — the oil multinationals and Trek. They buy synfuels from Sasol at the producer price, and sell at the government-controlled retail price.

Of course, while the rand's fall was favourable for the group, the reverse applies too.

A stronger rand means a lower producer price for Sasol. As a Johannesburg stockbroker assesses the outlook: "Anyone who is bullish on the rand should be cautious on Sasol. Anyone who is bearish on international fuel prices should also be cautious on Sasol, although declining overseas fuel prices may indirectly drag the rand value further down. The caveat to that scenario is that declining oil prices could precipitate a banking crisis with positive implications for gold and the rand."

It's unlikely that Sasol will build any new synfuel plants for some years, and the existing theoretical capacity at the present plants is virtually fully utilised. Even so, future growth in fuel consumption will continue to boost the group's profits.

All local oil refining plants, including Natref, are working well below capacity. In accordance with agreements which Sasol has with the rest of the industry, all refiners dropped their throughput when the Secunda plants came swiftly into production over the last two to three years. On the principle of "equal misery", each refiner reduced output in proportion to the market share it held before the Secunda plants started production.

Overall refining capacity is now said to be running at around 60%. However, as consumption rises, the increased demand will be met by the refineries, and all will increase their output again. This will include Natref, which is far smaller than the synfuel operations, but will nevertheless make a useful contribution to group profits.

While fuel will remain the dominant source of earnings, Sasol has been moving steadily to diversify its product range, and achieve the best possible return on its assets. In 1984, sales of chemical products, for example, totalled R338m, with about 25% derived from exports, another activity which has profited from the rand.

The diversification includes what's known as vertical integration. It involves using the large volumes of chemical raw materials produced as co-products at the oil-from-coal plants to make higher-margin, value-added products. Plants have been built to make fertilisers and explosives, based mainly on ammonia made as a co-product by Sasol.

Owing to the drought and to over-capacities at existing plants, the fertiliser industry has for some time been intensely competitive. A rationalisation of the market was long forecast anyway, and already we have seen a casualty in Hanhill's Bonus. It can be assumed, however, that Sasol will have carved out a profitable market share when the shake-out is over.

For its entry into explosives, which for years was dominated by AECI, the group has concluded licensing agreements with Nitro Nobel Aktiebolag of Sweden, and Atlas Powder Company of the US. A plant to produce various grades of porous ammonium nitrate is being built at Sasolburg, and another to make cartridged explosives is being built at Secunda. Both should be commissioned towards the end of 1985. Here, too, there's little doubt that in time Sasol will secure a lucrative slice of the market, which is worth some R600m/year in turnover at present. Both fertiliser and explosives should be contributing to profits in a year or two.

Positive as these developments may seem, they are necessary. The takeover of Sasol 2 caused Sasol's debt to soar from R68,4m at end-June 1983 to R2,3 billion at end-June 1984. This includes a loan of R1,5 billion from the State, which bears interest equivalent to the five-year Escom rate, plus 1,5%. The result was that net interest paid for the six months to end-June was R126,8m (R89,4m).

With interest rates at present levels, and the remaining 50% of Sasol 3 still to be taken over, repayment of debt is a priority. Encouraged by its strong cash flow, Sasol Limited plans to repay R400m, and Sasol 3 will repay R300m, of government loans at the end of this financial year. Sasol 3's borrowings are additional to those of Sasol Limited. But, if the repayments continue at this rate, the debt will be decreased substantially in two to three years.

When that has been achieved, the next big step will be the acquisition of Sasol 3. Indeed, it has become an important profit producer. For the first half of the 1984/85 financial year the interim dividend paid to Sasol by Sasol 3 was maintained at R12,5m for the second year, but this figure was nine times covered by the plant's before and after tax profit of R225m. If necessary, the dividend could be increased sharply.

The acquisition of Sasol 3, probably towards the end of the decade, will again push debt levels up sharply. But it will ensure another major source of earnings, and shareholders should cash-in on a very profitable operation when the debt is repaid by the mid-Nineties.

Overall, the share is a relatively low-risk investment. The forecasts laid out in the prospectus have been met or surpassed, and there is every reason to expect dividends to continue rising at around 17-18% over the next few years. By mid-May, the share had advanced to 645c, placing the share on a prospective yield of 5,4%. The price could stabilise close to 600c, particularly if the rand shows signs of strengthening, something which a positive balance of payments, or a sustained drop in the inflation rate, could bring about. Long-term, there is every prospect the stock will appreciate further. ■

Andrew McNulty

The vigorous veteran

The successful establishment of the Secunda giants has dwarfed Sasol 1's synthetic fuels output. But the original plant is still very much alive

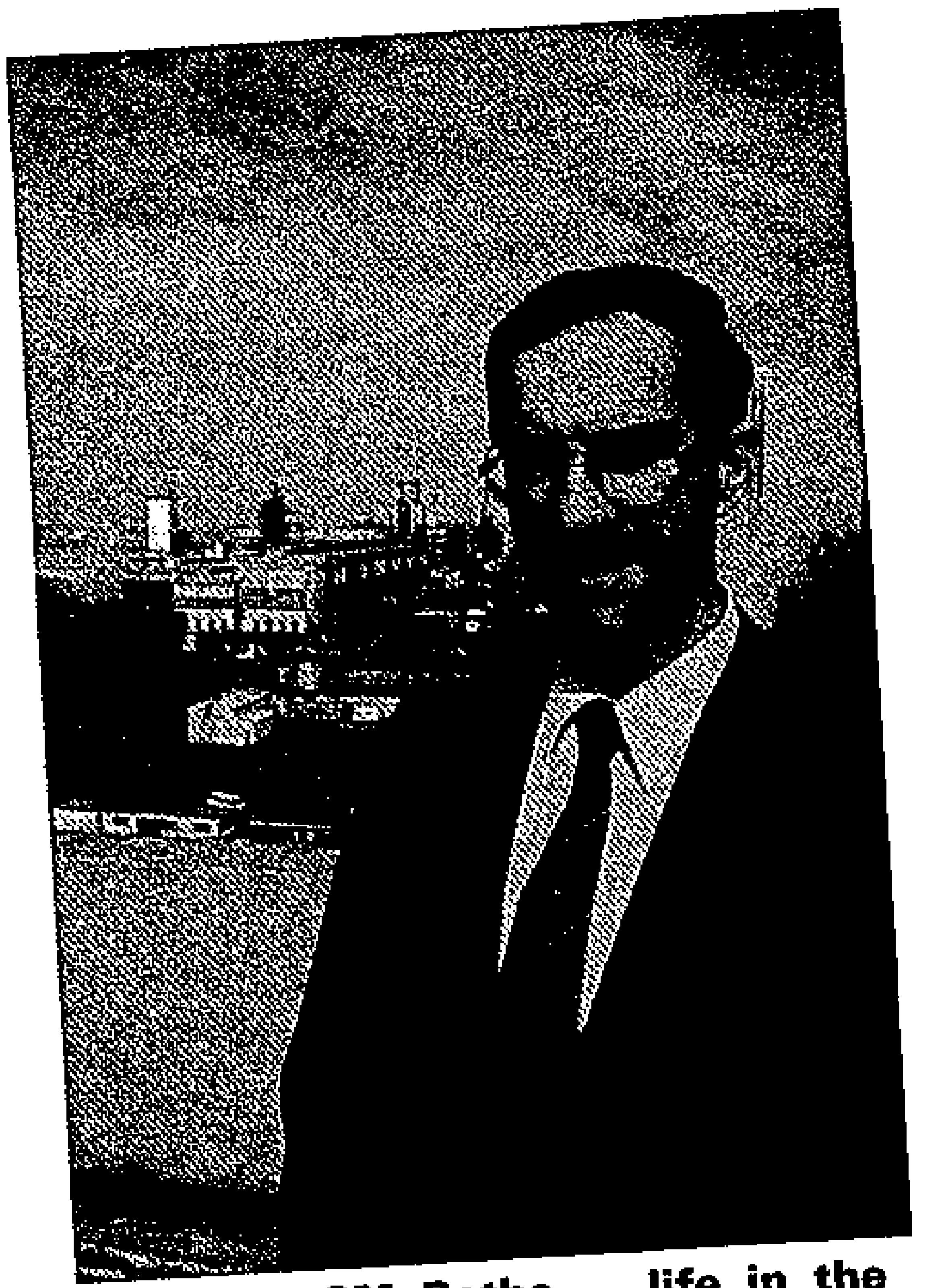
Largely as a result of rigorous maintenance, Sasol 1 remains active. However, its importance today lies more in the field of chemicals, and as a proving ground for new technology than as a major synfuels producer.

F J (Frikkie) Botha, newly appointed GM of Sasol 1, tells the story of Sasol's 30-year-odd history.

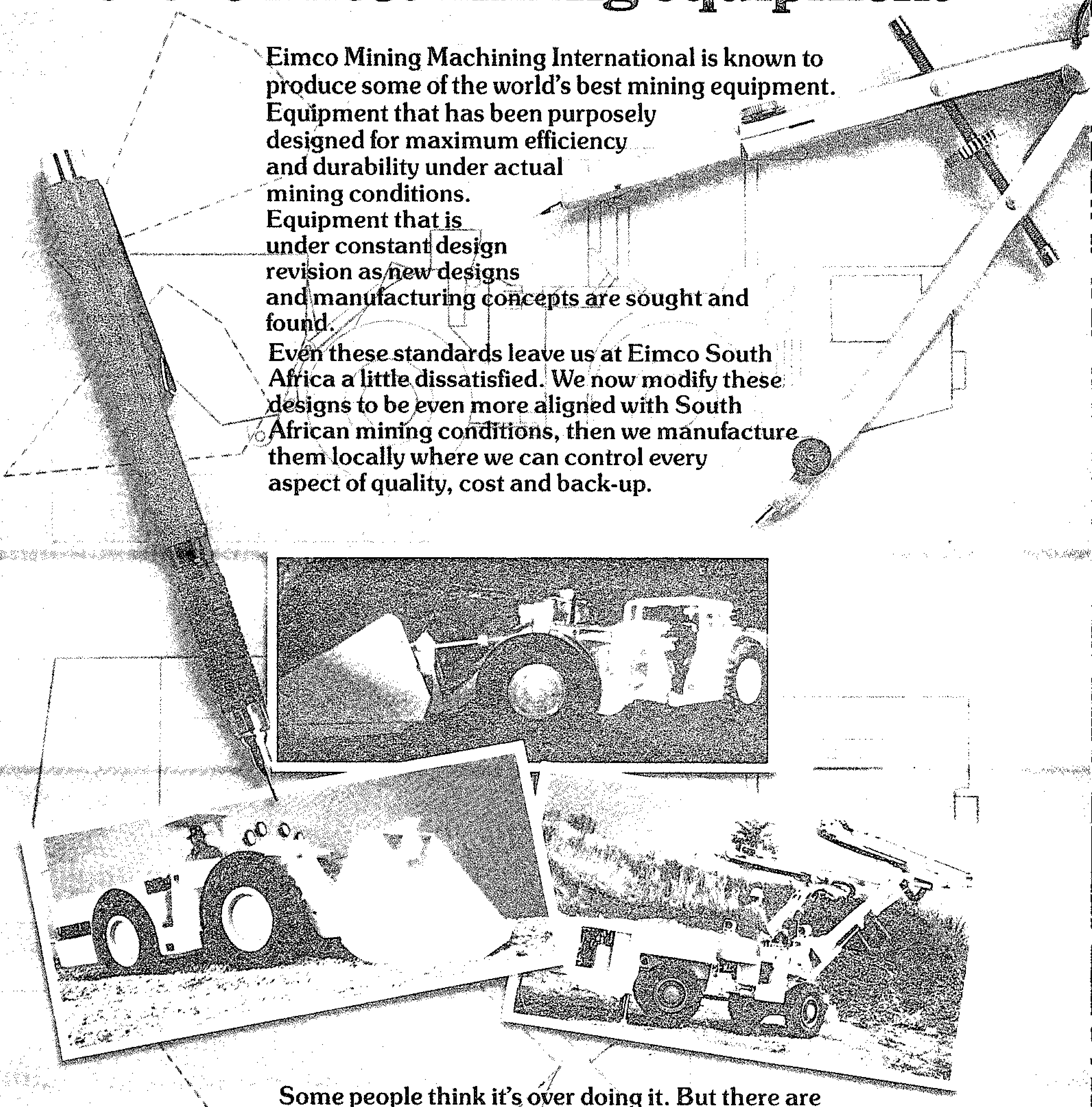
"At Sasol 1, the group set out to develop different embodiments of the Fischer-Tropsch hydrocarbon synthesis — the US Kellogg process, which uses a circulating catalyst — and the German Arge fixed bed reactor, in which the stream of synthesis gas is passed over a static bed of catalyst.

The product spectrum of the two methods differs considerably — Arge produces a considerable proportion of solid hydrocarbons (waxes), while Kellogg gives a much more satisfactory yield of liquids.

But the original Kellogg process was technically deficient, so Sasol was obliged to do much research and development. The result was the evolution of the original Kellogg process into the contemporary Sasol "Synthol" process, which was ready to be



Sasol 1 GM Botha . . . life in the old plant yet



used at Sasol 2.

Sasol 1 is the only plant using the Arge process, but it will continue to be used as a source of valuable chemical products independent of the main stream of synfuel production, as we state elsewhere in the survey.

The catalyst for the fluidised bed (Synthol) reactor is a special product perfected by Sasol, and is iron based, derived from Iscor millscale and doped with the necessary promoters to produce a useful range of products. The Arge catalyst is a pellet compared with a fine powder for Synthol.

Coal is the raw material for all of Sasol's operations. The annual consumption at Sasol 1 is some 6m tons, (against more than 30m tons at Secunda) flowing to 17 Lurgi gasifiers (against the original nine) and fifteen boilers (against four).

Sasol 1 has the added complication of having to produce different gas compositions for the Arge and Synthol reactors respectively.

The raw gas stream, produced by the Lurgi gasification of coal with oxygen and steam, requires careful purification before it becomes suitable for the synthetic processes. The first step is cooling, which condenses out "black products" as well as surplus steam, into water containing water-soluble products.

These go to the tar separation plant, where the "black" and water soluble products are separated. The water phase is routed to the phenosolvan/ammonia recovery plant where some products are separate. Other products, like phenol, cresilic acids and ammonia, are extracted. The remaining water is then treated and returned to the Vaal River.

These substances are sold separately as final products, further refined or blended with other Sasol products. The ammonia is used for the production of ammonium sulphate, for example, which is sold as fertiliser.

The Rectisol process — passing the gas stream through refrigerated methanol — is used at all Sasol plants to remove hydrogen sulphide and the large quantities of carbon dioxide produced during gasification, before the gas is suitable for synthesis. (For Sasol's current problems with the subsequent conversion of hydrogen sulphide to sulphur, see "Environmental Hum," page 58.)

Once the purified gas enters the Synthol or Arge reactors, temperature and pressure conditions have to be closely controlled to avoid undue loss of carbon.

Methane is also produced as an inevitable co-product in the Synthol process. Most of the methane produced at Sasol 1 is sold through Gaskor's well-developed industrial gas market, generating a considerable income for Sasol. Sasol 1's gas capacity is sufficient to take up market growth until about 1987, and there is a connection with the gas distribution system to Secunda. If the methane is sold rather than reconverted to synthesis gas, thermal efficiency is maximised in the Synthol process.

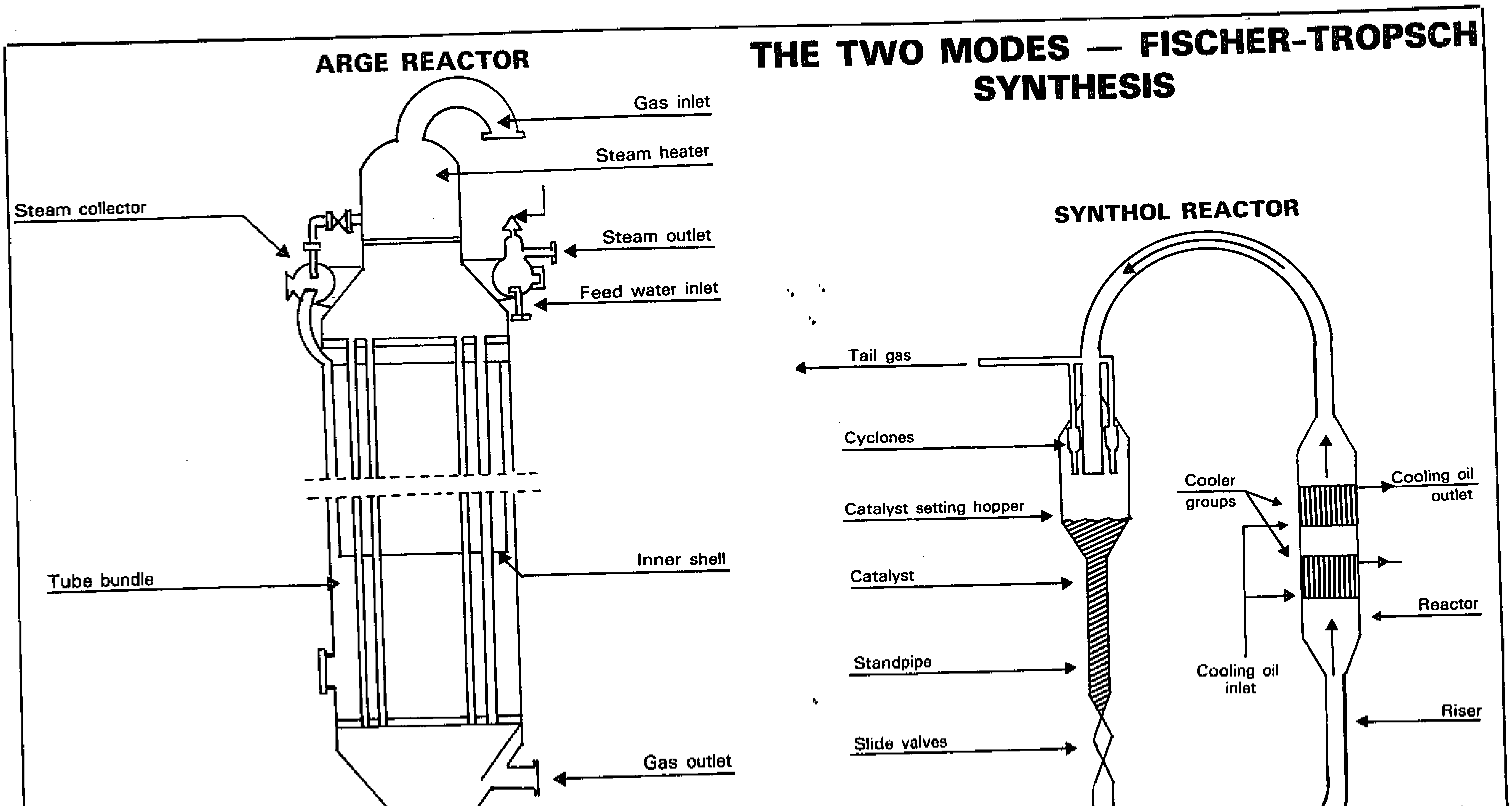
At Sasol 2 and 3, the methane is reconverted ("reformed") to synthesis gas (carbon monoxide plus hydrogen) and recycled to the Synthol reactors, so as to optimise synfuels output. Methane reforming causes an energy loss, but the thermal efficiency of Sasol 2 and 3, though lower than at Sasol 1, is nevertheless still comparable with that of a coal-fired power station.

At Sasol 1, explains Botha, the purified stream of synthesis gas takes three directions. One stream goes to the Synthol process for conversion to synthetic fuels, one to the Arge reactors — which produce mainly valuable waxes — and the rest to the nitrogen fixation complex to be converted into ammonia.

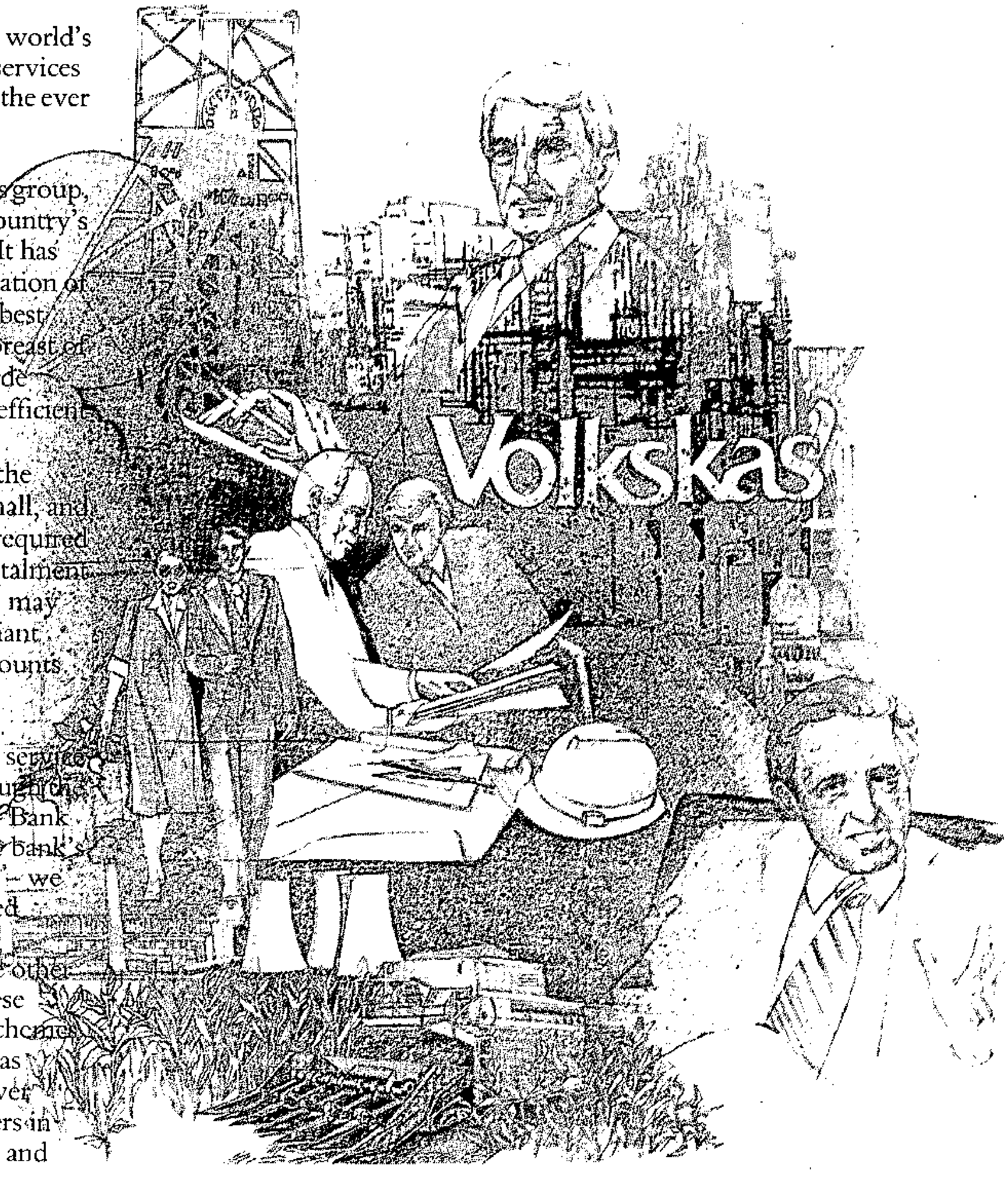
There are three Synthol reactors, one product recovery section for hydrocarbons and one recovery section for chemicals. The main range is from C1 (methane) to the diesel boiling range. LPG (bottled gas) as well as petrol and diesel are produced. The oxygenated co-products include alcohols and ketones.

Sasol 1 has recently started construction of a porous prilled ammonium nitrate plant, as base material for the explosives venture.

In the 1960s the olefin division was established, comprising styrene and butadiene plants and two naphtha crackers. As a result of the poor economic climate, the butadiene plant was shut down in 1983 and the styrene plant in 1984. The No 1 cracker was shut down when ethylene became available from



THE TWO MODES — FISCHER-TROPSCH SYNTHESIS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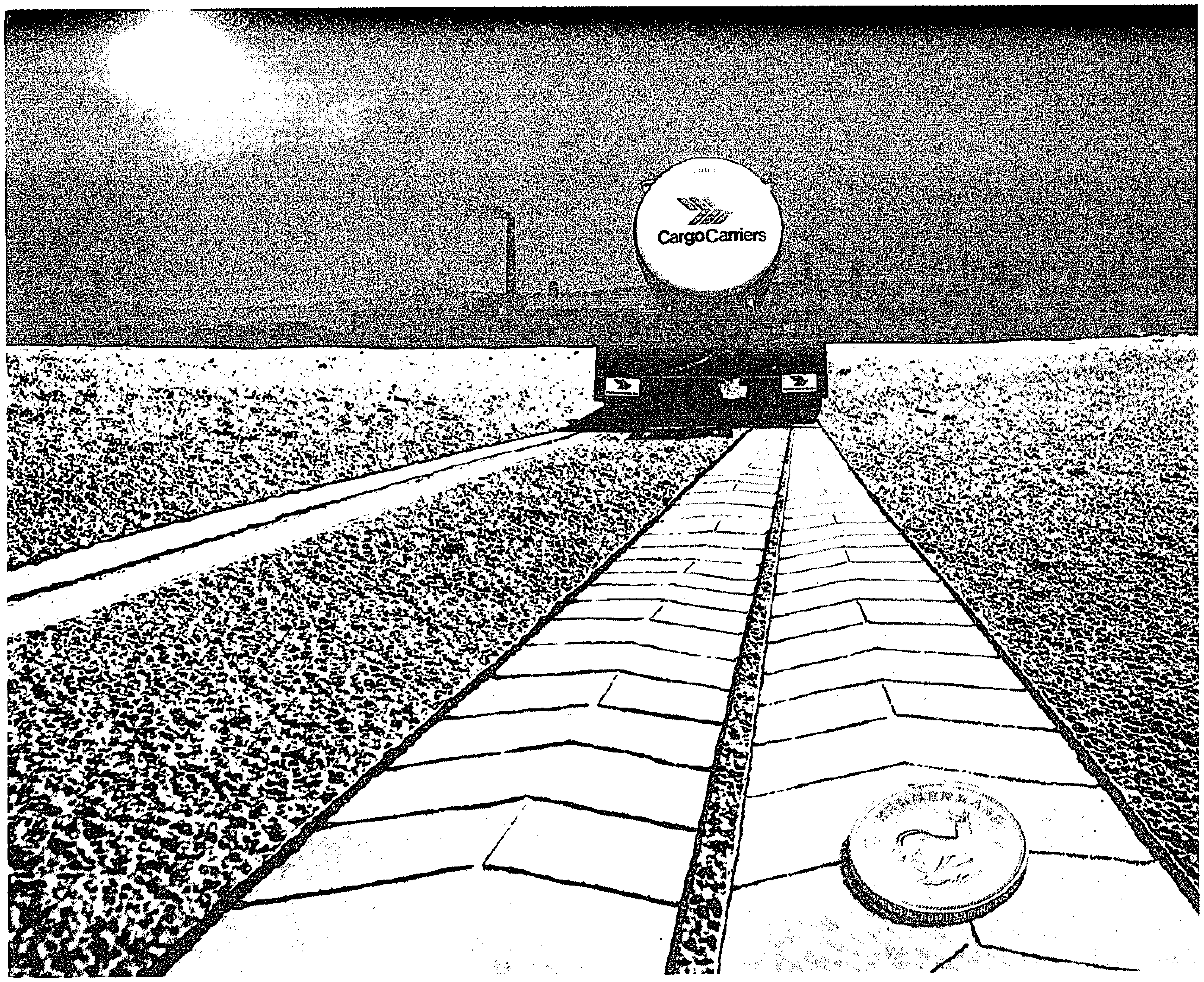

CargoCarriers

Secunda, and the No 2 cracker when Secunda 3 ethylene became available. It is used at present only as a refrigeration unit to liquefy ethylene from Secunda for buffer storage between Sasol and the customer.

Although dwarfed as a synthetic fuel plant, Sasol 1 provided the main supply of skills for the design and commissioning of Sasol 2 and 3.

The need for intensified maintenance

After 30 years of operating life, it has become necessary to intensify the maintenance programme at Sasol 1 on the principle of the "bathtub curve," familiar to maintenance engineers.

The principles underlying this concept can be explained as follows: in the downward sloping part of the curve, teething troubles are overcome in a new plant. The flat bottom of the curve indicates a period of relative trouble-free optimal output. Then ageing starts to affect plant items, with an increasing risk of failure from fatigue and corrosion. Maintenance and replacement programmes must be intensified if output is to be maintained.

So, as long ago as the Sixties management at Sasol 1 had established a well-balanced plant renewal and maintenance programme to counter plant ageing. Regular maintenance is done during partial shut-downs, while a complete shut-down is performed every two years. During shut-down, all rotating equipment is restored to the original condition. At the same time, new or improved technology is incorporated, like the installation of a new type of mechanical seal for pumps and compressors.

But equipment described as "static" — the large vessels, pipelines and boilers — are merely inspected regularly. The inspection forms the basis of a programme of plant replacement and renewal, which takes care of those items where the risk of failure due to corrosion or fatigue becomes significant. In testing many components, Sasol now uses its own SEM (scanning electron microscope.)

This process has been applied to the replacement of pipes in the refinery section of the Synthol plant and to the power station, where boiler tubes are replaced on a systematic basis over an extended period. The wall thickness of certain vessels is carefully monitored. Recently the group has begun defining an instrument replacement programme. The result is a plant that continues to be highly productive and safe to operate.

Botha notes it is possible to improve availability and therefore output from the gasifiers by giving a greater input in maintenance techniques. For example, tungsten carbide seats (linings) have recently been installed for certain valves. Over the years, these and other improvements continually improved operations — and profitability.

Research and development at Sasol 1

Sasol's R & D division is located at Sasolburg for historical reasons. This location is useful in current circumstances, because some new concepts like "on-line catalyst addition" are more easily tested at Sasol 1 than at Secunda.

The reason lies in the smaller scale of operations at Sasol 1. The result of this is that any sub-standard performance during development testing will cost less per Synthol reactor than it would at Secunda. But not every pilot plant to test new processes will necessarily be built at Sasol 1, says Botha.

Describing the work on catalyst addition in more detail, Botha explains that, previously, Sasol had to take Synthol reactors off line to replace catalyst. As the result of work done at Sasol 1, the Synthol reactors have been modified to permit the withdrawal or addition of catalyst while the plant is in operation. This is "on-line addition." Sasol has achieved a run of 116 days compared with a previous 40 to 50 days. The ultimate objective is a two year run.

Similarly, there is a large responsibility on Sasol 1 to test the new concept of a "fixed fluidised bed" Synthol type reactor. This type has an ebullient bed of "fluidised" catalyst instead of a circulating arrangement. Calculations show that the fixed fluidised bed would be cheaper to operate, while capital expenditure would also be lower, as erosion would be reduced.

In order to remain competitive, management at Sasol 1 has to be innovative, initiating an up-to-date training scheme for the operating staff, called the "criterion reference instruction technique." This technique has been fully implemented.

Sasol 1 is very proud of its safety record and has earned many awards including a five star rating for eleven consecutive years from NOSA (National Occupational Safety Association) which Sasol joined in 1959. Sasol 1 has also won the coveted "NOSCAR" award several times.

Asserts Botha: " For the long term, Sasol 1 will continue to operate at least at the present scale, with diversified expansion, as the original plant still remains profitable."

What of coal? Replies Botha confidently: "There is enough coal for 50 years. The Lurgi gasifiers and other equipment can last as many years at least."

So Sasol 1 won't go out to grass just yet. ■

Launching Secunda

The Sasols 2 and 3 represent some R6 billion worth of capital investment — and countless man hours of research, planning and design

Sasol 1 was more than a test run. It proved the success of the research on shich it was based. Thus the announcement in December 1974 launching Sasol 2, was based on approximately 25 years of successful operation of Lurgi gasification and Fischer-Tropsch hydrocarbon synthesis at Sasol 1.

Although Sasol 2 and 3 are so much larger than Sasol I, they are easier to describe, as only one type of synthesiser — the Synthol — has been installed. The Secunda giants were specifically designed to maximise synfuels production, while Sasol 1 remains much more of a multi-purpose plant.

This experience permitted the vast scaling-up of the processes at Secunda to create one of the largest petrochemical complexes in the world. It has involved an investment in Sasol 2 and Sasol 3 of more than $6 billion — big money by any standards.

The process of synthesising liquid fuels (see chart) at two parallel, independent plants — Sasol 2 and Sasol 3 — comprises a series of interdependent processing units, which form a chain from the input of coal, through gasification, then to Synthol units and on to the final product spectrum.

Allowing for differences of scale and changes mainly intended to optimise fuel output, the process is fundamentally the gasification Fischer-Tropsch route already explained.

Coal is received by conveyor belts from the Secunda Collieries and sized and screened in wet screening plants. The coal fines (which are unsuitable for Lurgi gasification) are fed to the boilers, both for process steam required in the gasification and other processes and for electric power generation.

Sized coal is fed to the Lurgi gasifiers, together with steam and oxygen. The oxygen is extracted from air using cryogenic (low temperature) fractionation. According to Sasol, the nitrogen remaining could serve as the raw material for future ammonia production at Secunda.

In the Lurgi gasification units, coal, steam and oxygen react to form raw gas, the proportion of inputs being controlled to produce synthesis gas with an optimum hydrogen: carbon monoxide ratio.

As at Sasol 1, the raw gas stream also contains carbon dioxide, methane, hydrogen sulphide (rotten egg smell), ammonia, oil and tar. These co-products are worked up broadly as at Sasol I, but with certain differences described elsewhere in this issue.

The purified synthesis gas is fed to the Synthol unit where it entrains circulating powdered iron-based catalyst in the familiar "looped" reactors. The Fischer-Tropsch reaction taking place in the reactors is "exothermic," that is, it produces energy rather than absorbing it.

The product comprises hydrocarbons of varying boiling points as well as co-products including alcohols and ketones, which are worked up in a chemical products recovery plant.

The heat emitted by the reaction itself is used to generate high-pressure steam, subsequently employed to drive turbines within the unit. This is an example of the design philosophy employed throughout the plants to maximise the efficient utilisation of energy. The thermal efficiency, despite the inclusion of methane reforming (See "The vigorous veteran") is of the same order as that of a modern coal-fired power station.

Working up the hydrocarbons

The gaseous uncondensed portion of the Synthol effluent is further separated in a cryogenic unit. A methane-rich stream is recovered for subsequent reforming to hydrogen and carbon monoxide and recirculated to the Synthol process.

Ethylene is recovered for use as a feedstock for synthesising polyethelene and related intermediates for plastics. Ethane is cracked to provide additional ethylene. Propylene (a low boiling unsaturated hydrocarbon) and light petroleum gas (LPG) can be recovered or processed further to liquid products.

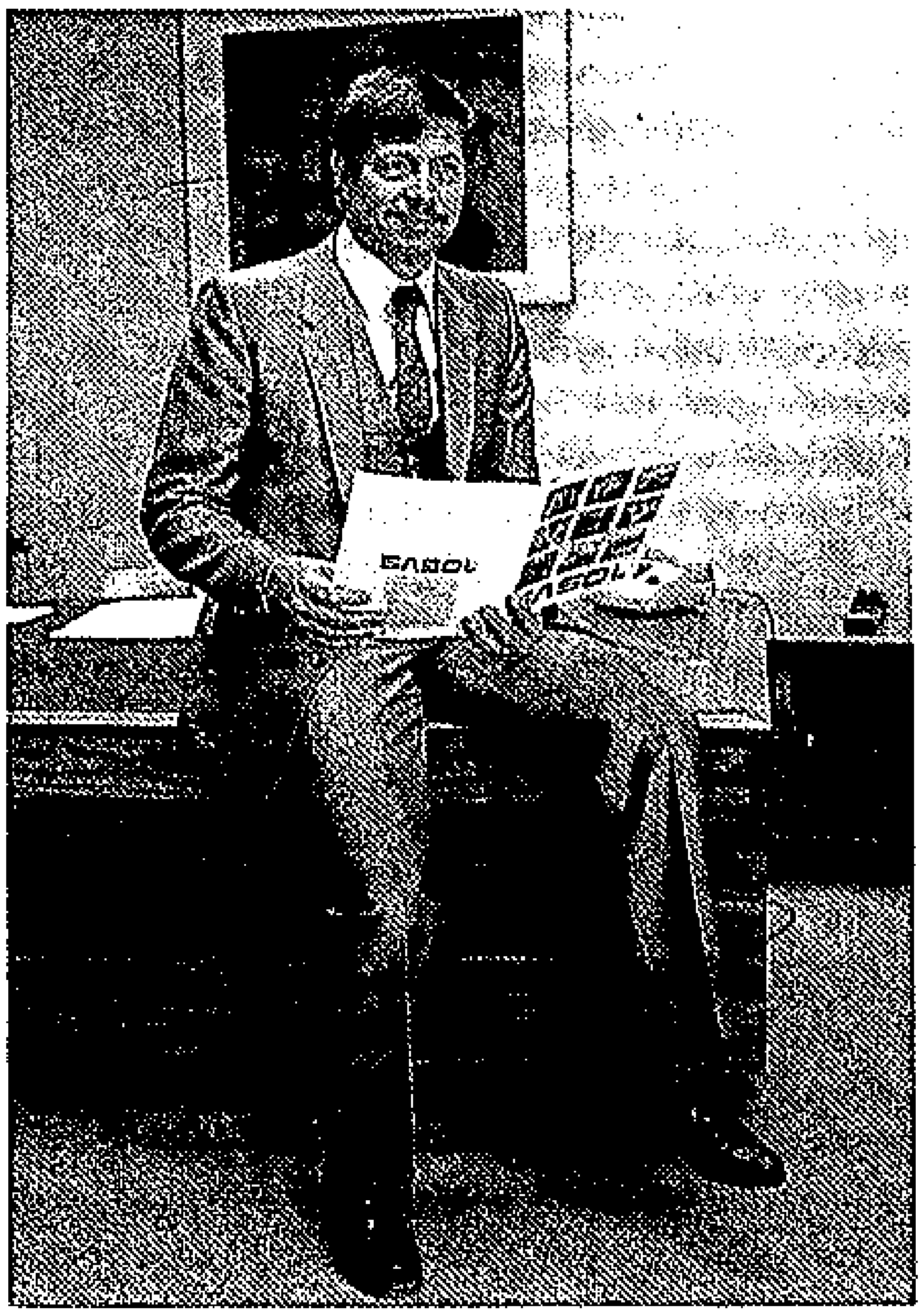
The stream containing liquid hydrocarbons is fed to an oil products recovery plant, where a series of oil-refining units, including a "Cat. Poly" unit and a "Platformer," produce petrol and diesel. These processes are used to improve the yield and quality of products in the petrol and diesel range.

Process design considerations

The size chosen for Sasol 2 required an enormous scaling up of the operations carried out at Sasol 1. Over-all process design of the scaled-up units and indeed, of the entire complex, could have been done only by Sasol itself, because of its unique operating experience on commercial scale.

No single design contractor possessed the required resources to handle the detailed designs within the required time span. Contractors with specialised experience in the various fields were therefore employed.

Detailed process and engineering design work was commenced in mid-1975. The workload was shared between seven major contractors — Fluor, Lurgi, Badger, Linde, UOP, Deutsche Babcock and L'Air Liquide.



Sasol's senior GM Kruger . . . scaling up at Secunda

The last two contractors were given turnkey contracts for the design and construction of the steam plant and oxygen plant, respectively. Fluor was appointed as managing contractor for the main project.

Careful attention was paid to the choice of size of process units. In particular, equipment like fractionating towers, compressors and drivers were chosen of a size to avoid the use of commercially unproven facilities, and which took transport limitations into account. Those items too large to transport — like the Synthol reactors — were manufactured in a plant built on site for this purpose.

The construction process was split into two separate adjoining phases and each phase was split into appropriately sized "processing trains." This method held the advantages of staged construction and commissioning. That is, the earlier completion of Phase 1 would permit start-up while Phase 2 was still under construction. Also, in the longer term, a plant turnaround (necessary shut-down for catalyst replacement and other periodic maintenance) could be staggered to leave at least half the plant in operation at all times.

Saving water at Secunda

The process design incorporated the principle, vital for the water-short Vaal basin, of "zero aqueous effluent." Considerable effort therefore had to be directed toward the purification of water effluent to render it usable in process cooling systems and in boilers. This procedure, combined with air cooling, resulted in a water saving of more than 200 M*l* a day.

Teams of Sasol process, project and procurement personnel were placed in each of the home offices of the design contractors to provide on the spot directives. As the design progressed, experienced Sasol operating and maintenance teams visited the contractors' home offices to review process and mechanical flow diagrams and to conduct plant model reviews. This approach resulted in a minimum of subsequent construction changes in the field.

Plant models — after completion of engineering drawings — were sent to site and used both for construction reference and follow-up and to train production staff.

Site construction

Fluor was appointed managing contractor in March 1975 with over-all project management responsibility, excepting the two turnkey projects. It was also responsible for part of the detailed design engineering.

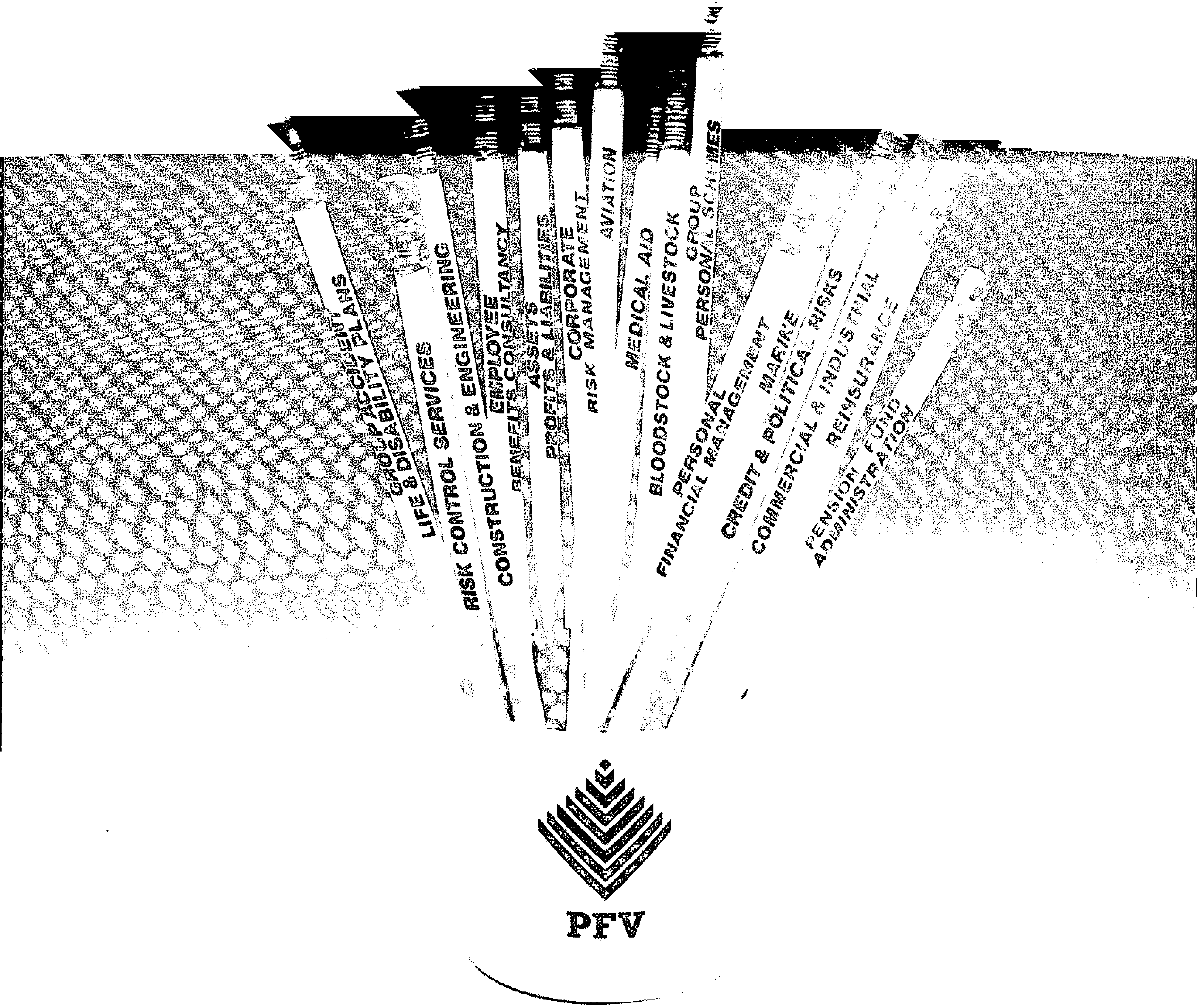
Site preparation commenced early in 1976. Phase 1 was complete by April 1980 and Phase 2 by July 1980, one month later than the revised plan and nine months earlier than the original plan.

More than 100m man-hours were expended in the construction of Sasol 2, with the labour force peaking at about 28 000.

A highlight of construction was the total on-site fabrication by CB & I of the Synthol reactors and hoppers — eight of each. The vessels weighed 317 t and 366 t respectively and were fabricated in sections, two per reactor and three per hopper. The final welds were conducted with the sections in place. A special 600 t derick rig was used to lift the sections into position.

A central commissioning planning group was set up to ensure good communication between all parties. Formal meetings covered topics like the planning of over-all commissioning, plant hand-over and start-up. The planning effort was successful in defining a detailed sequence of hand-over and specific early utility requirements. The programme was constantly reviewed to incorporate any deviations from planned schedules.

One technique employed, for example,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EMPLOYEE BENEFITS CONSULTANCY
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AVIATION
MEDICAL AID
BLOODSTOCK & LIVESTOCK
GROUP PERSONAL SCHEMES
PERSONAL FINANCIAL MANAGEMENT
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COMMERCIAL & INDUSTRIAL
REINSURANCE
PENSION FUND ADMINISTRATION
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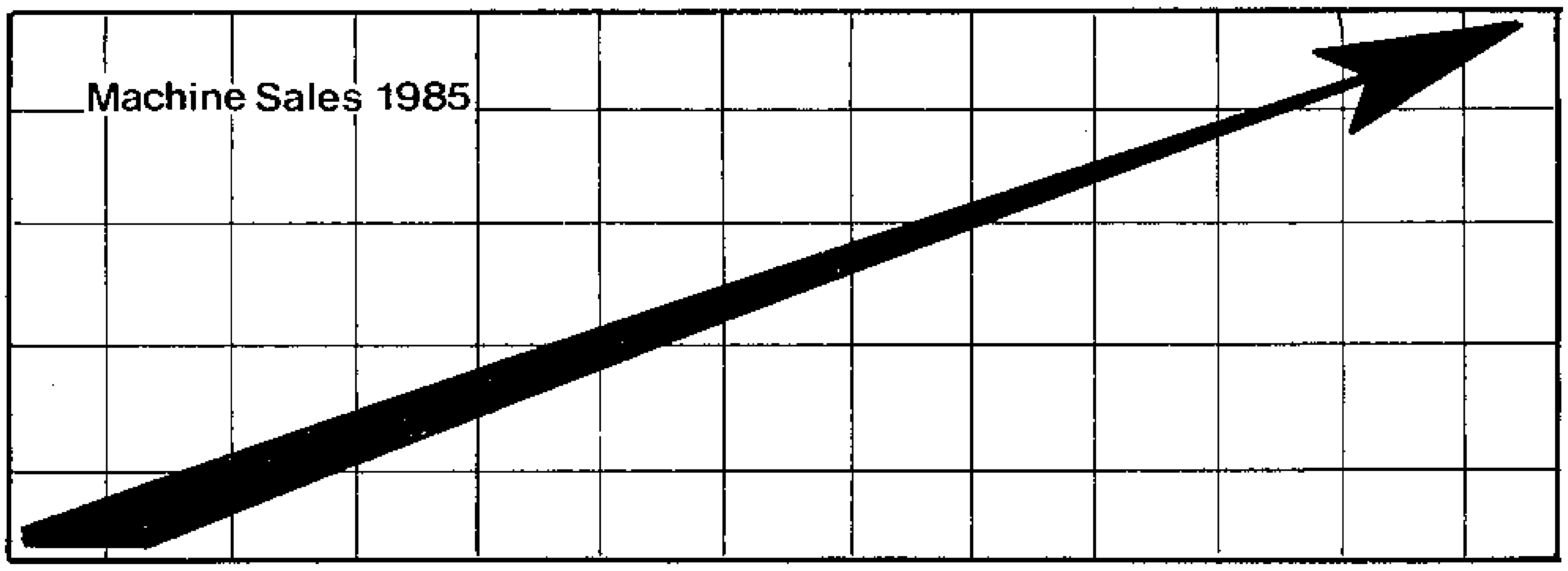
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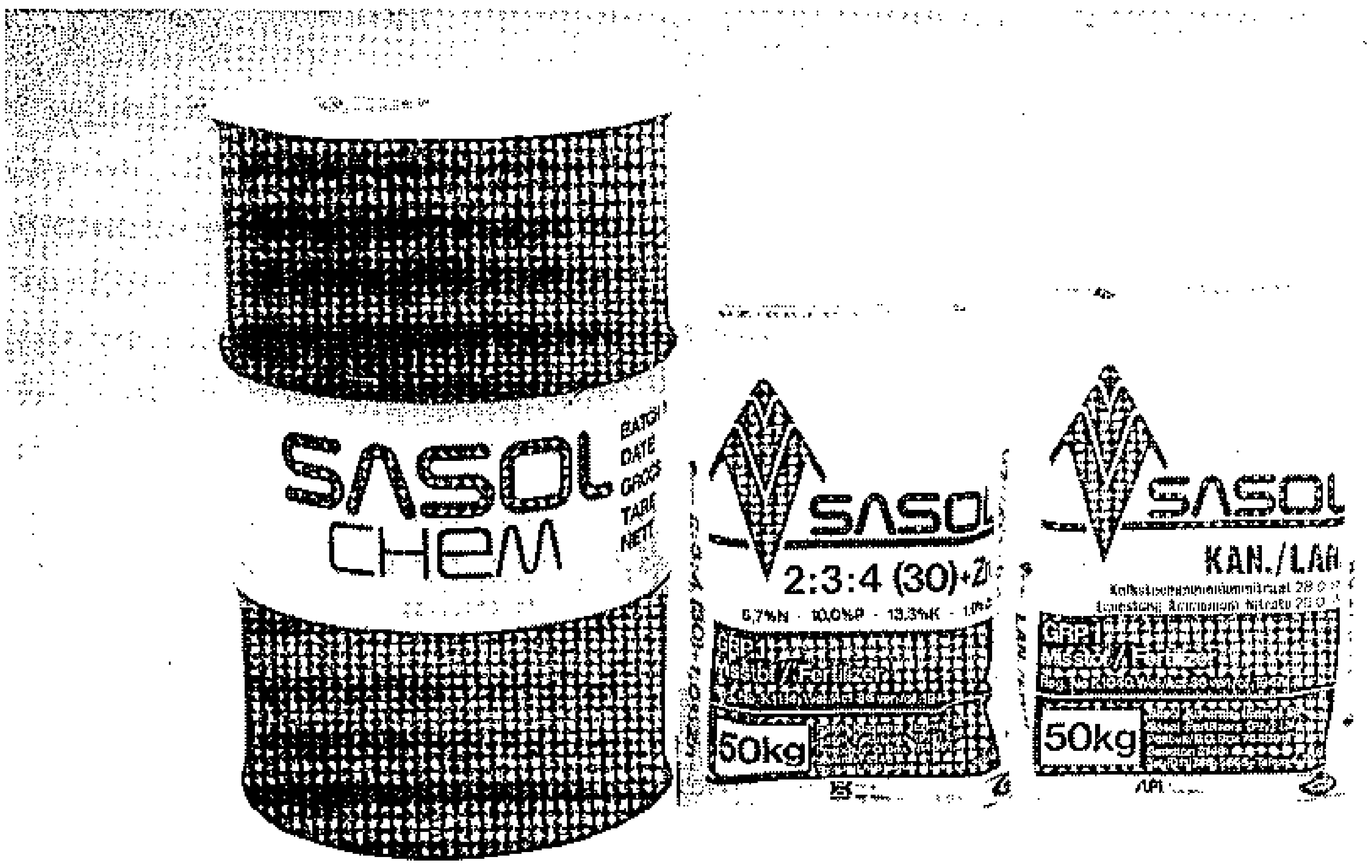
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50kg
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50kg

was to prepare procedural codes to cover the "interfaces" between construction completion, hand-over, commissioning and safety.

Another important issue was to define the moment of transfer of responsibility from contractor to client. The transfer of "care, custody and control" (TCCC) is important, for example, in respect of insurance liability. This timing was also linked to the first introduction of nitrogen (which is inert and cannot sustain breathing), hydrocarbons (which are flammable) and toxic substances.

Detailed start-up plans

The principle adopted for detailed start-up planning involved breaking down each plant into process systems of "manageable proportions." Each process system was regarded as a small operational unit in itself. A logic network was developed for each system. Then the separate system networks were integrated into a consolidated network for the complete plant, so that critical paths could be derived.

The start-up plans for each plant were then integrated into an over-all factory commissioning plan. The commissioning of Sasol 2 was achieved without any major process design problems, even at the interfaces between different plants where different contractors were employed. There were no fires or other incidents which could have caused serious delays. The Honeywell TDC-2000 instrument control system was commissioned without major problems.

Total commissioning costs remained within budget. Problems experienced with Phase 1 had been ironed out by the time the units in Phase 2 were ready for commissioning.

What problems occurred were confined to conventional equipment like electric motors which had been scaled up in size, and were not confined to any one manufacturer. The process of familiarisation with a new generation of electronic control instruments was also underestimated.

Uninterruptable instrument power supply equipment also caused trouble. An unexpected, high rate of corrosion occurred in a unit employing new technology, but this was luckily brought under rapid control.

In the event, the complete Sasol 2 plant was producing 90% of normal gas load within 18 months of the completion of construction.

The Sasol 3 project derived many advantages from being a duplicate follow-on to Sasol 2. Only minimum design changes were permitted. The most important was to use turbine drivers instead of electric motors on the Sasol 3 oxygen unit. Also, Sasol 3 incorporated a "creosote hydrogenation unit" to maximise diesel yield.

The two plants were interconnected at many points, so that certain inputs could be supplied early to Sasol 3 and to maximise inter-plant profitability once full output had been attained. The trained and mobilised construction force moved from one site to the next — an important benefit. The same design contractors completed updated engineering packages (based upon lump sum contracts, where possible) within mimimum time and duplicate equipment was purchased from the same vendors. These orders and contracts were negotiated before the decision to proceed with Sasol 3 had been announced.

The total Sasol 3 project was completed in just over three years from the time of decision, or two years less than it took to design and build Sasol 2. During the period of maximum overlap between the two projects, manpower levels peaked at 28 000.

During the commissioning of Sasol 2, there was the important advantage of a supply of spares from Sasol 3, so that delays in start-up caused by unexpected break-downs could be avoided by borrowing from Sasol 2.

The last Synthol trains came on-line in January 1981. By mid-1980 top management appointments had been made for Sasol 3. As Sasol 3 was staffed during a period when the economy was at a peak, an additional strain was placed on the staffing programme.

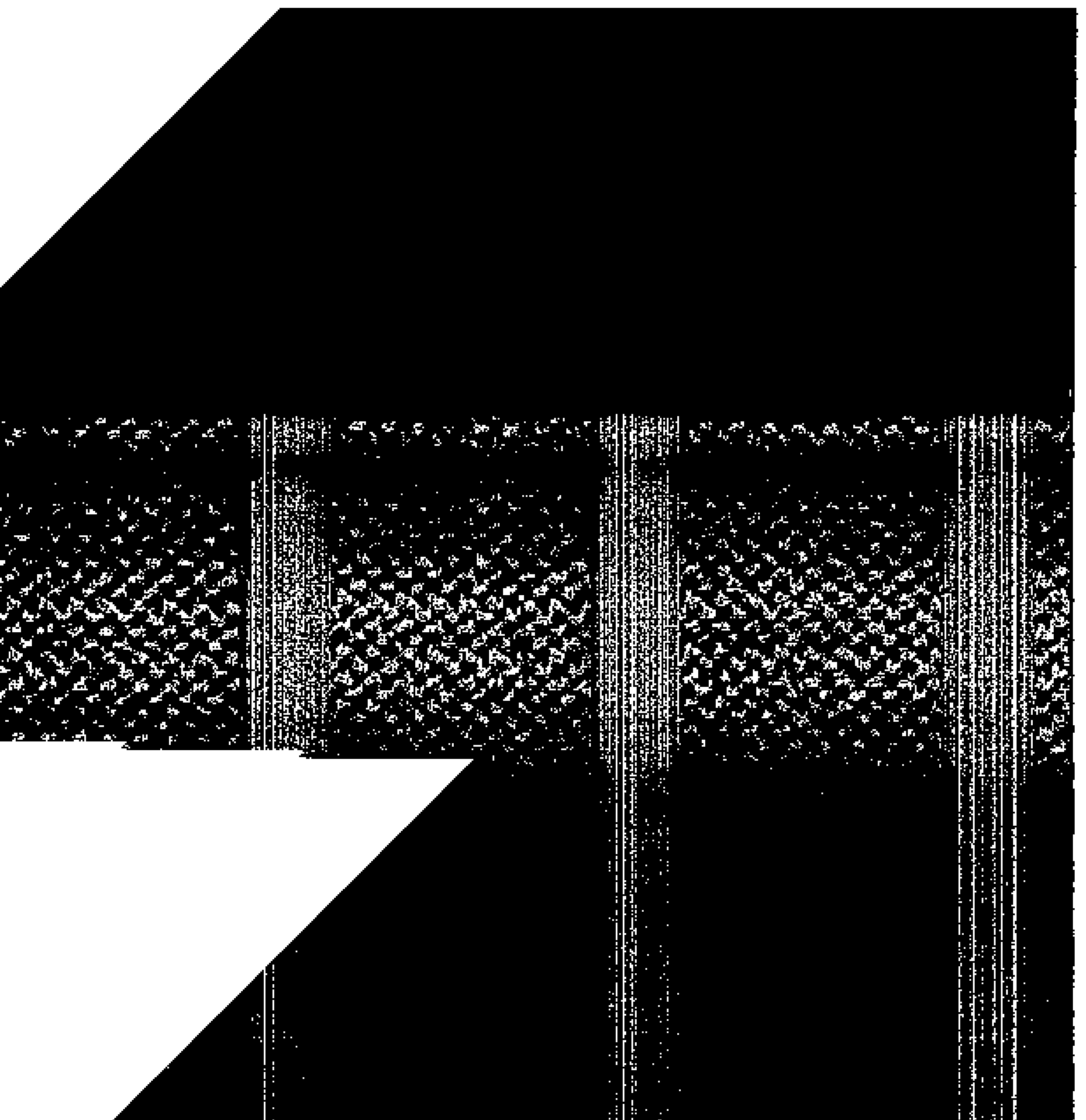
Every effort was made to capitalise on experience in constructing Sasol 2. A small team of Sasol 3 personnel assembled lists of all known problems and categorised these as procedural shortcomings; required design adjustments; scope changes because of changed requirements at Sasol 3; and modifications essential for start-up or for safety.

One change made was to create a redesigned uninterruptible instrument power supply system for Sasol 3. Maximum protection was built into key utility plants to ensure the most reliable supply of utilities to the process units. Priority was given to boiler control systems and trip-testing and a boiler optimisation system.

Sufficient time was provided for the checking out of sophisticated instrument control systems before the start-up at Sasol 3.

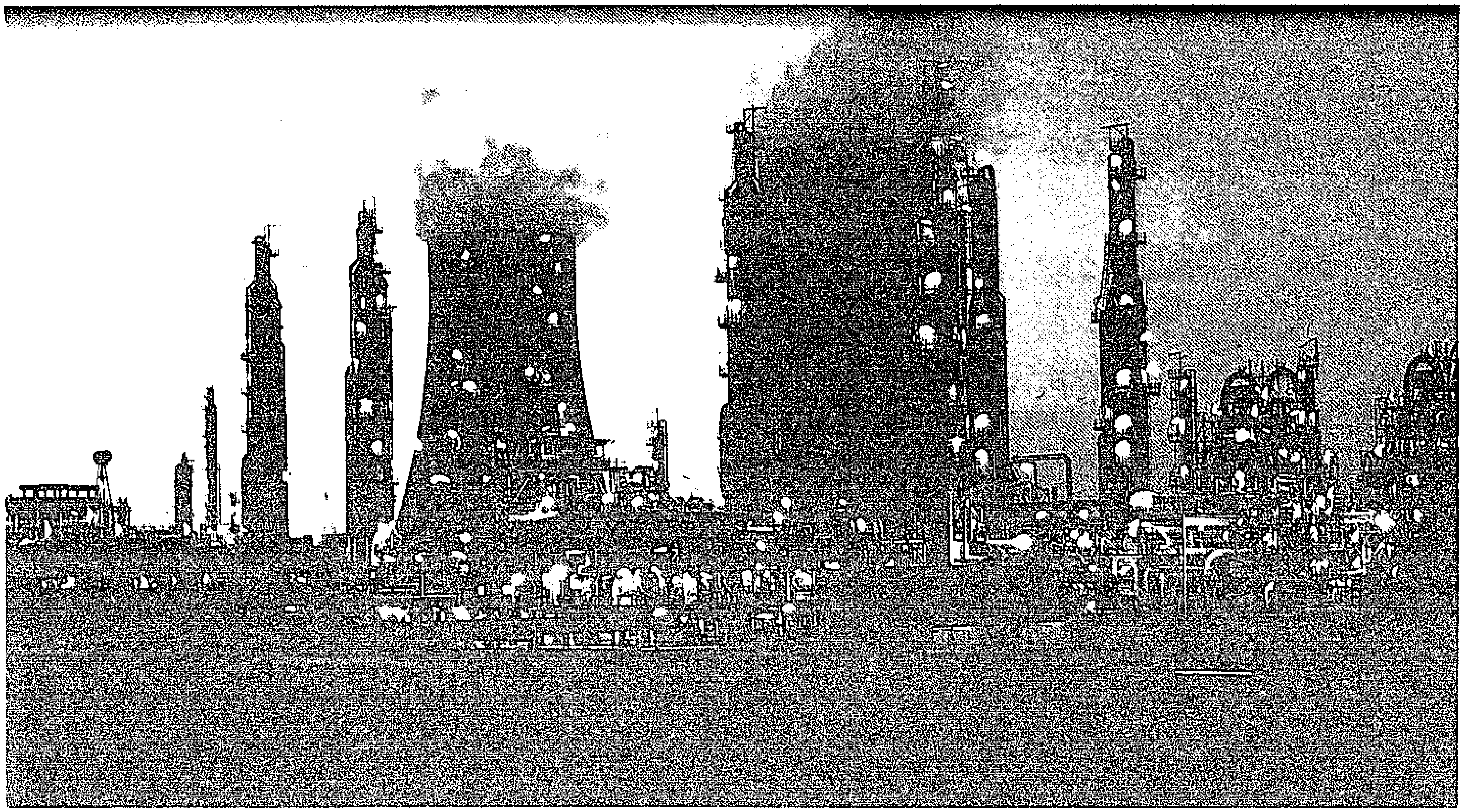
The first Sasol 3 Synthol reactor was commissioned in May 1982, just 26 months after its counterpart on Sasol 2, and 37 months after the decision to proceed with Sasol 3.

The learning curve was illustrated by the fact that Sasol 2 did not quite meet the admittedly ambitious targeted production in the first year, while Sasol 3, being a duplicate of Sasol 2, exceeded the target for the first year by a wide margin. ■



The working giant

Secunda's operations demand skill, dedication, specialisation, perfection — and lots of it. Sasol has been hard pressed to juggle such expertise



Synthetic fuel's profile . . . securing SA's lifeline

It all started with a small clutch of technical wizards at Sasol 1. Paul Kruger, senior GM of Sasol Ltd, explains that the decision to go ahead with Sasol 2 in 1974 relied on the relatively small Sasol 1 as the technical and manpower base for expansion. Operational preparations started in 1977, when staff had to be prepared for the commissioning of Sasol 2.

When the decision was taken to proceed with Sasol 3, Sasol 2 was in the phase of early commissioning, so key employees had to be withdrawn from Sasol 2, which served in turn as training base for Sasol 3.

The result was that in the late Seventies and early Eighties all three plants were depleted of skills and Sasol had to embark on a major training and human development programme. These programmes have now been completed and all three plants are operating at full capacity with all of the skills suitably developed. They have now entered the "fine-tuning" and optimisation phase as well as technical consolidation and expansion through "debottlenecking."

Sasol 2: the first giant

As previously explained, Sasol 2 was built to optimise output of synthetic liquid fuels, using a massive expansion and scaling-up of the Lurgi/Synthol route well-proved at Sasol 1.

Willem de Waal, GM of Sasol 2, says that the plant, having achieved rated capacity, has embarked on de-bottlenecking. It is consuming 43 000 t of coal per day, as is Sasol 3, so the total for the two plants is some 30 Mt per year. This enormous quantity is taken from the four underground mines at Secunda collieries.

Another aspect of Secunda's combined scale is that the twin oxygen units at Sasol 2 and 3 are each by far the largest in the world.

The eight Synthol reactors of each Secunda plant have three times the capacity of those at Sasol 1, while there are 40 gasifiers and 8 boilers, each three times the size of Sasol 1 boilers.

The product stream comes out of the Synthol reactors hot. It is cooled, condensed to a crude oil, and refined normally to conventional fuels. The watery condensate contains alcohols and ketones — as mentioned in the description of Sasol 1.

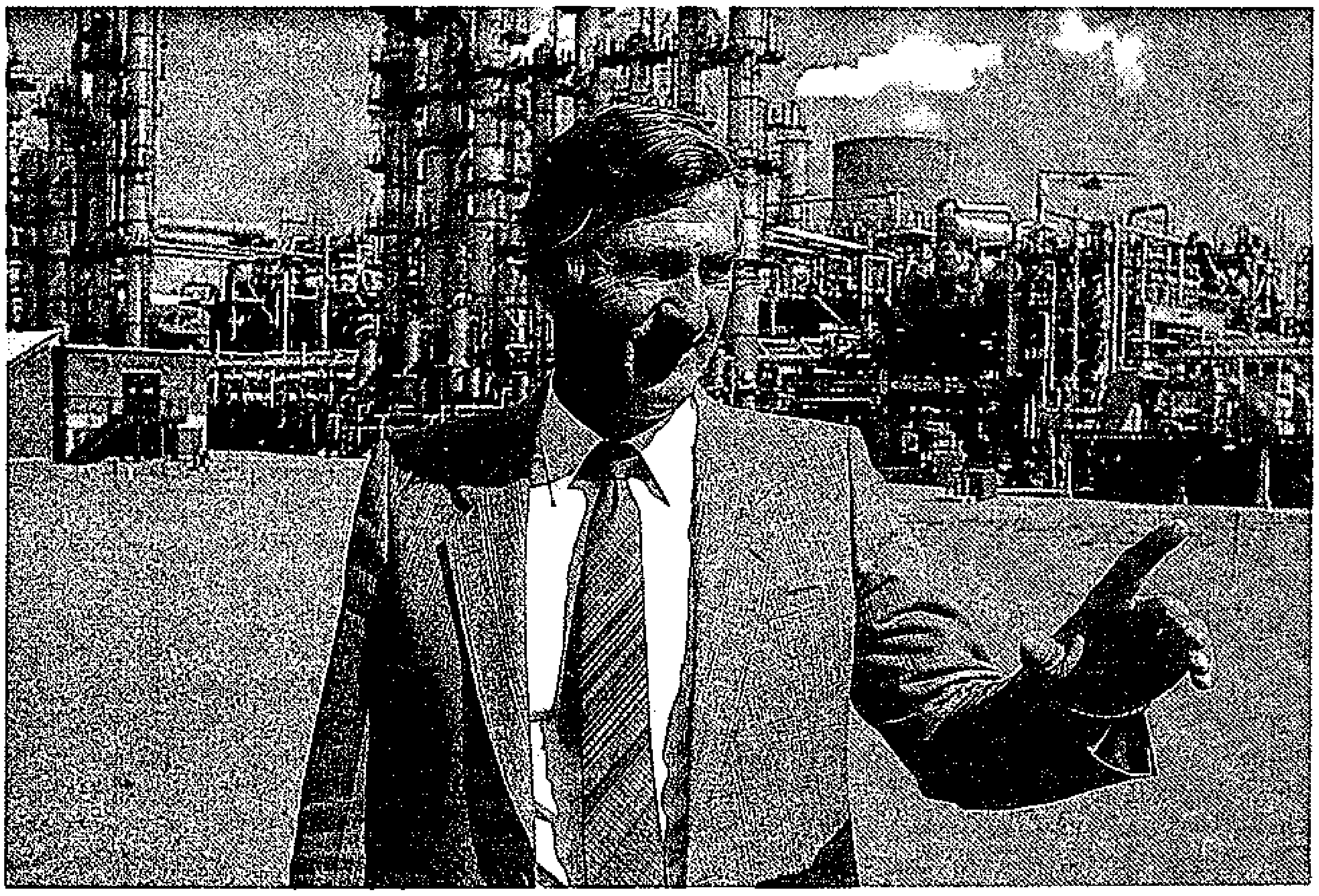
The third stream, apart from the mainstream, is gaseous and passes through the "cold separation plant" at -176 C. The first products fractionated are light hydrocarbons, methane and hydrogen which are recycled via a reforming process to the Synthol reactors, then ethylene and ethane, followed by the heavier gases which are polymerised into diesel and petrol.

Sasol 2 and 3 were designed to optimise synthetic fuel production. For this reason, they incorporate a chemical engineering "loop" — to recycle the methane by reforming it into additional synthesis gas, using steam and oxygen. This step causes some loss

of carbon as carbon dioxide, so reducing the thermal efficiency from the level attained at Sasol 1, where most of the methane is sold through Gascor.

C3 compounds (those having a chain of three carbons) are blended into LPG (bottled gas). These include propylene and propane. But Sasol can play with unsaturates in the range C3 to C5 which are sent to a "catpoly" (catalytic polymerisation) plant" to increase the yield of petrol, diesel and other products.

About half of Sasol's liquid fuels come from this source, and the group is now achieving a "diesel swing" — dictated by the market — through manipulating operating conditions, for example by extending the period that the reactants remain in the catpoly reactors. The C2 substances go to a cold separation step where the ethylene is removed. Then the ethane is converted to additional ethylene through a high-temperature cracking process.



Sasol 2's De Waal . . . fighting the cost dragon

On the subject of co-products, De Waal draws attention to the fact that Sasol 2 makes pure (99,9%) anhydrous ammonia from the "gas liquor," or aqueous condensate from the gasifiers, for sale to Sasol's own and other fertiliser companies.

Water treatment

Sasol 2's water comes from the Grootdraai Dam in the Vaal River system (which is increasingly under pressure of demand), so the whole plant was designed to re-use effluent.

So, cooling is done in the first stage by air and only then by water, which reduces consumption by more than 60%. This procedure, as well as the recycling of purified process water, reduces the total consumption by approximately 200 Ml water/day. This saving alone is equivalent to the combined consumption of all East Rand cities.

The zero effluent principle ensures that not one drop of effluent goes into the Vaal Dam.

Electricity generation

Sasol 2's steam plants produce about 50% of electricity requirements, while the balance is imported from Escom. Total consumption of Sasol 2, 3 and the Secunda Collieries is about 1 000 MW, and the Secunda collieries use an additional 200 MW.

Containing costs

It is true that Sasol 2 is now on the downward part of the "bathtub maintenance cost curve," but this aspect does not absolve plant management from making every effort to keep operating costs as low as possible. And Sasol has always been cost conscious.

"In these days of cost inflation, every man on the team is even more cost orientated," says De Waal. The operating budget for 1984/85 is the same as for the previous year in spite of a budgeted 2% increase in production.

These results have been achieved by making employees cost-conscious and through adopting the following strategy with suppliers: two whole days were spent with the main contractors and suppliers, explaining that Sasol was determined to fight cost increases. While staying within commercial norms and ethics, Sasol would resist the idea that suppliers could pass on their own cost increases and inefficiencies. They found this approach most refreshing and undertook to do the same with their own suppliers.

As an additional cost-saving measure, to reduce the cost of inputs, Sasol 2 goes for large scale contracts for chemicals and catalysts. The inventories of consumables are also kept at minimum levels. The objective was to buy at 5% below the inflation rate. Up to last month the rate of price increase was 8%, which meets this objective, although for the year as a whole imported inflation could be a blow. Sasol 2 also has a spare parts reclamation programme, which has saved R12m already during the current year.

The success of this approach can be expressed on an indexed basis. If you take 1982/83 at 100, then the real costs in 1983/4 are 103,2 and those budgeted for 1984/85, 94,3. On the production side, if 1982/83 is taken as 100, then 1983/84 is 121,0, and 1984/85 is budgeted for 123.

Current output is at rated levels, but significantly better in some units. The plant is in the process of improving output by 6%, through de-bottlenecking. Even at Sasol 1, notes De Waal, there are still opportunities for small increments to output, especially as chemical engineering is a much more exact science than 30 years ago.

Sasol 2 also has a five star rating from Nosa and has worked a million man-hours without disabling injury 28 times since 1979, with a record of 6,4m.

Sasol 3: doubling up at Secunda

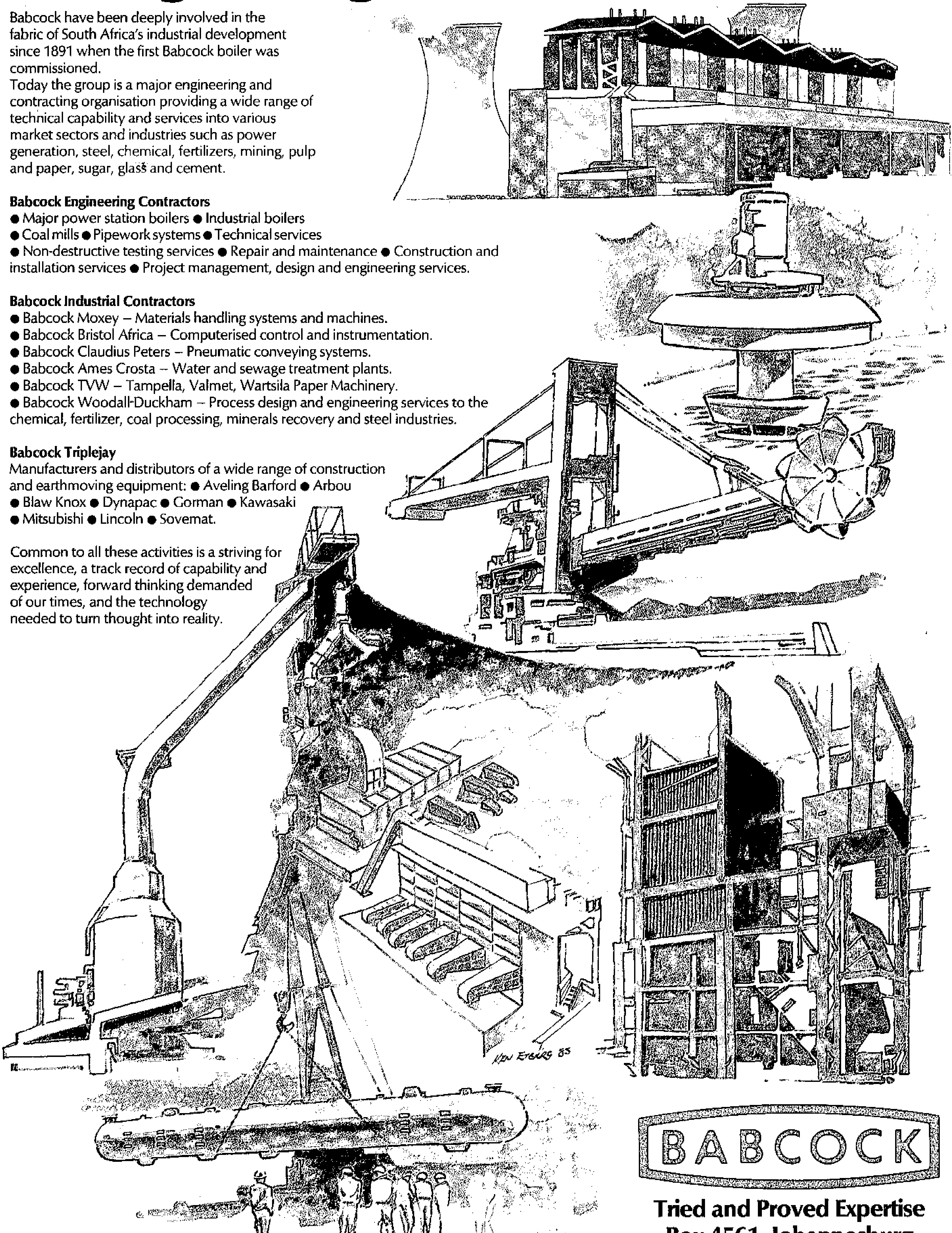
Jan Fourie, assistant GM with responsibility for Sasol 3 operations, draws attention to certain differences between Sasol 2 and Sasol 3. Sasol 3 uses steam turbines instead of electric motors because of power economics. Hence the demand for steam is higher but that for electricity lower.

Another difference came about because, after the construction of Sasol 2, the demand for diesel increased. So Sasol 3 put up a creosote hydrogenation unit to rework creosote both from Sasol 2 and Sasol 3 under mild cracking conditions to produce more diesel. In addition, Sasol 3 also converts a proportion of its tar acids to petrol. As Sasol 3 does not have an ethylene plant, the C2 compounds produced are sent to Sasol 2 for the production of pure ethylene.

In May 1981, only 22 months after construction started, Sasol 3 produced its first commercial hydrocarbons. The company thought this a major achievement, especially as Sasol 3 had acquired only 30% of its staff complement when it started commissioning. The company had to "pump in" a dramatic amount of on-the-job and classroom training.

The result was achieved through a careful study of anything that went wrong at Sasol 2 — so enabling Sasol 3 to "piggy-back" up the learning curve of Sasol 2 surprisingly quickly.

Now that Sasol 3 is also running at rated output, it has set out on the same de-bottlenecking procedures as Sasol 2, aiming for a 6% increment. "When we look at challenges, we go for that 20% which can produce 80%


KEN EYBERS 85

of the gains," says Fourie.

Sasol 3 also attacks the cost factor, with excellent results. Thus, the maintenance budget has been kept to last year's level in nominal money terms. Production for 1984/85 is up 18,5% on the first effective year. Costs are down by 5% in real terms.

Sasol 3 takes its coal from Secunda Collieries at a transfer price determined at arms' length. This comprises "a real price" both to the synfuels plants and to the mine, which can operate as a separate profit centre provided it keeps a tight control over its own costs.

And the reason for buying in coal initially was not delay at the Secunda mines, but a more rapid than anticipated climb to full Synfuels production.

Human capital

As for training and management development, Fourie notes that the average age of the Sasol 3 supervisory and management team is still about 33. With few experienced long-time foremen, what it lacks in experience must be replaced with improved management techniques and training. Training costs on supervisory level alone (excluding salaries) amount to an average of approxmately R1 700/employee/year. "With such a high-technology plant which is also drawing in new people, human resource management is most challenging." The result is a tightly-knit team dedicated to productivity, quality and safety.

A high priority at Sasol 3 was to get a five star grading from Nosa in its first year of operation, and the plant is now running at a rate of 0,26 accidents per million man-hours worked. This is an excellent rating for three to four years of work. Sasol 3 has also worked a million hours eight times without a disabling accident; two million hours five times, three million three times, once five million, once six million and once 7,5 million manhours.

Senior GM Paul Kruger notes that the fact that Sasol has received additional income with assistance from the rand/dollar rates does not mean that the group has stopped looking at ways to increase efficiency. The group has embarked on a process of quality improvement and has decided to bring in an American consultant. Already over R2m has been spent on training top management in the quality improvement process, known as "SQIP."

This process — which is genuinely orintated to enable people to reach their ultimate achievements — resulted from the survey of the most efficient US companies described in *In Search of Excellence.* It was clear that all the commended US companies cared about the quality of output, a concept exported to Japan and now being re-imported into the US.

Computerised control

Kruger adds that while Sasol was building its new plants, an area that lagged behind was the informational system and the application of computers. Sasol has found as a high technology company that it has been possible to start afresh with state-of-the-art systems. Its current major programme for information systems is beginning to pay off already.

Future developments and the "diesel swing"

Sasol, despite the cancellation of the Westinghouse gasifier development agreement, continues to be interested in a workable fine coal gasifier that could be used in conjunction with the existing gasifiers.

As for the "diesel swing," taking recent developments in the Synthol process into account, Sasol can accommodate the current market.

One example is the running of different modes on the cat-poly unit, in conjunction with the crude oil refinery.

The Synthol process alone is more versatile than people realise, but the full swing could not be absorbed at Secunda alone without some reliance on the Natref crude oil refinery.

But if Sasol built the Secunda complex today, it would be possible to build in a greater flexibility. So a future Sasol 4 could be aligned towards producing a greater proportion of diesel than the two Secunda plants.

One of several possibilities is to build more Arge capacity to produce wax for hydrocracking back to diesel.

So the options are open. All it requires is more of that scarce commodity: brainpower. ■

R & D — going into it

Sasol has discovered that when it comes to research and development, the latter is as important as the former

Research is the life-blood of a chemical company, and turning coal into chemicals — including liquid fuels — is the very foundation of Sasol's existence.

Sasol took two synthesis concepts — one a developed German process and an unknown American development — and went to work. Through research and development (the second as important as the first), it has turned them into a commercially effective, mature technology capable of serving as basis for an entire industry.

Today, Sasol's R & D may be loosely classified into four areas: optimisation of present activities; protection of the environment; research into new and improved processes and products; and technical services. (From the point of view of chemical theory, there are quite a few alternative roads from coal's lumpy, impure solid state to high-energy liquid fuels.)

As the result of SA's Sasol initiative, Lurgi gasification followed by Fischer-Tropsch synthesis has become the world's only fully commercialised oil from coal route. But this does not mean that other synthetic methods are not worth exploring too.

Sasol's research and pilot plant activities are all carried on at Sasolburg under the control of Sastech (Pty) Ltd, which provides engineering services to all divisions of the group.

Present at a discussion with the *FM* about the group's R & D were Theo van der Pas, a director of Sastech, as well as a GM of Sasol Ltd, and a chemical engineer by training. Also present was Dr Andries Brink, GM for R & D at Sastech and an assistant GM of Sasol Ltd. He spends his time "50-50" at Sasolburg and at head office. Andre du Toit, senior GM of Sasol Ltd with head office responsibility for corporate finance, Sasol technology and fertilisers, also participated.

Van der Pas explains that Sastech has the job of dealing with research and development of projects; put simply, design in all its aspects.

He notes that the group has a separate division dealing specifically with overseas foreign licensing developments like the North Dakota project for synthetic natural gas from coal.

This scheme was started in the early 1970s, even before the energy crisis and at a time when the United States feared that natural gas would run out. But, as Van der Pas says: "We know better now." At that time, Sasol started negotiating for potential licensing. But he admits that in today's easier energy market conditions, "licensing is no longer a very active business."

The three major categories of Sasol's R & D already listed — optimisation of present activities, fundamental research into fuel synthesis methods, and protection of the environment — will be described in subsequent articles in this issue. ■

Raw materials · Energy · Environment

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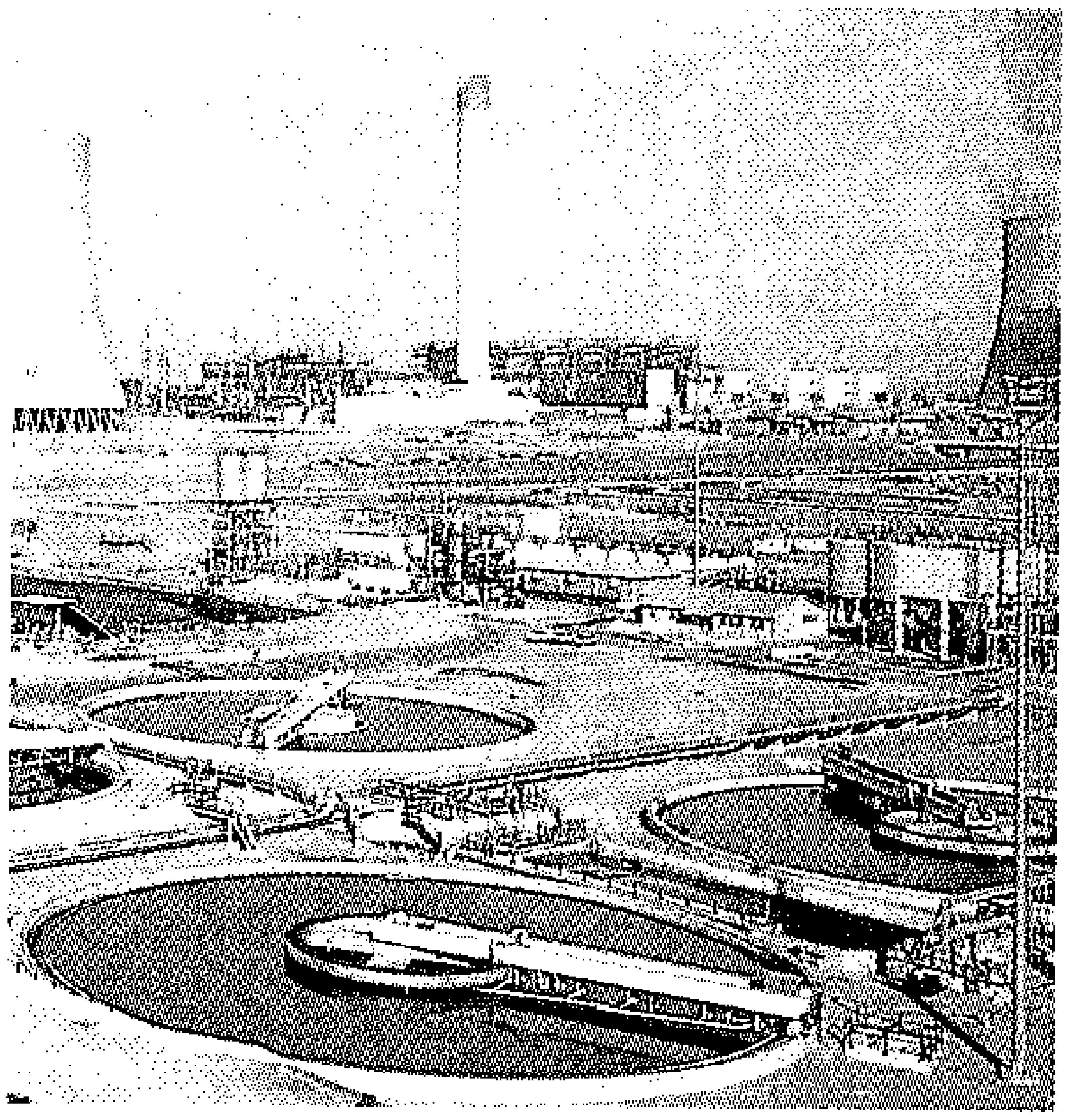

Making the most of South Africa's natural resources

South Africa is rich in raw materials. And, throughout the Republic, Lurgi lends a helping hand with a wide spectrum of technological know-how in the service of these vast resources. For instance, coal and fuels, ores and metals, base chemicals and synthetic fibres. In fact, Lurgi know-how is in many cases the sound foundation on which large-scale plants are designed and operated. With maximum efficiency and, at all times, effective pollution control. For example, in the world's largest coal-based fuel production complex (see photograph) with its exemplary and extensive systems for environmental protection. Take the metallurgical industries. Here, Lurgi know-how is at work in the world's largest plants for the direct reduction of ores in rotary kilns; non-ferrous metal ores are roasted in Lurgi fluidized bed furnaces, and calcining gases are processed into sulphuric acid in Lurgi plants. And in the country's major power plants, Lurgi electrostatic precipitators protect the atmosphere through effective flue gas cleaning. Other Lurgi processes help to produce precious metals, polyester fibres and many vital basic or starting materials for the country's chemical industry. For all these activities, the necessary know-how is channeled through Lurgi South Africa (Pty.) Ltd., South Africa's long-standing link with Lurgi.

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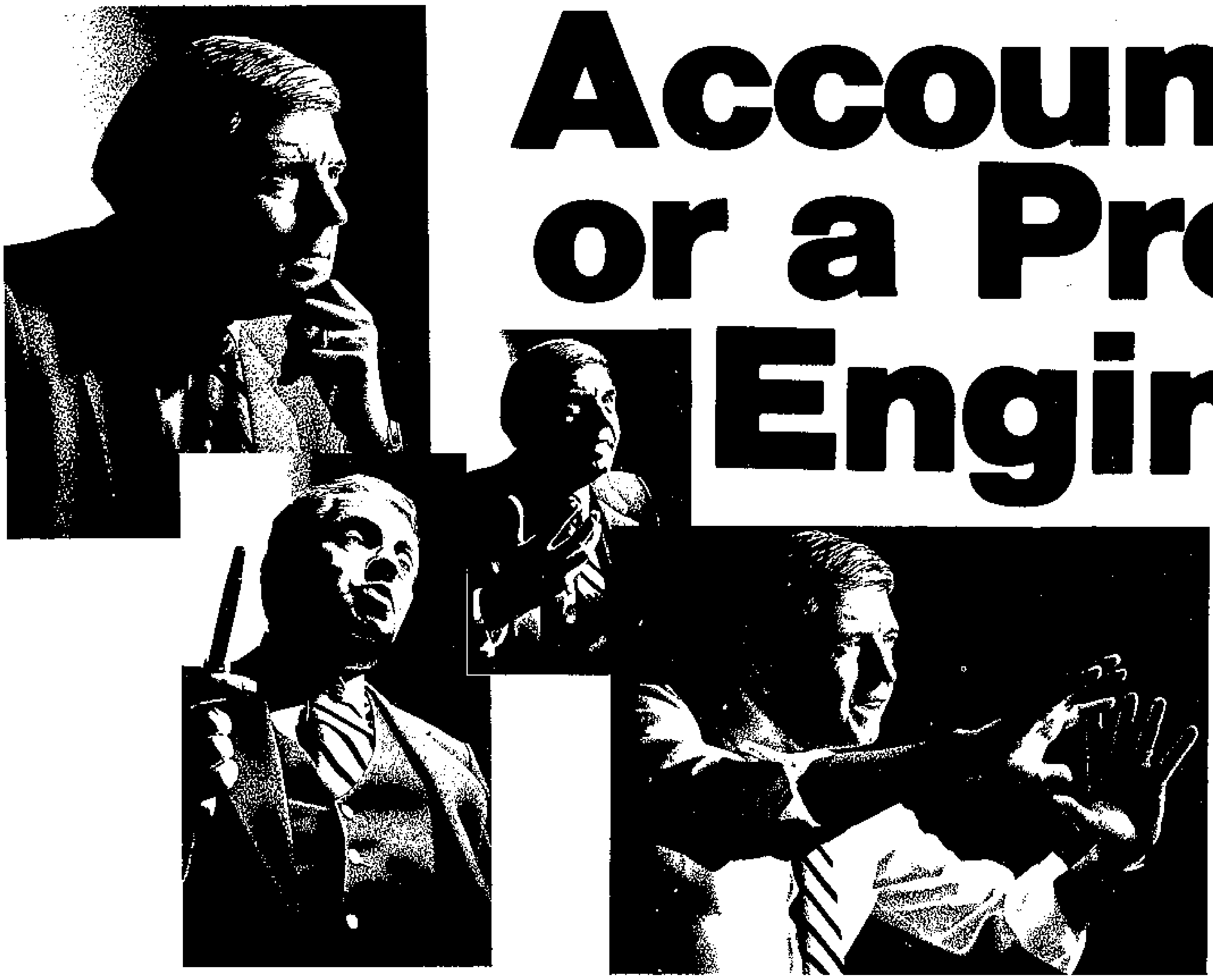
Is he an Accountant or a Project Engineer?



Either way, you've got to be good!

The four individual mines, which form Secunda Collieries' large underground complex, supply coal to the Sasol two and three plants Its a big operation by any standards and requires the very best in manpower. Two important positions must now be filled.

Project Engineer

In order to ensure that the mines' infrastructure and geographical extensions comply with operational needs at all times, we will appoint an experienced engineering man to have on-going responsiblity for the evaluation, planning and scheduling of intended projects and for the preparation of detailed capital budgets for inspection and approval.There you will be closely involved in the preparation of technical specifications and capital expenditure plans with regard to approved projects and also oversee all project management aspects from needs analysis to implementation.

Applicants should be in possession of a relevant B.Sc. (Eng.) degree or NDT, backed by a Government Certificate of Competency and a valid Red Ticket. We would expect you to have spent a period of at least 3 years at supervisory level in the mining industry. Bilingualism and a good financial sense will further strengthen your application.

Accountant

(Management Information)

We require an experienced Accountant to handle all aspects of management information within the company. The successful applicant will assist our mines and their departments with the compilation of operating and capital budgets and analyse their cost reports on a continual basis to determine cost tendencies and ensure that expenditure is restricted within budget specifications. In addition, he will be closely involved with the training of line management in the interpretation and effective application of financial information systems and for providing assistance in an advisory capacity.

Applicants should be in possession of an appropriate degree or cost diploma and should preferably have completed articles. Previous exposure in the cost function of a large concern and the ability to function independently will considerably strengthen your application.

The salaries will be competitive and the fringe benefits package will include ● a home-ownership scheme or housing at reasonable rent ● generous leave ● leave bonus ● excellent medical and pension schemes ● assistance with relocation. The Project Engineer will qualify for a car benefit.

Contact Mr C. Birkenstock at (01363) 40-3898 or address written applications, reflecting full personal and career details, to The Personnel Manager, Secunda Collieries, P.O. Box 3, Secunda 2302.

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RESOLVING CONFLICT

Sasol, like many giant SA companies, is a major employer of black labour. And like many other SA companies, it has had its share of labour problems.

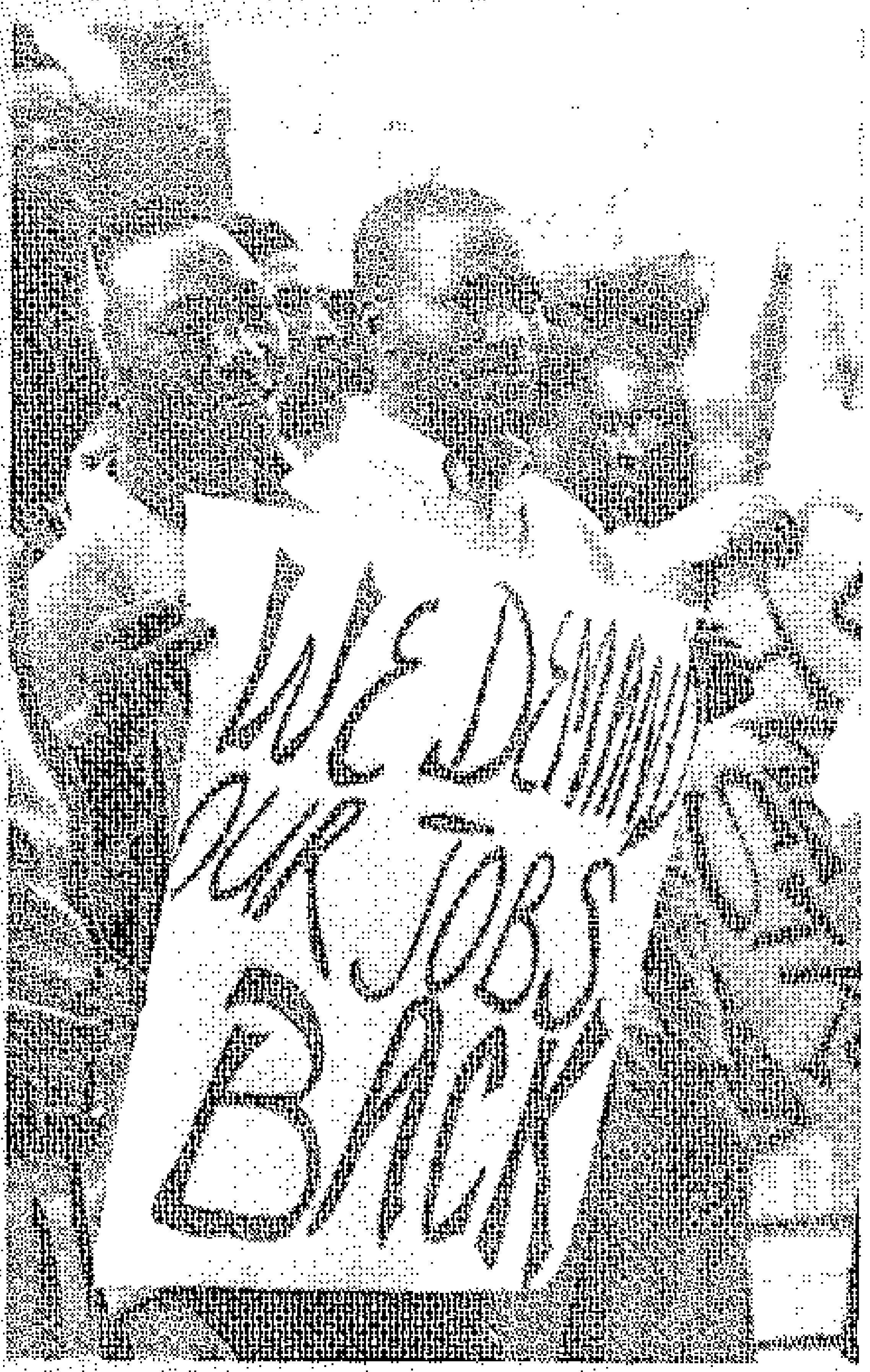
The most publicised of those problems was the 1984 black worker stayaway. Dr Dirk Mostert, senior gm of Sasol Ltd, expresses Sasol's views on last year's worker action.

He says firmly: "A high technology industry like Sasol requires a reliable workforce and not one that can strike at a moment's notice. Yet this is exactly what happened to us."

He believes the November stayaway was not work-related.

As Mostert has it, after management had explained to workers the inevitable implications of persisting in their approach, workers still went out. And, reckons Mostert, after considered appraisal of the situation, over 6 000 were dismissed. He says this was not a vindictive act, rather a disciplinary action on Sasol's part.

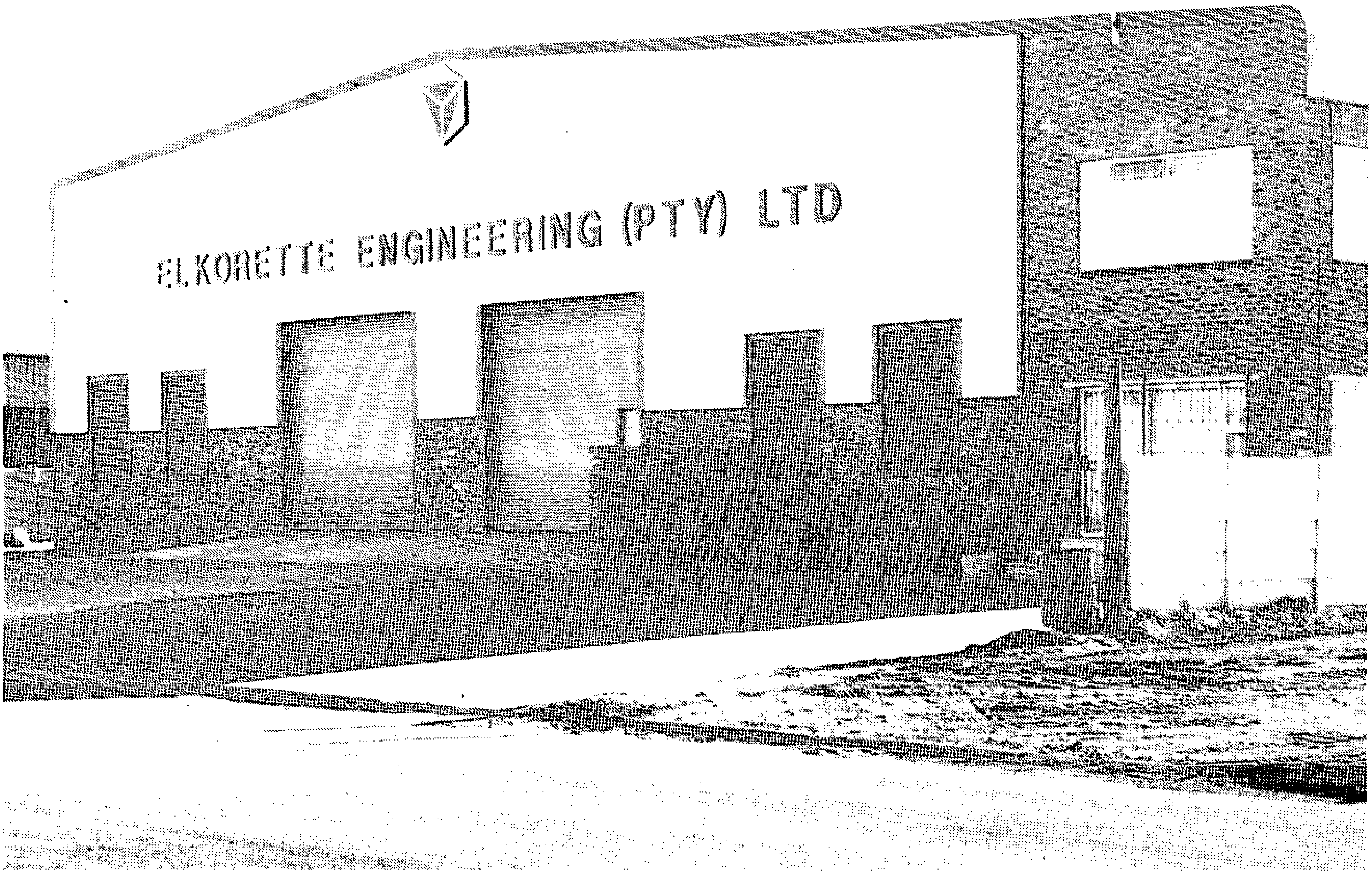
Selective re-employment was the route Sasol followed after the mass dismissal. Management, then decided there were certain circumstances which would justify re-employment — like proof that workers were victimised or intimidated into striking.



Sasol set up certain criteria for re-employment. Those who complied could be re-employed. Not unexpectedly, the political grievances workers might have harboured against the SA political system were not regarded as relevant.

Up to that time, Sasol's management had had very little contact with the union regarding the dismissals, and the issue was a new experience for the group. Clearly, it was time for a cohesive approach. So in December, talks were started and structures created for co-operative future development.

This is not to say there has been a softening of attitudes. Sasol's bottom line is firm. It is now understood that in a high-technology environment, where control of large quantities of potentially hazardous substances is involved, there is no room to accommodate what are seen by Sasol as "political" strikes.


ELKORETTE ENGINEERING (PTY) LTD

The big business of making the most of what they've got

Sasol's van der Pas ... posing the Synfuels' options

Naturally, Sasol is in the business of making money as well as chemical products. So, much research activity is related to improving current processes

Sasol's Theo van der Pas explains that the group has made enormous capital commitments to the developments at Sasolburg and Secunda. Now, it must do work protecting its investment — and optimising it. "We are continually looking at methods for improving our present plants. Even 1% improvement in production means money," he says.

Sasol also constantly re-examines the processes used in its operations, and the quality of its products. Petrol is a case in point.

The group is also required to assist its marketing companies to provide technical services for its products. "Fuels constitute the major part of our business, so we spend quite a lot of time and energy looking at fuels." Sasol has "a fairly extensive fuels laboratory" which was built quite recently to be used for engine and fuels testing.

"You are dealing here with a developing field, with new motor cars coming onto the market, so your fuel has to be suitable. Equally, manufacturers must ensure compatibility of their equipment with South Africa's alcohol blends," reckons Van der Pas.

The fuels market is a stable market but in his view is "not absolutely dead static." There are always developments in the properties demanded by present day engines, diesel or petrol. And the "small high output engine" has special demands in fuel properties, like octane rating and other aspects of composition.

Sasol also markets its alcohol blend. This blend says Van der Pas, has fairly unique characteristics". He explains: "We are about the only people in the world running this particular mixture. It poses some interesting challenges."

This is not to say the fuel is beset with difficulties. The basic problems presented by the introduction of alcohol fuel have been solved. As he points out, it is rather a case of Sasol addressing future challenges.

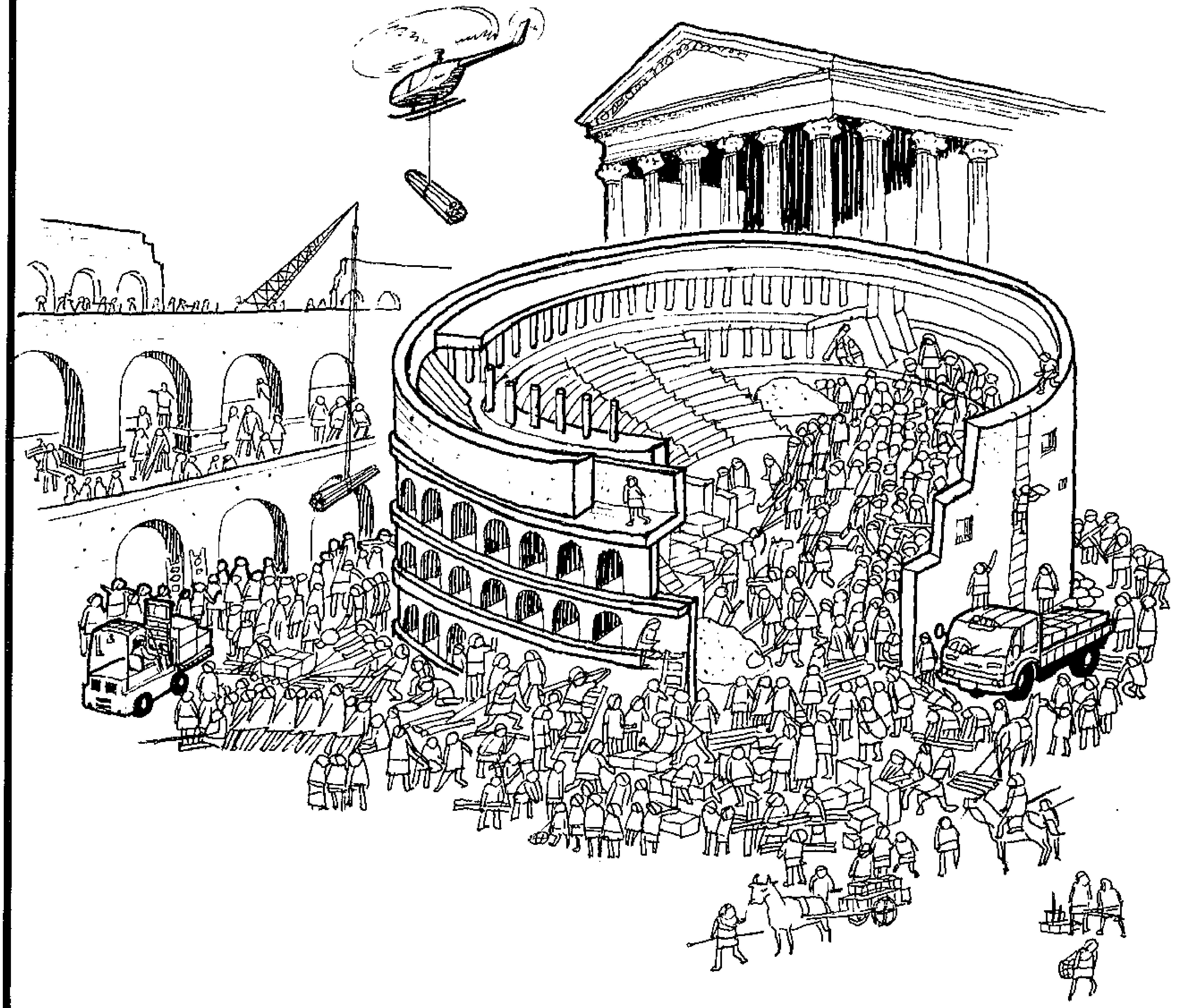
"Carburettors and fuel systems don't stay the same, that is our problem," points out an exasperated Van der Pas. "The manufacturers are always experimenting with the metallurgy, so things are not static. And the moment the metallurgy changes, fuel systems may react differently to the blend.

When Sasol planned to market the alcohol blend it went to all the car manufacturers with samples of the fuel to test. The thinking was that manufacturers could, if necessary, adjust the metallurgy of carburettors or the composition of plastic components of the fuel system to cater for the specific properties of the new blend.

A lot of the manufacturers did. And they, as well as Sasol, did tests on the alcohol blend. But, unfortunately, SA imports most of the sensitive components like carburettors. And overseas manufacturers do not specifically cater for the small SA market with its own specifications to suit a petrol containing up to 12% alcohol.

By way of comparison, a typical motor gasoline blend in Europe or US would contain some 3%-4% alcohol. In Brazil it can go up to 20% — that is quite apart from cars designed specifically to run on Brazil's own pure alcohol fuel, which is sold through a parallel distribution system.

Van der Pas emphasises, though, that Sasol "has had, and still has, very good co-operation from the motor industry." The alcohol content is no longer at issue. Sasol and industry co-operate to ensure compatibility between blend and components."



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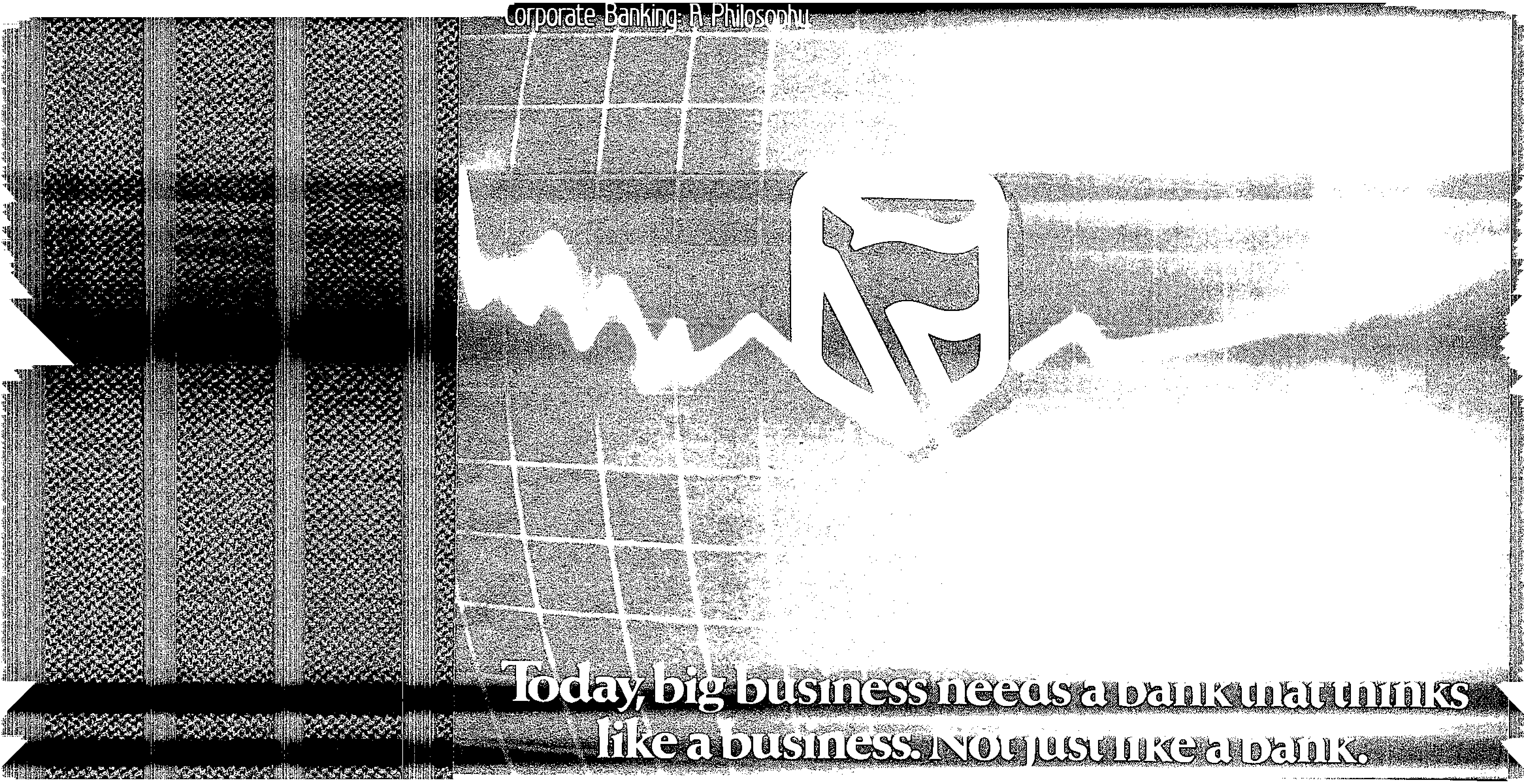
Corporate Banking: A Philosophy

Naamsa represents the motor industry in this respect.

Brink adds that adding an inhibitor to the fuel prevents corrosion. Still, as he points out, a new carburettor can always be imported that has not been tested. And you cannot always test things in the laboratory. One is still dependent to some extent on what happens in practice." For the moment then, Sasol is attempting to be one step ahead, to anticipate possible future complications.

Research on chemicals

Sasol's research is also directed to giving support and improving technical services in the industrial field, related to the group's large range of non-fuel chemicals.

André du Toit, senior GM, Sasol Ltd, notes that Sasol is keeping in touch with solubilising processes for making fertilisers that do not require sulphuric acid. Sasol also does detailed wax research to stay ahead of the market. Research also goes into making the best use of co-products like phenols and on "black products" like tars and creosotes. These substances are used as road tars, in formulating emulsions and in other applications.

Improving the fuel synthesis processes

Sasol puts a great deal of research effort into improving the gasification and fuel synthesis processes, related to future development.

Sasol employs the so-called "indirect route" to synthetic liquids — first breaking the coal down to manageable molecules (comprising "synthesis gas") through gasification, then rebuilding them catalytically into the ranges of molecules making up petrol and diesel.

Van der Pas claims that there are "exciting possibilities" for improving this two-stage process. First of all, on the gasification using different coal fractions and for gasifiers producing gas of different composition. The object is an improvement of the economies of fuel synthesis.

Sasol is also looking at alternative synthesis catalysts and improvements to its present catalysts. There is the prospect of developing "entirely new catalysts" which will give an improved product spectrum over present catalysts and will offer various operational gains.

The group is also looking to improve the "whole operation," including the "way you carry out your synthesis," as well as product work-up. So, on the synthesis side, Sasol is looking at alternatives to the familiar "gooseneck" Synthol reactors, which employ a circulating bed of fluidised catalyst.

One of the alternatives for future plants would be a "fixed fluidised bed" (ffb) where the catalst stays in suspension but does not circulate with the gas stream. The first plant of this sort bas built by Hydrocolla at Brownsville in America around 1950.

This plant never really got going due to technical and economic problems.

Sasol chose the circulating fluidised bed system for its plants at Sasolburg and Secunda, but has recently gone back to the concept of the ffb. Says Van der Pas: "Our pilot plants at Sasolburg have been running along these lines all the time, because, on a small scale, you cannot run a circulating fluidised bed."

Sasol has done a lot of work on the problems associated with fluidisation of the catalyst. "We think we have made progress and we were so confident that we actually built what we call a 'large pilot plant' or a 'small demonstration plant' at Sasolburg. It's running very well now," he says.

Sasol believes that the ffb can give considerable advantages over the present circulating system because mechanically the reactor is much simpler. Sasol is "quite pleased with the results." A few mechanical problems were experienced, but these have been sorted out and the chemical process side is also going well. So there is a strong possibility that Sasol can scale up to full commercial size in time for incorporation into the next synthetic fuel plant. There is even a chance of accommodating the new process sooner than that.

> *❝ If America had started research seriously at the same time as Sasol, then synthetic liquids would be an economic process in the US, as well as in SA. ❞*

Substitute

Sasol is also also looking at a "slurry bed" as a substitute for the Arge fixed-bed reactor (still in use at Sasolburg for sythesising waxes), employing a catalyst in a fine powdered form. This slurry bed process gives promise of easier scale-up than the Arge reactor, which in its current form has significant limitations of scale.

One possible use for extra Arge wax production in future synfuels plant would be to achieve a further "diesel swing" through hydrocracking wax, back to diesel. Van der Pas explains: "Arge and Synthol are not too far apart and in developing either process your direction will be determined by the products most desired.

"So, if you want more diesel fuel, you would set out to improve the fixed-bed (Arge) route. In any event, research on the Arge process is also related to the demand for waxes as final products, especially Sasol's unique hard waxes." Sasol has already done a lot of work over the years to optimise wax production.

As to the issue of patents, Sasol's technological know-how is unique.

So Sasol is effectively free to deal with the processes as it sees fit. Du Toit adds that Sasol is in a position to licence its technology. And this counts.

Whatever improvements in the present processes are achieved, Sasol hopes to incorporate in future plants. Du Toit notes with some irony: "Considering the steepness of the various learning curves in synfuels technology, if America had started seriously at the same time as Sasol, then synthetic liquids would now be an economic process in the US, as well as in SA."

To summarise, says Van der Pas, if one looks at the coal-based synfuels scene today, there are three routes. "One is Fischer-Tropsch, where you first gasify the coal and synthesise afterwards. The methanol route is very much the same , as you must start by making synthesis gas, while the third is direct liquefaction."

Gasification

There is, in practical terms, not a great deal of difference between the three. Therefore, in effecting improvements, one looks at the individual components that make up these processes. In Sasol's case, gasification is an important step, particularly for SA. Here, whether you use the methanol route or whether you use Fischer-Tropsch, whether you use synthol or fixed bed, "you cannot get past the gasification step."

In terms of basic research, Sasol has not done a great deal of work, except looking at the properties of coal. But its active in the development of gasification as a specific step, that is in the Lurgi process now in use, as well as in the study of alternative gasification processes.

What has been achieved with the Lurgi gasifier has been a notable scaling up together with other modifications of an existing concept. Whereas Sasol's first gasifiers had a capacity of 25 000 cubic metres of raw gas one now talks about a gasifier in operation at Sasolburg — Mark V — having a capacity of nominally 100 000 cubic metres. At Secunda, at both Sasol 2 and 3, Sasol has deployed the Mark IV gasifier. This has a diameter of 4m against 5m for the Mark V.

Gain in economy

The multiplicity of gasifiers needed for the current scale of operations at Secunda demonstrates the need for further scale up. There would still be a gain in economy of scale in going from Mark IV to Mark V: Sasol would certainly use Mark V at any new complex and that would "bring us back from about 40 per factory to about 20 units, which is a step very much in the right direction in terms of operability," he points out.

The effect on capital commitment is not as

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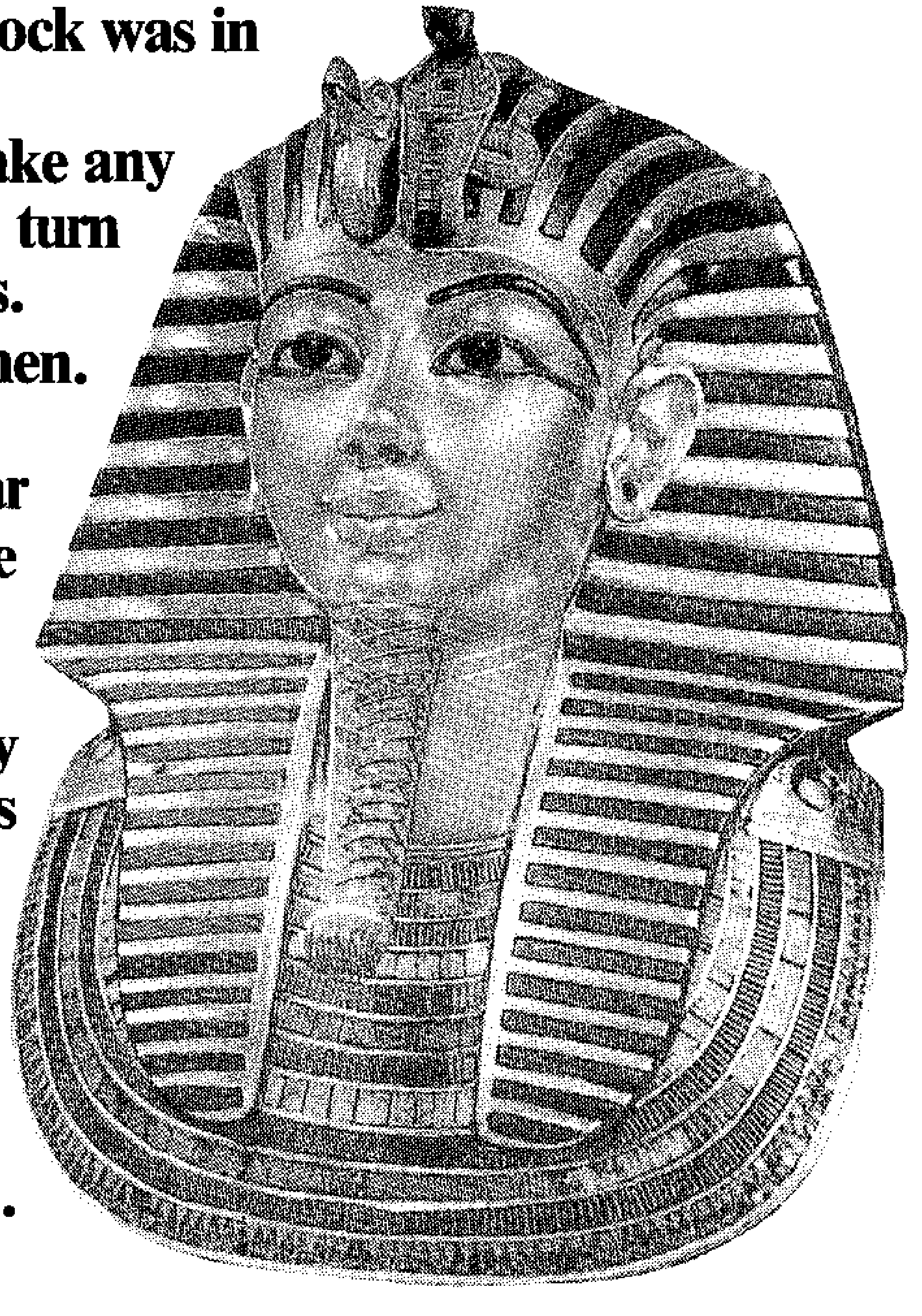

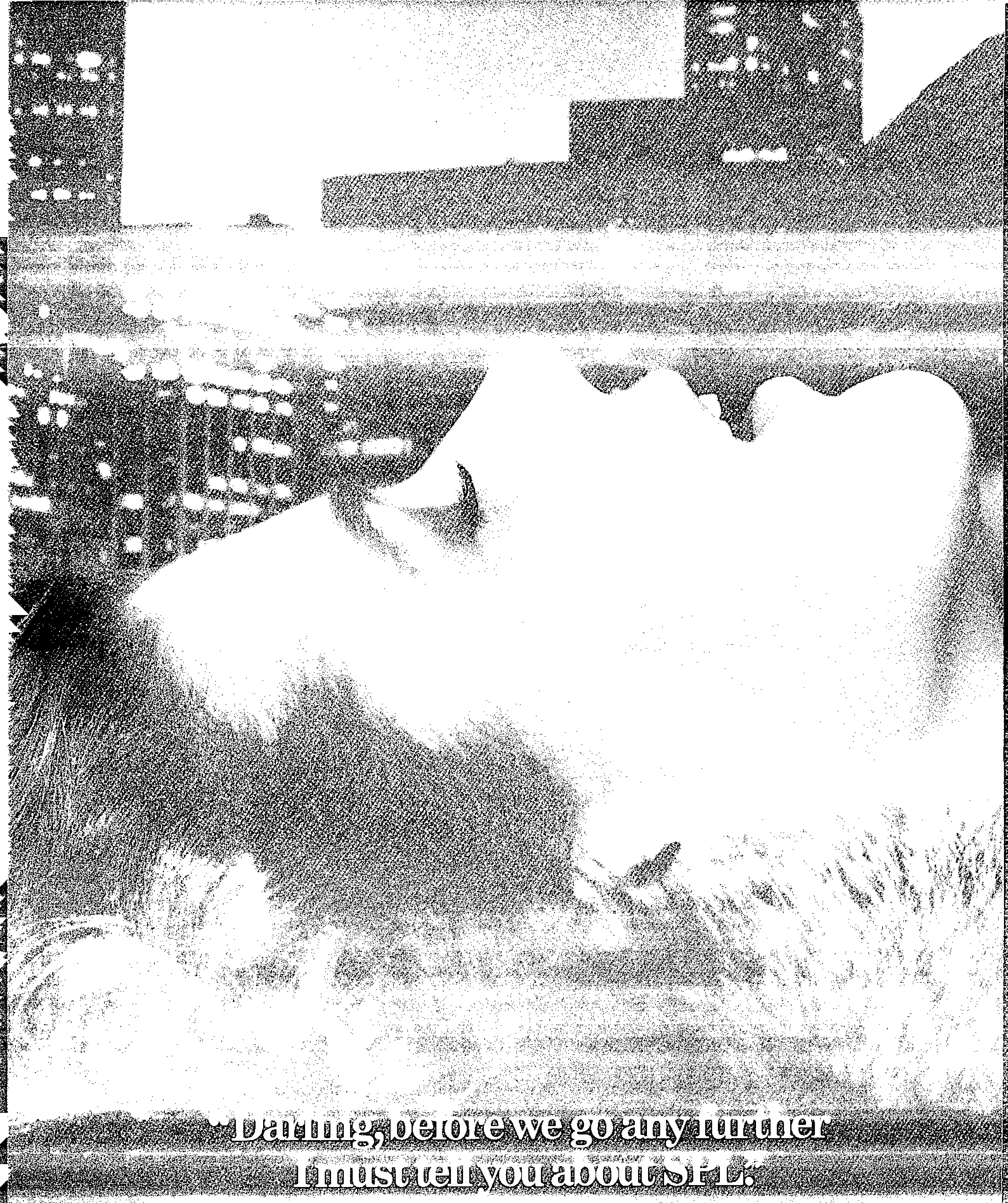

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Price	R31 300
GST at 12%	R3 756
Radio/Tape	R876
GST at 12%	R105
Sub-total	R36 037
36 months lease at 27%	R1 439 per month
36 months total (est.)	R51 804
Perks tax 1986 (est.)†	R2 319
Perks tax 1987/88 (est.)†	R9 275
Sub-total	R11 594
Top speed*	180 km/h
Economy (litres per 100 km)*	10/100 km

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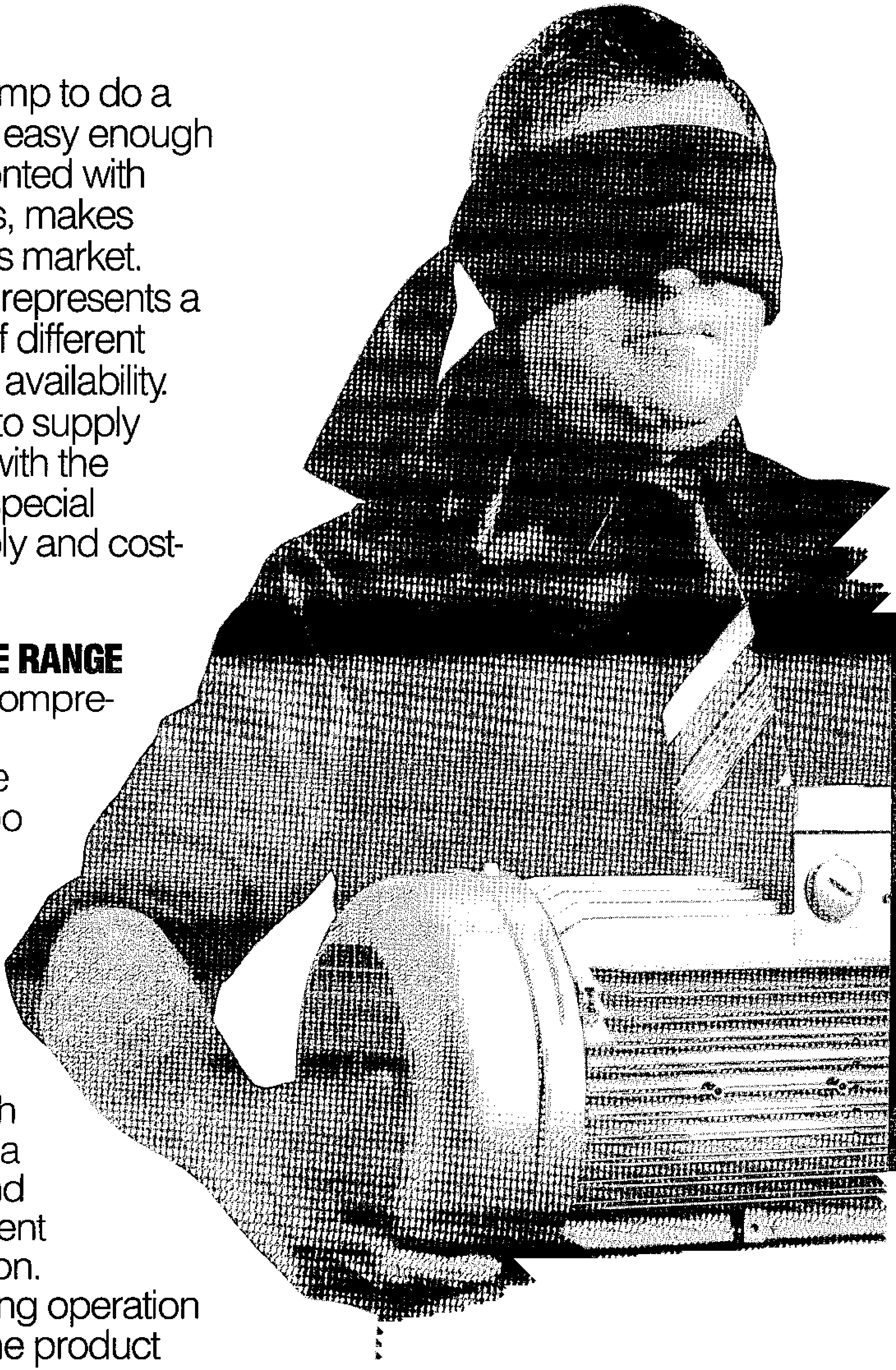

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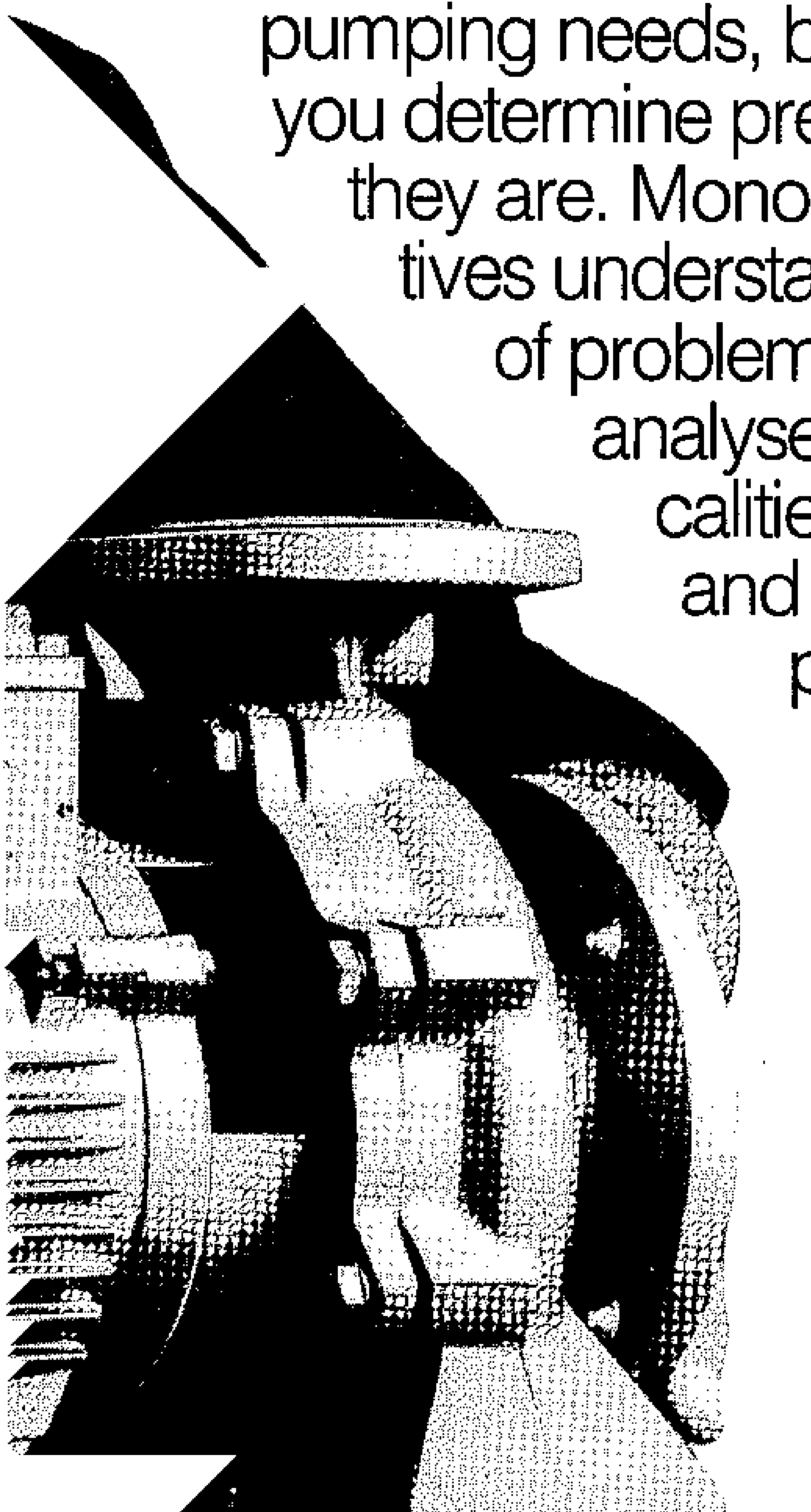

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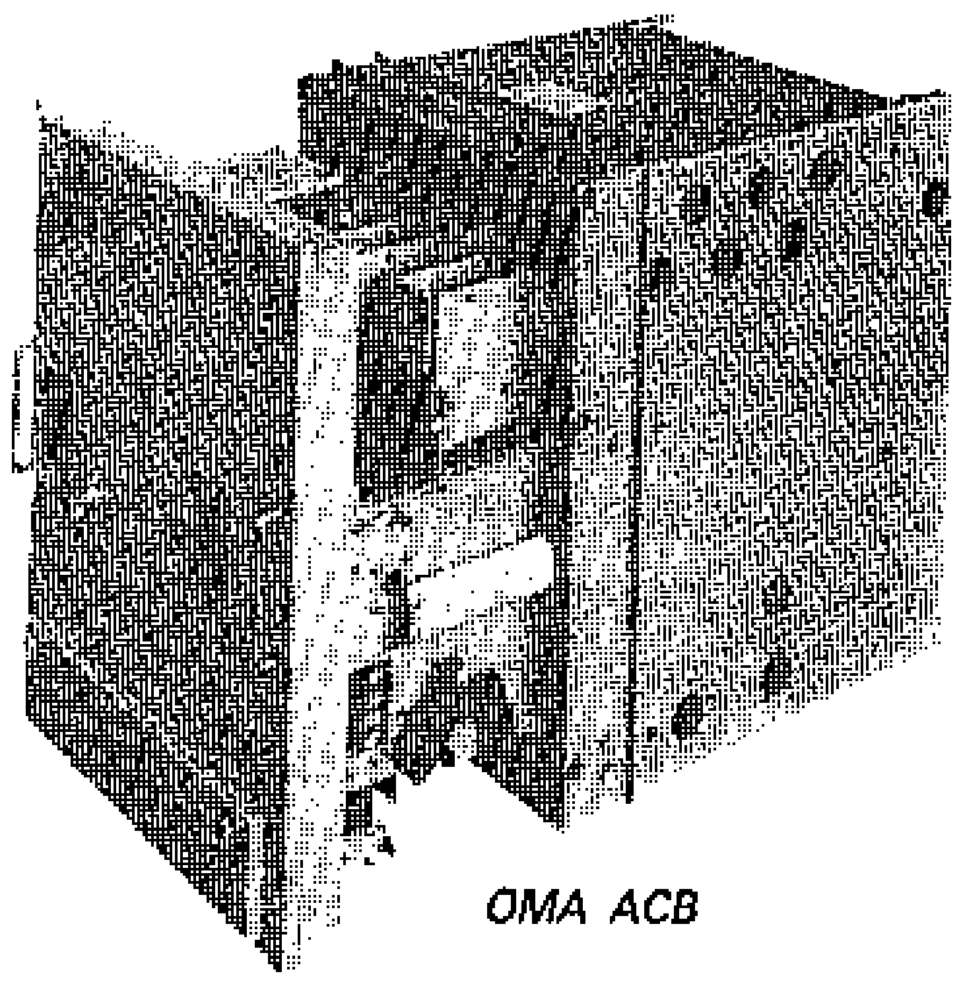
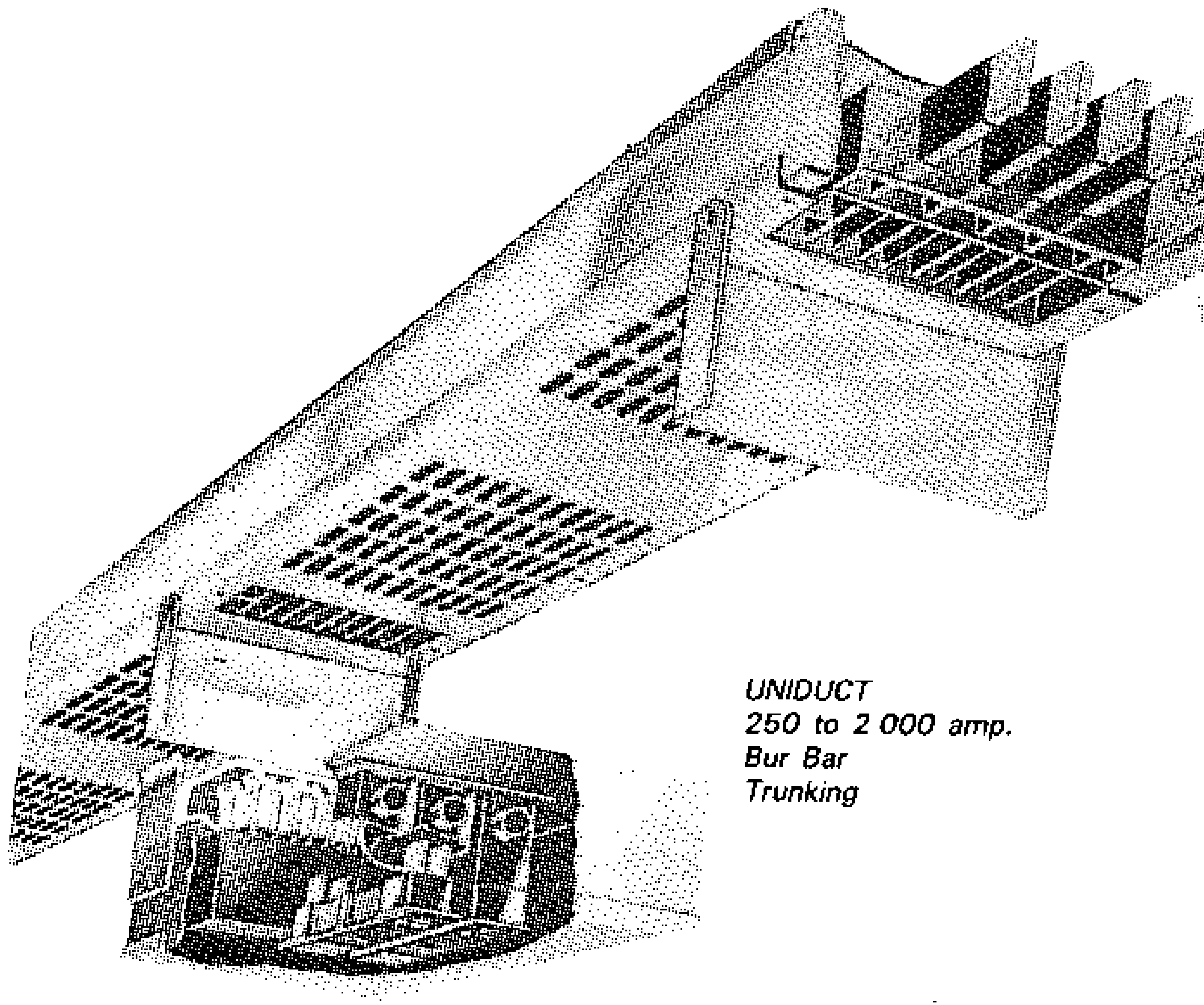


OMA ACB



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250 to 2 000 amp.
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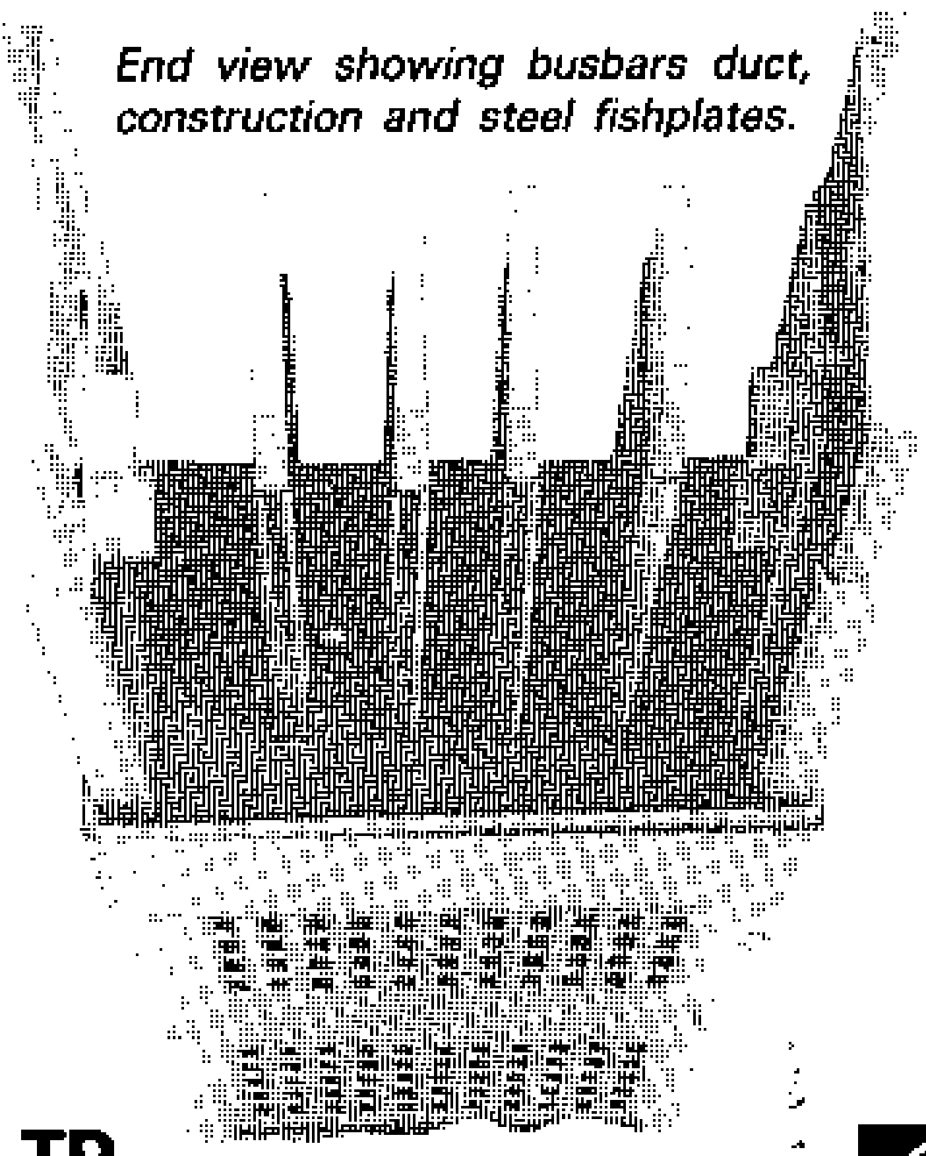
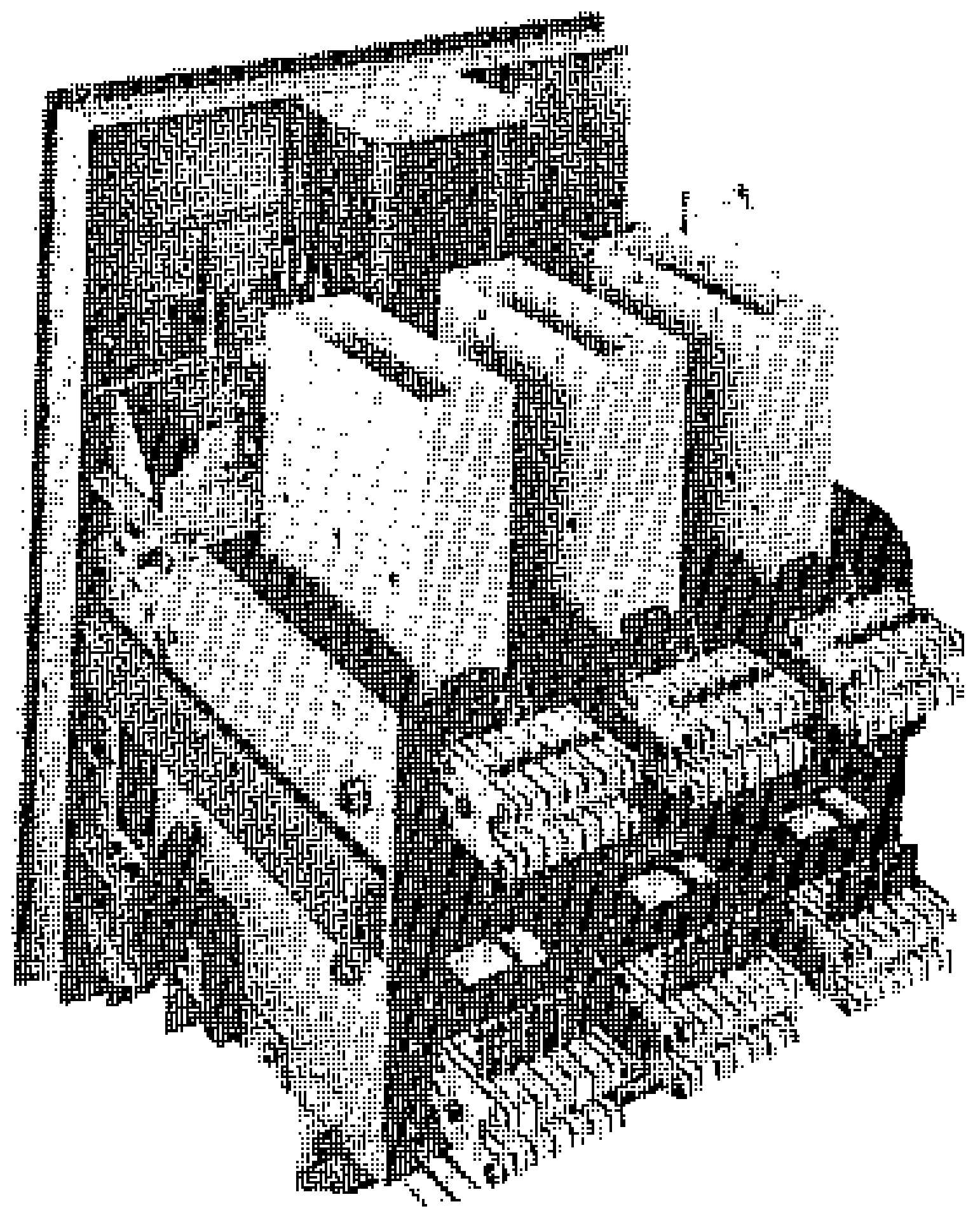
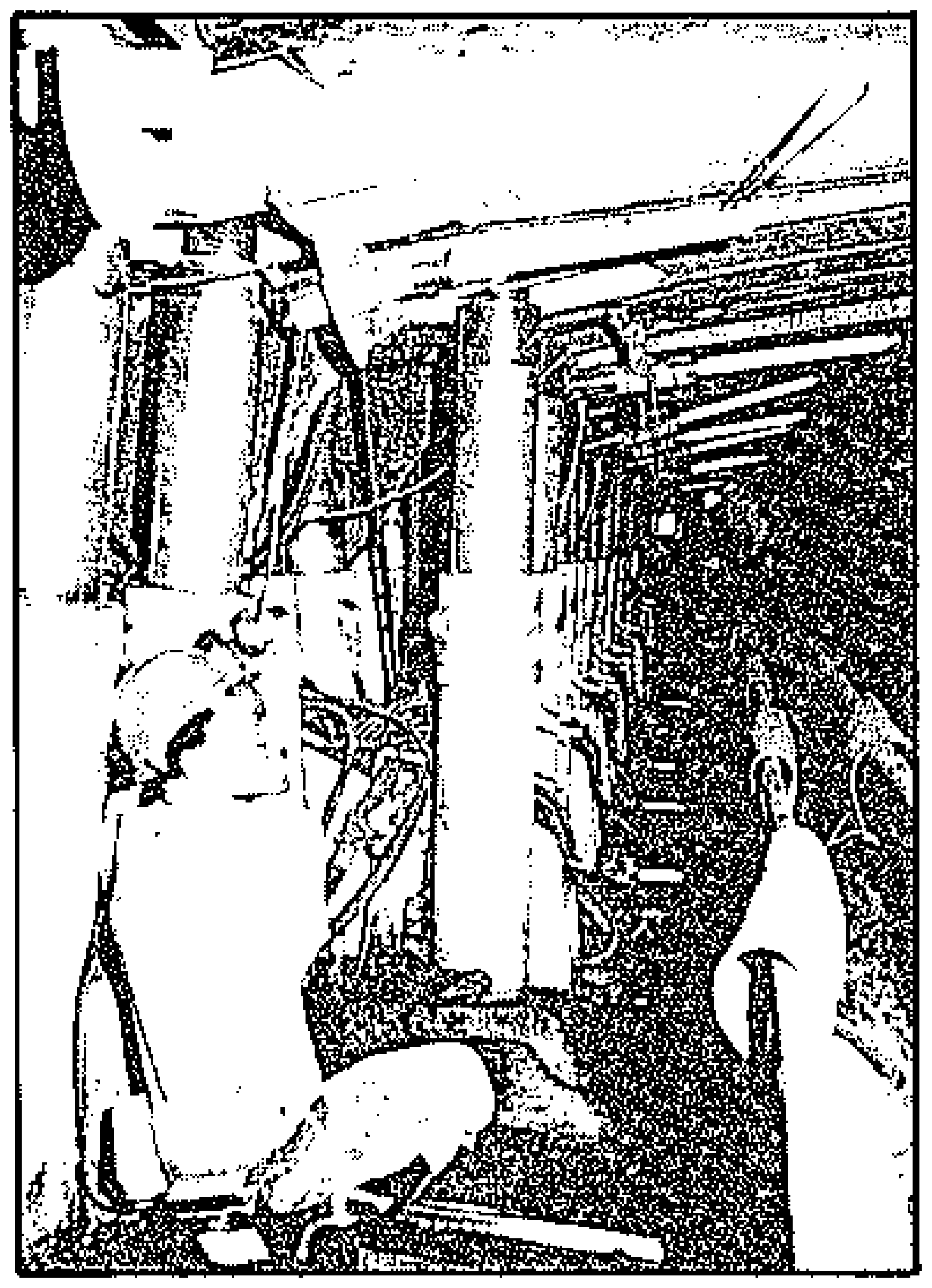


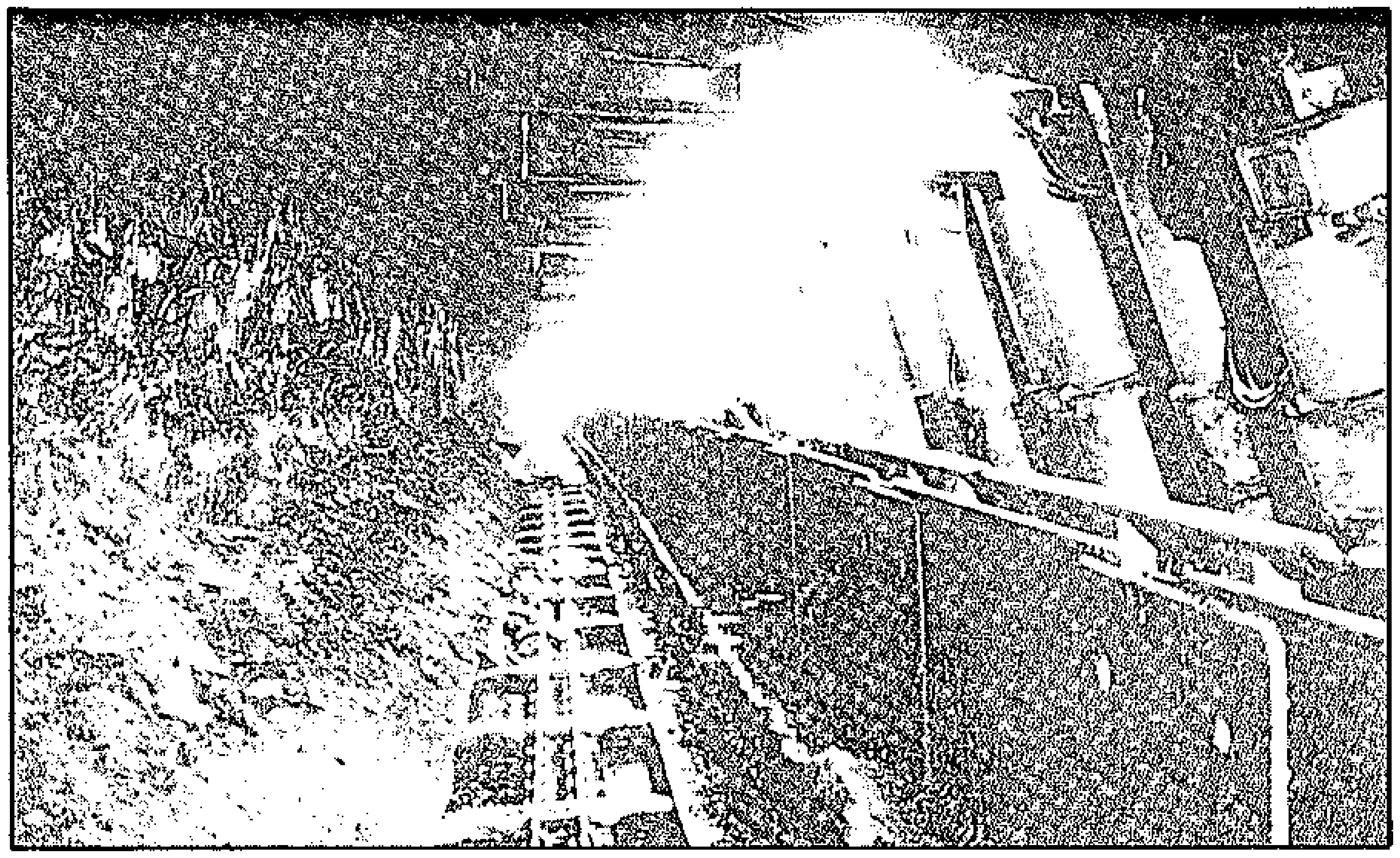
End view showing busbars duct, construction and steel fishplates.



Rear view of draw-out contacts of ACB



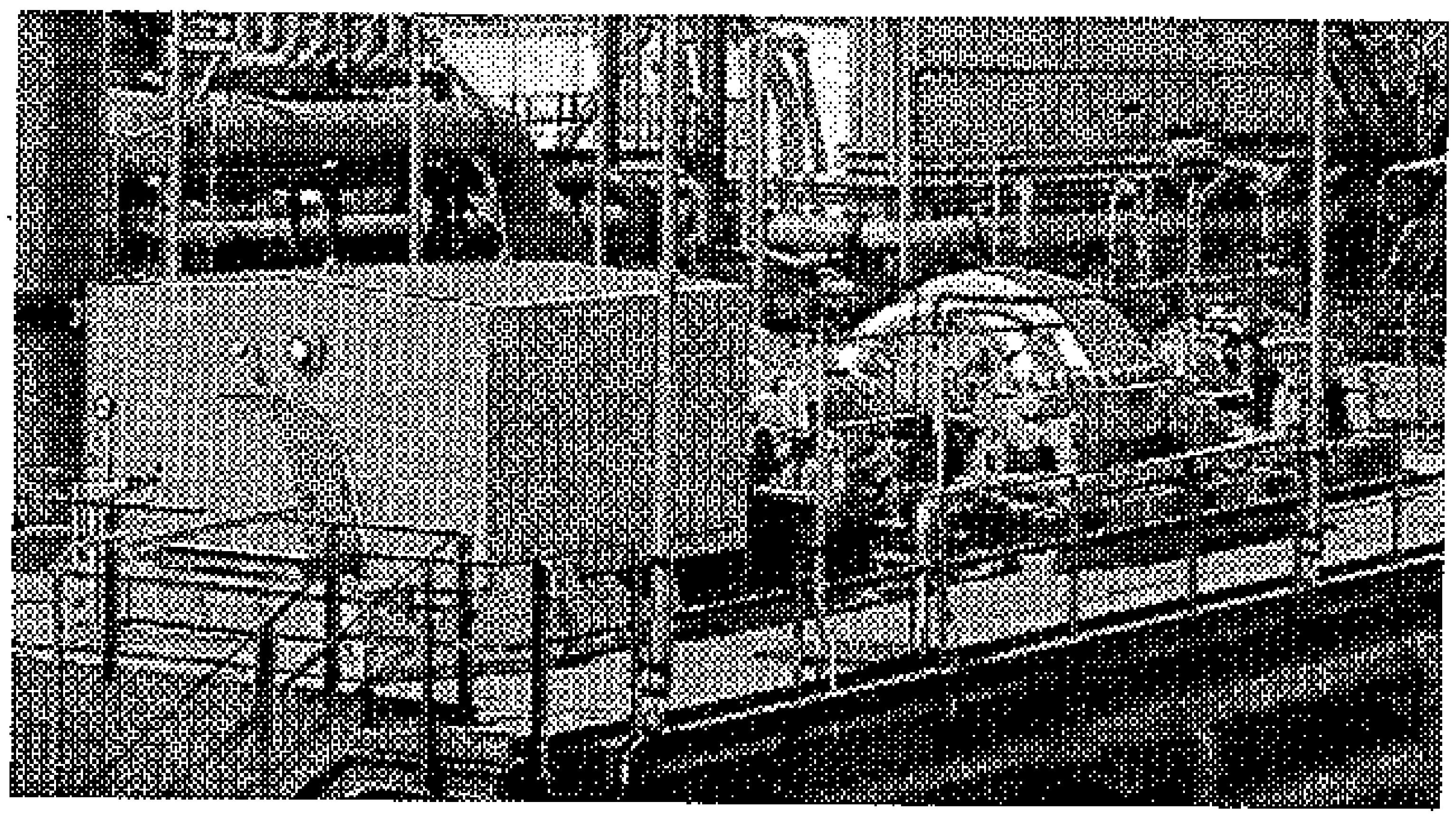
4-Leg 640 t Hemscheidt shield at Secunda Colliery



The Halbach & Braun heavy-duty armoured face conveyor being used in conjunction with the Hemscheidt G553 2-leg heavy-duty shields.

Sulzer compressors

Before you convert coal, you may have to convert air...



... to oxygen—economically and efficiently. At the heart of most coal conversion processes is a requirement for a lot of oxygen... produced in an air separation plant at lowest possible cost.

Sulzer experience with air separation goes back to 1928. Since then, we have provided equipment for hundreds of plants throughout the world with air, oxygen and nitrogen compressors for blast-furnaces, steel and copper converters, and chemical processes, many of which already equal the volume and pressures needed for coal conversion.

For example: The Union Carbide, Linde Division, oxygen plant at Burns Harbor, Indiana, has supplied 4000 tons of oxygen per day to a nearby steelworks since 1977. Two 25-MW Sulzer air compressors of 300 000 Nm³/h and two 9-MW oxygen compressor trains, each supplying 55 500 Nm³/h at 34.2 bar, are key to the efficiency and reliability of the plant.

Another example is the selection of Sulzer oil-free labyrinth-piston compressors for the Union Carbide, Fort Saskatchewan plant. Both machines have three compression stages and six pistons delivering 11 000 Nm³/h of oxygen at 35.5 bar. They have no piston rings to wear out and, as our turbocompressors, are completely safe for compressing such a hazardous gas as oxygen absolutely oil-free.

For the world's first commercial-size coal conversion applications in the USA, Sulzer is supplying the air and oxygen turbocompressors for the 1000-tons/day Coolwater plant and the oxygen compressor trains for the 3100-tons/day Great Plains plant. These installations add to the many other experiences Sulzer already has in compressing large flows of oxygen to high pressure, including the worlds largest plant involving 15 compressor trains totalling approx. 30 000 tons/day of oxygen at the giant SASOL oil-from-coal plant in South Africa.

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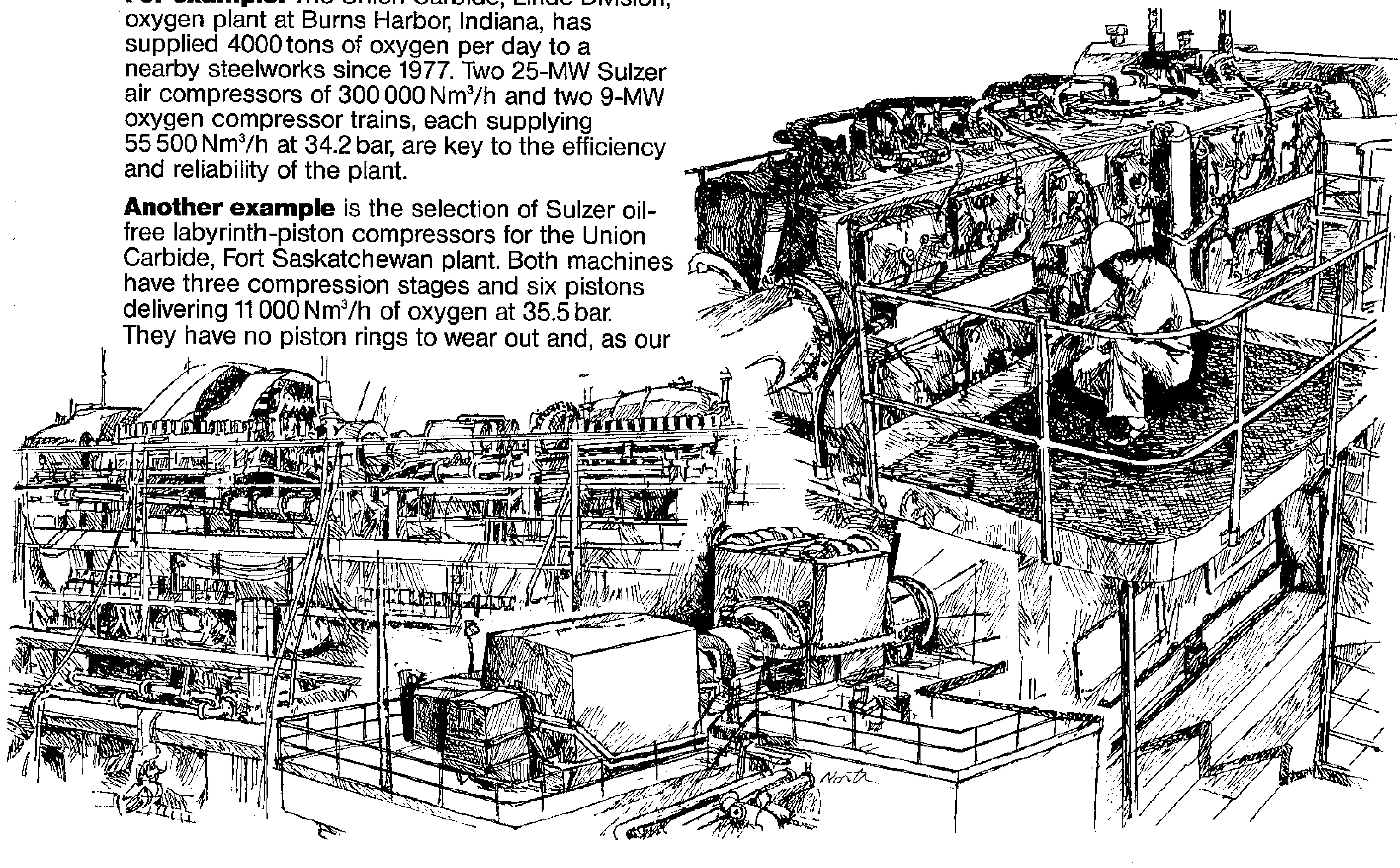


clear. Du Toit notes that a disadvantage of scale-up is what an insurer would call "concentration of risk." If you start with eight parallel Synthol reactors and then reduce the number to four through scale-up, you lose 25% of capacity instead of 12,5% if one converter goes down. So your scaled-up reactors need to be more reliable. On the other hand, too much repetitiveness (as in the case of the 80 Lurgis) becomes complex, as each individual reactor does not get the attention it requires.

It is important to understand that coal gasification is not a chemical process in the true sense of the word. Explains Van der Pas: "You are dealing with solids of variable nature in size and properties. So it would be easier if you could use a smaller number of gasifiers. And this is the aim."

But Du Toit counters: "You would never like to reach the situation of a refinery which has only one crude distillation unit."

Van der Pas says that although Sasol has always been happy with its choice of gasifiers, it has become yet happier as time went on, thanks to its examination of alternatives. One important drawback with Lurgi is that it requires a minimum coal size — hence the investigation of alternatives. But it was during that investigation Sasol "rediscovered some superior characteristics of Lurgi."

Today a number of other processes are materialising. One is Texaco, which takes up to 70% of fine coal in a watery suspension, which is then pumped into the gasifier which operates at very high temperature and pressure. Texaco operates in a slagging mode (ie the ash is produced in liquid form). But unfortunately for SA, it is "not a particularly attractive alternative" because of our high-ash coal. Notwithstanding, Texaco *can* handle fines (fine coal) and it is becoming commercial in the US as well as in Germany and Japan. So it makes sense that Sasol is "keeping an eye on it."

At present, the coal fines go to the boilers for power generation. Van der Pas argues that Sasol would prefer not to be in the business of power generation. Du Toit agrees that "in our set-up it is more economical to turn a coal particle into liquids than into power."Also, the diversion of coal fines from synthesis involves enormous additional mining operations — out of some 36 Mt of coal, one third now goes to the power plant.

Would Sasol use the existing design if another synfuels plant were built in the near future? Van der Pas says: "For an engineer, development is the key word. One is always inclined to do it differently the next time. One actually needs a happy medium between development and experience. But for gasification we would certainly go to the bigger gasifier."

Sasol would have to design the refinery differently next time, taking account of the "diesel swing" needed, as well as to cater for lower lead in petrol. But conceptually, a new plant would be very much the same as Secunda's. And this makes sense. As Van der Pas points out: "The technical risk would be limited bearing in mind the investment involved."

As for the ffb Synthol reactor, Sasol already has a small unit in operation. The results are encouraging. He says: "Apart from inevitable problems we have successfully demonstrated the fluidisation and the conversion properties." Sasol hopes that it will be able to demonstrate the ffb at Sasol 1 for the first time on a commercial scale. The reason for this location is not to expand Sasol 1, but because the existing infrastructure enabled Sasol to put up "just a reactor without everything around it."

If the project turns out a success, Saso would like to incorporate the improved reactor system in any future plant. But this is a matter of timing. If the ffb is not ready for a future Sasol 4, the circulating bed will be used."

Van der Pas says Sasol would then make adjustments to the existing units "that experience has taught us at Secunda."

High-ash coal

A longer term issue is whether Sasol cou use coal with ash content above 35% as SA supplies of lower-ash coal become exhausted. Says Van der Pas: "Sasol can easily go up to 40% — and, in fact, has done so at Sasolburg. Here the coal is generally 30 to 32% ash. In some areas of the mine though, it rises to 40%."

But high ash content has "an economic cost" as you have to handle increased quantities of waste material. "At some stage your ash handling can become as expensive as your coal," he points out.

Economics aside, Sasol sees no technical reason why it cannot go beyond 40% — the gasifiers will take higher-ash coal than that. On the boiler side, though, high ash becomes a problem. There is a new development however, which Sasol is following with interest — the fluidised bed boiler. This has no ceiling on ash content.

When it comes to high ash content then, Lurgi gasification gains advantage over alternatives. Then the other processes like Texaco become less and less attractive as the ash needs to to be "fed and melted."

Timing the next synfuels plant

Van der Pas says that MD Joe Stegmann has acknowledged the need for further plant. Goverment has an energy bank reserved for further synfuels developments. And the authorities would like to retain a minimum level of fuel self-sufficiency for SA.

If we accept that any synfuels plant, regardless of size, will take five years to complete, "we are talking of 1990," reasons Van der Pas. So SA must be getting nearer to the planning stage for the next plant.

What form could SA's next synfuels plant take? At present various groups are looking

PROTECTIVE INSTINCTS?

Sasol MD Joe Stegmann does not regard himself as a protectionist. However, he feels it is important to distinguish between a developed, mature economy and one still in the throes of development. South Africa, he says, is "a rather strange animal." It is a plural economy, not simply a dual economy.

"We cannot hope to develop our huge Third World sector if we cannot draw on the resources of a strong First World industrial economy," he argues. This implies some protection against the devious forms of dumping and unfair competition from mature economies. Even the US and Japan resort to both overt and covert forms of protection.

"But SA must remain selective in protecting its industries," cautions Stegmann. The result of indiscriminate, heavy protection will be flaccid, unprofitable companies.

"However, because of the absence of economies of scale in SA, and remaining weaknesses in the productivity of the labour force (itself a function of the Third World element in our economy) we must have some form of protection. This should be reasonable, modest and highly selective."

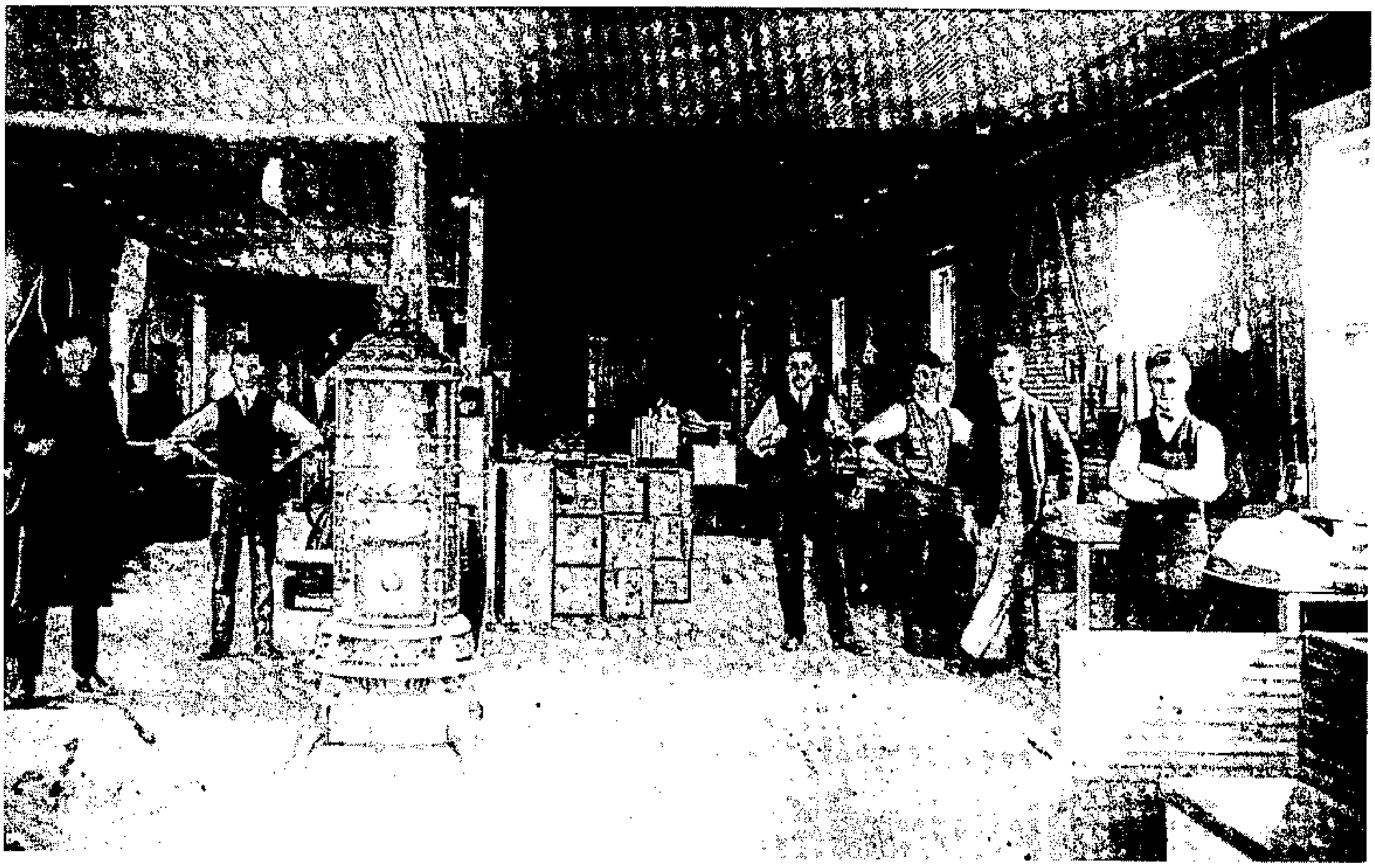
Although small, specialised industries may be able to train their employees rapidly to the standards of productivity attained in the industrial world, SA companies "cannot, in the short term, completely escape from their environment," reckons Stegmann. "This means you have a tremendous task in advancing productivity in the largest industries to internationally competitive levels."

He also considers it important to have at least some capital-intensive industries in a developing economy like SA's, even if they do not provide many jobs directly. A developing economy cannot achieve the economic muscle to grow vigorously, without a significant proportion of properly selected capital-intensive industries contributing a high, added value. Jobs in other sectors flow indirectly from jobs in capital-intensive industries. These industries, generally speaking, beneficiate primary resources. By import replacement or through exports, they make a vital contribution to the balance of payments and economic growth.

Sasol considers that Pretoria's current view on the appropriate level of protection for the chemical industry is reasonable, provided that unconventional forms of dumping must be detected.

There has been no new major investment decision in the heavy SA chemical industry for over five years — a worrying phenomenon. ■

Once every hundred years, we allow ourselves to look backward.



Being a forward-thinking group of people, it feels a bit out of character for us to look backward.

But this year, as Honeywell joins the handful of American companies that have lived to see their centennial, it seems appropriate to reflect upon a few of the people and events that have made our longevity possible.

We'd like to remember Albert M. Butz, the quiet Swiss immigrant who, in 1885 in Minneapolis, filed for the furnace control patent that started it all.

Fred Denison, hired in 1908 to run a screw machine, who, despite the fact he had only a fourth grade education, came to be regarded as one of the most gifted inventors of his day.

H.W. Sweatt, who succeeded Mark Honeywell as president in 1934, and once remarked, "Whatever else we may do, we must strive always to keep it fully alive, this spirit of restlessness."

People like Erik Wistrand, a factory worker in the early part of this century, who would use his motorcycle to run shop equipment when the power went out.

Daisy Arnold, who became our first female supervisor (or "forelady," as it was dubbed in that day) in 1923.

And Bill Knack, who joined us in 1920, and in more than a quarter century of employment, never reported to work late, never missed a day on the job.

We'd like to recognize Bill McGoldrick, who headed the team that developed the electronic autopilot used in World War II. We'd like to acknowledge the Honeywell engineers who helped stir imaginations by advising on the film *2001*.

We'd like to congratulate our employees who developed the first centralized building control system and installed it in the White House. The ones who helped launch and land the space shuttle. And the group who pioneered the laser gyro.

In short, we'd like to thank all of our 94,000 employees around the world, who have helped turn problems into solutions, visions into reality. And we'd like to extend our appreciation to the many customers with whom we've enjoyed close, productive business relationships.

And now, having given the past its due, we'd like to once again turn our attention to the future; concentrating on the next hundred years with the forward-thinking outlook that has brought us to where we are today.

Honeywell 100 Years

Together, we can find the answers.

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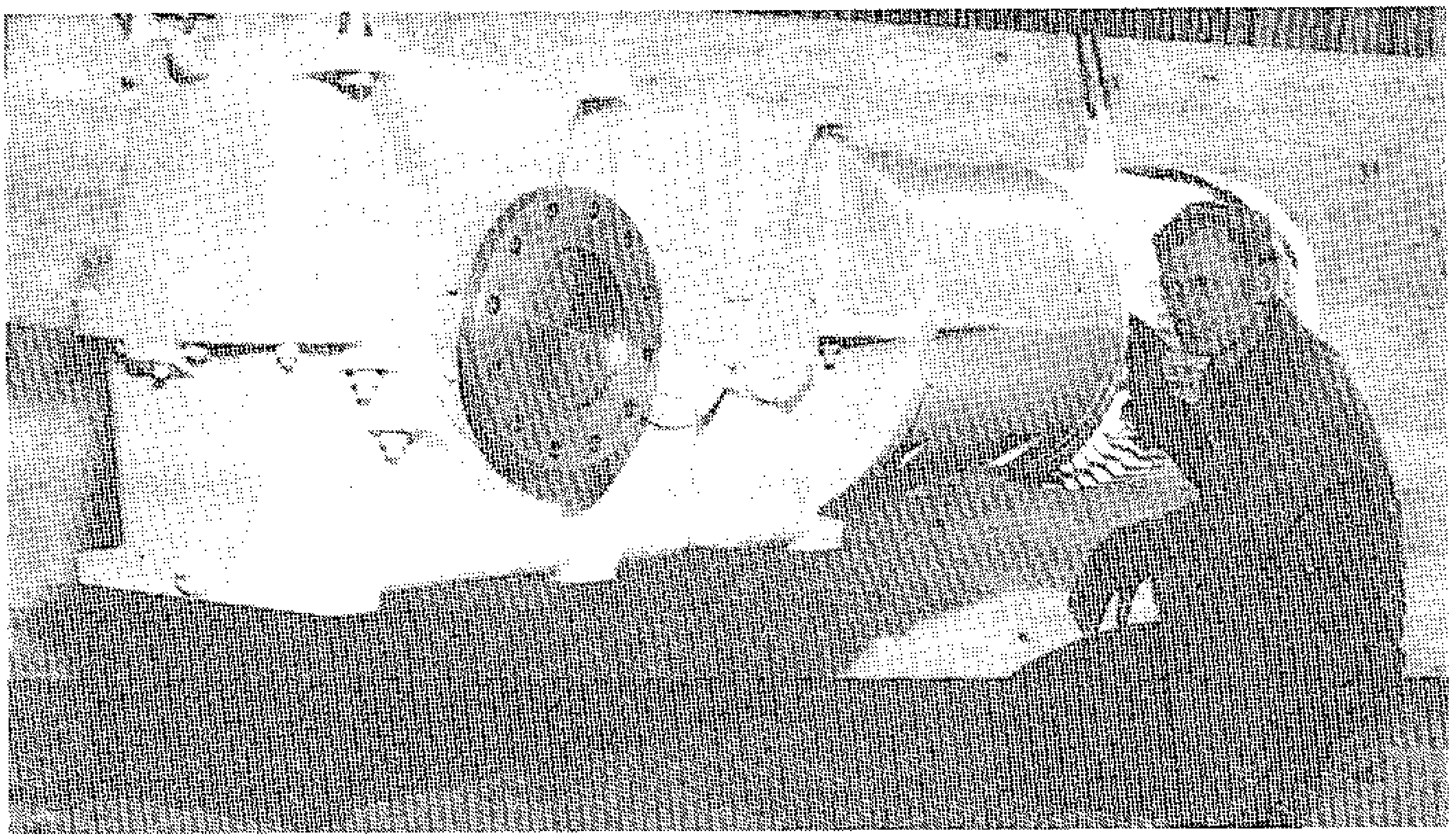


at "real plants" as opposed to "paper plants." But Sasol itself has made clear that it is not ready. It is still squeezing extra output from the present plants. Then there is the major constraint of finance. Van der Pas says Sasol "would like to see someone else in the field."

"We have an over-concentration in synfuels in SA, so we believe that someone else coming in would be good for the country and for us. A new entrant would provide a measuring rod."

Du Toit notes that Sasol also currently has a monopoly in the local supply of ethylene, which is not desirable. SA is in balance at the moment, but by his admission, it would be nice to have another supplier of ethylene.

"The time is ripening," says Du Toit, "for another synfuels plant. But it will not be put up by Sasol. There are several mining houses with large coal resources, while the lead time makes it logical that SA gradually moves to another decision."

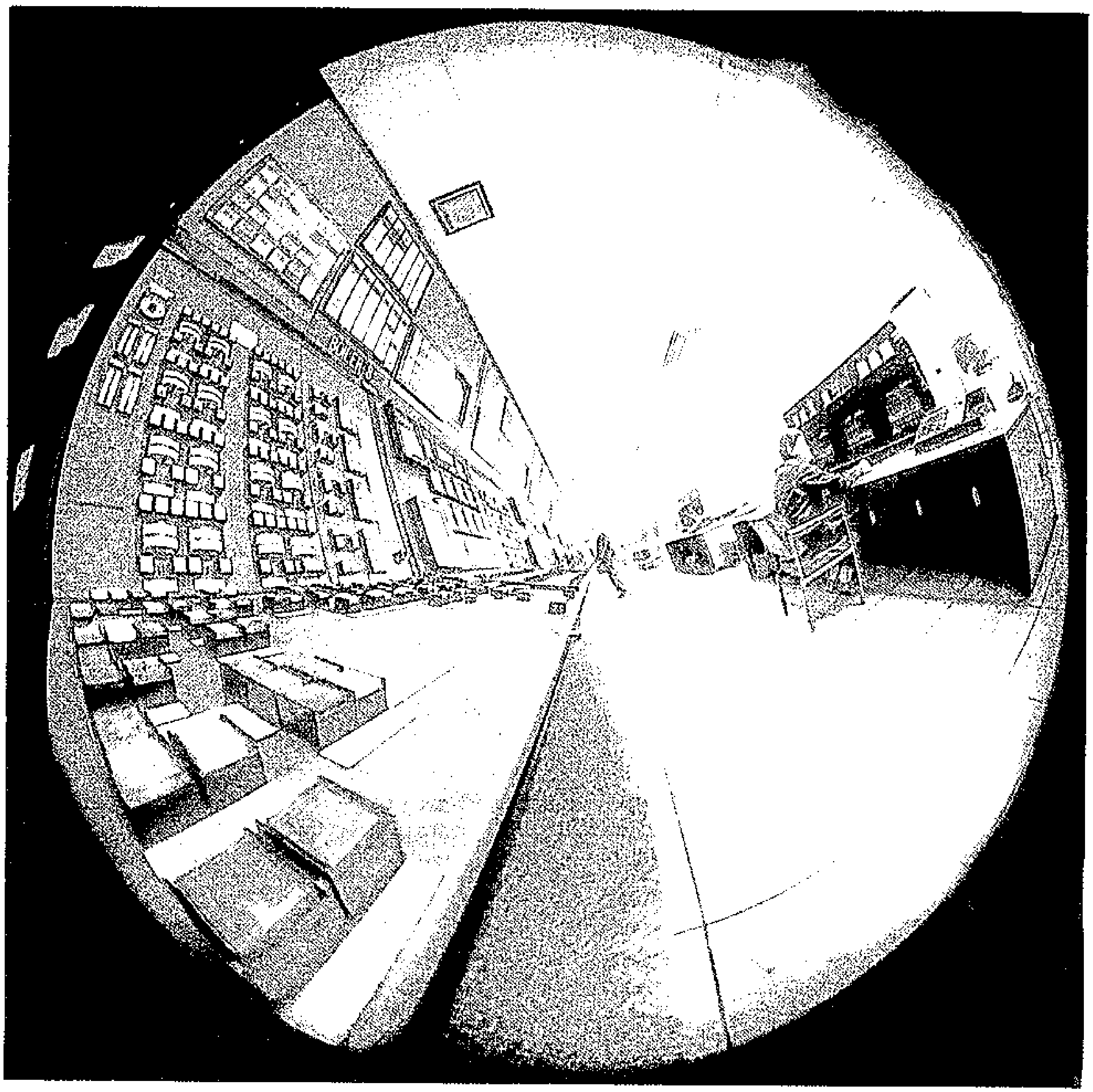
From a technical point of view, says Van der Pas, there is not much to be gained by building a bigger plant than Sasol 2 or 3. There are already so many gasifiers at Secunda that there is no real reason to go bigger — not to mention the funding requirement. Indeed this might make it better to go smaller. Sasol 2 today, would cost R6 to R7 billion.

Could the next synfuels plant be based on natural gas at Mossel Bay, or will it be coal-based?

Time will tell. ■

Processes — new moves

Sasol has a tried and tested means of obtaining synthetic fuel. But it's looking at other ways too



Advanced technology . . . Sasol is there

Sasol, after its inception, selected the combination of Lurgi gasification and Fischer-Tropsch synthesis (in its Arge and Synthol variants) as the route from SA's high-ash coal to synthetic liquid fuels. But chemists have built up a big body of knowledge about other synthetic routes, which Sasol monitors carefully. It also does its own research into selected aspects of alternative synthetic routes.

Partly because of the long lead time built up in commercial operation of Lurgi/Synthol, and partly because of the strength of the technology, Sasol will probably stick with the existing processes. But the group "is not wedded" in principle to any given synthetic route to petrol and diesel.

Basic research for the future is devoted to processes "a lot different from those we employ today," says Van der Pas. Direct liquefaction of coal has been under study since 1970, when Sasol built a laboratory and a pilot plant for studying the direct liquefaction of coal in the presence of hydrogen at Sastech. (The independent work on this process at Potchefstroom University came later.)

In order to make "solvent refined coal" (src) the group has done a lot of work, also in co-operation with some Japanese companies, to apply Sasol's technology for coal hydrogenation to Australian brown coal. Src is a hard, pitchlike product which comes from brown coal or bituminous coal.

At first the Japanese idea was to use the src as an additive to poor quality coke in the capacity of a coal extender. Five to 10% of src added to low grade coal gives very much improved coke. But the steel market "never really got out of the doldrums" and the Japanese companies could not get government money for this line of research.

So the Japanese switched objectives — by taking a further step to convert src to liquid fuels. This objective is achieved by further hydrotreatment of the solid src.

The Japanese companies are being supported by their government in this direction of research, and they have already built a 50 ton per day pilot plant in Australia, "very close to start up." Based on the starting point of Sasol's technology for making src, they have done their own work towards synthetic liquids, using src as an intermediate.

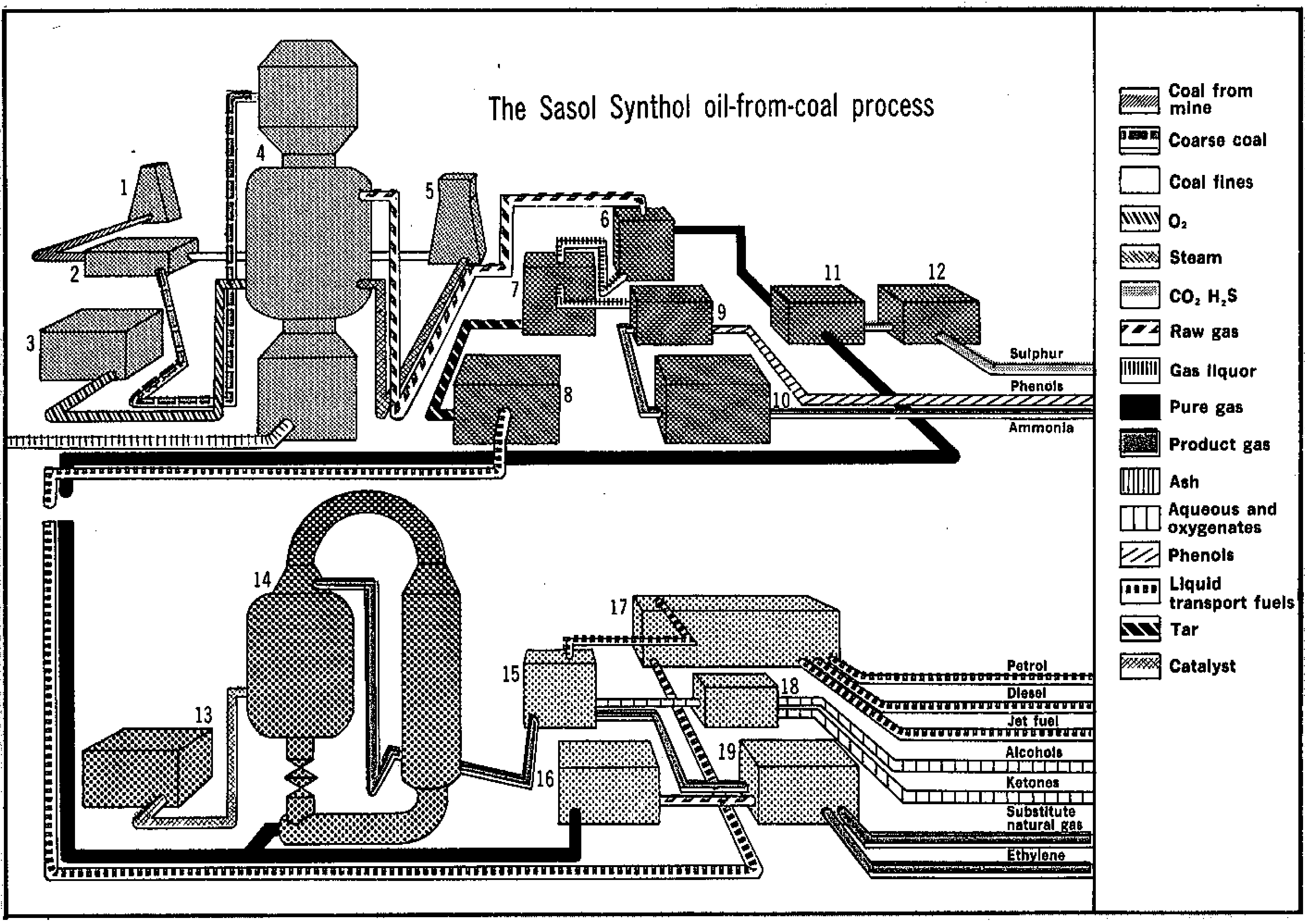
When src is made, the ash and any unconverted coal is separated out by filtration. So brown coal (lignite), which is very low in ash, is most suitable for this process. In particular, Australian brown coal is unique in having only one or two percent of ash. Even German brown coal has 5%-6%.

The major deposit of lignite in Victoria has the added advantage of lying "in a hundred metre thick layer." Although the principle of treatment is the same, brown coal has less ash but more water than SA coal, introducing variations in operating conditions. (The brown coal was formed at a later geological stage than "Gondwana coals" like SA's high-ash coals, and is quite different in composition).

Sasol became interested in direct liquefaction because it thought, at first, that the method might be cheaper than its present route and much more efficient.

Meanwhile a lot has happened overseas. The Americans have built at least two large plants to process 250 t per day, starting from bituminous coal. The Germans are very active in this field, to this day.

But the Americans have shut down their pilot plants. However, perceptions now are that liquefaction — the "direct route" — is still expected to be somewhat cheaper than



Coal from the mine (1) is sized and screened in the Wet Screening plant (2). Coal fines are used to feed the power plant boilers (5) to supply steam for gasification and other processes and for power generation. Sized coal is fed to Lurgi gasifiers (4) together with steam and oxygen, the latter supplied by an Air Separation plant (3). In the Lurgi Gasification Unit, coal steam and oxygen react to produce raw gas with an optimum hydrogen/carbon monoxide ratio. The raw gas stream from the gasifier also contains carbon dioxide, methane, nitrogen, hydrogen sulphide, ammonia, oil and tar. It is cooled (6) to condense out an aqueous phase containing water-soluble substances (gas liquor) and crude tar which are subsequently separated in the Tar techniques produce motor fuels. The aqueous solution is treated in the Chemical Work-up facilities (18) for recovery of alcohols and ketones. The uncondensed portion of the Synthol effluent is further separated in the Product Recovery Unit (19). A methane-rich stream is recovered and sold as such or reformed (16) to hydrogen and carbon monoxide to provide additional feed for the Synthol process. Ethane and etylene may be used to produce pure ethylene or reformed for additional Synthol feed. Crude tar products from the Tar Separation Unit are upgraded (8) to petrol and diesel components. The gas liquor feeds a Phenosolvan Unit (9) where phenols are extracted. Further treatment (10) of the aqueous effluent results in Separation Unit (7). The cooled gas is then treated in the Rectisol Unit (11) to remove carbon dioxide and hydrogen sulphide by methanol absorption. The sour gas is treated in the Sulphur Recovery Unit (12) to meet environmental standards. The purified synthesis gas is now fed to the Sasol Synthol unit (14) where it is entrained with circulating powdered iron-based catalyst (13) in the Synthol reactors. The exothermic Fischer-Tropsch reactions produce a product gas consisting of hydrocarbons and oxygenated chemicals. This stream is cooled (15) to produce gas, liquid hydrocarbons and an aqueous chemical mixture. The hydrocarbon liquid is fed to the Oil Work-up Section (17) where conventional refining

the indirect route.

"The thermal efficiency will be somewhat better, but the differentials between the direct and the indirect routes have shrunk. Nevertheless, until you have a plant with a supply of the right feed material, the merits remain somewhat academic," says Van der Pas.

And in SA "we are rather limited in the coals that are suitable for this route." The eastern Transvaal coals are not suitable, "so you are looking at the Springbok Flats or at the Waterberg or Soutpansberg," he says. Although these coals are more suitable, they are unfortunately very difficult to mine.

As they have a very high ash content, they need to be upgraded to make them suitable for liquefaction. This means the coals will be much more expensive too. As he points out: "SA does not have the same advantage as, say, the Americans."

Coals differ, according to their petrographic composition, in their reactivity in a solution process (like the process used in making src). A good coking coal has a high proportion of reactive constituents, compared with inert coals, although inert coals are good for burning or gasification. Reactive coals can be broken down easily by a high temperature — 350 to 400 degrees. Then you have to stabilise the products under high presssure in a hydrogen atmosphere.

But SA coals have different origins from the coals of the Northern Hemisphere. Worse still, they contain dolerite intrusions which have in effect "cooked" the coal and so converted it to inactive forms. This set of circumstances also explains why SA is also short of coking coal, bearing in mind that good coking coals are also suitable for liquefaction.

Sasol believes: "Coal liquefaction possibly has some place in SA, but only subject to careful examination of the resource base — and if we can use proven technology."

Van der Pas says: "From our early Fischer-Tropsch experience we know what can go wrong. Sasol would like to be number 2." Now that Sasol cannot immediately hope to run a liquefaction process on overseas experience, it has decided to "reassign its priorities" on coal liquefaction. Sasol has shut down its pilot plant, but has not abandoned its research.

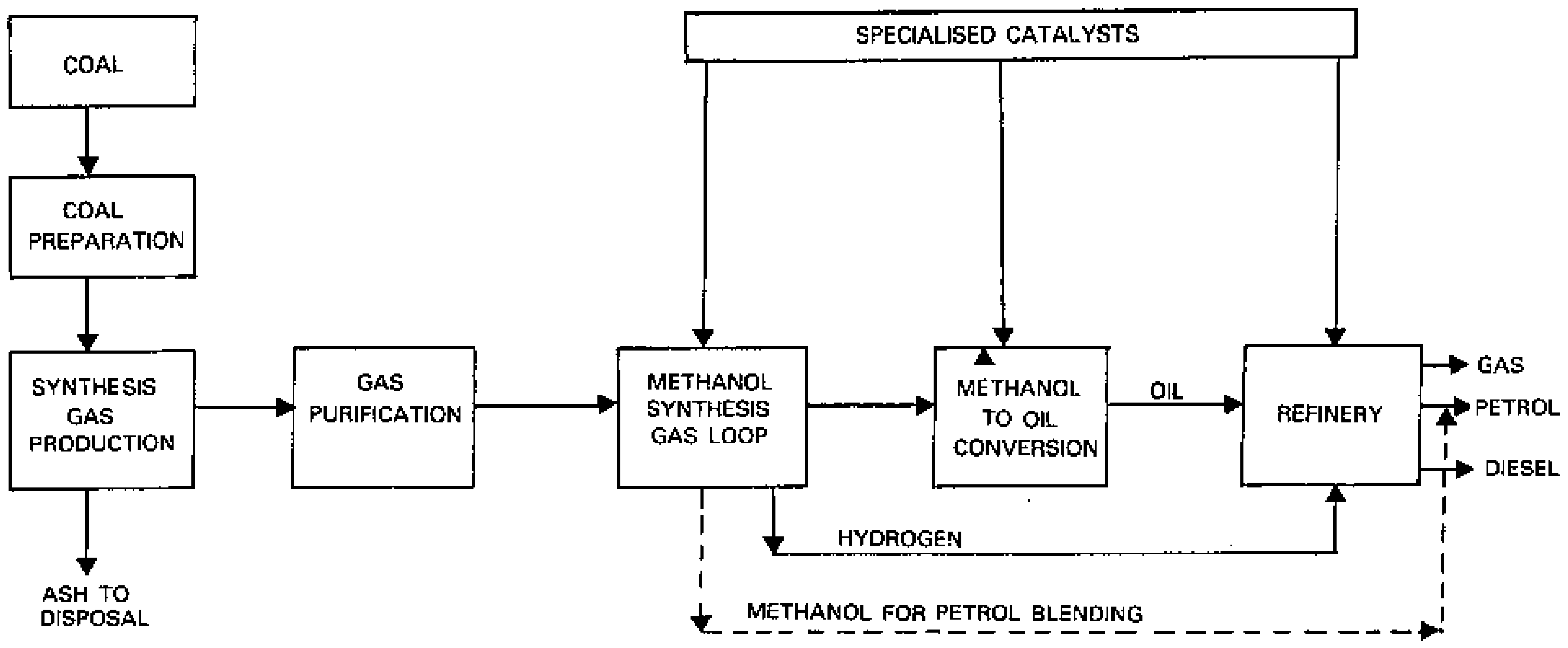
Theoretically, there are cheaper ways to be found for converting coals into liquid fuels than Sasol's present direct method. It is a question of looking for those direct liquefaction possibilities, which Van der Pas prefers to call "third generation processes." The first generation processes were those the Germans had in the war years, like the Bergius process, while Australia is now (on a pilot scale) almost at the second generation of liquefaction methods.

So the search is on for the third generation — or different ways of breaking the coal molecule. "That molecule is big, and at the moment the only way is a combination of high temperature and high hydrogen pressure. This is a very expensive process."

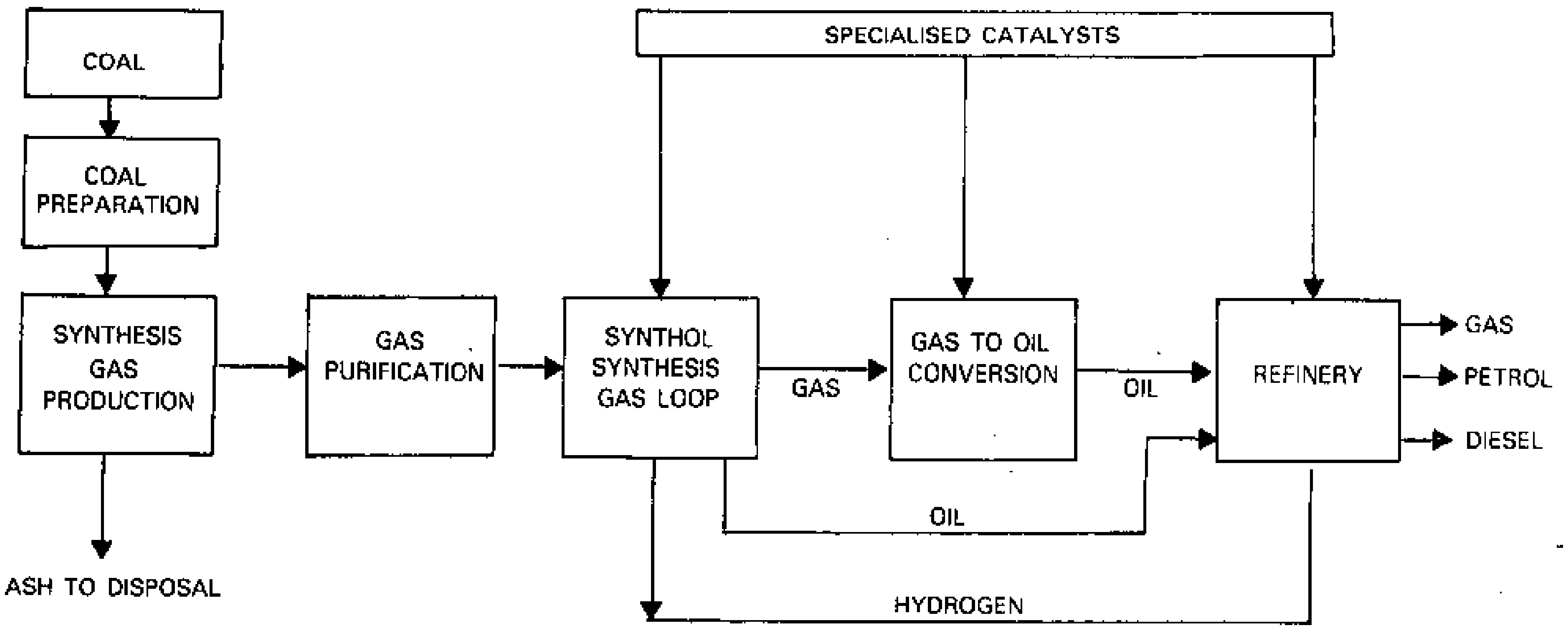
According to Van der Pas, Sasol is not doing anything active on the methanol route to synthetic hydrocarbons, although he says: "We are mildly interested." In his view this method will not be all that different from Fischer-Tropsch. "You are doing the same sort of thing — taking carbon monoxide and hydrogen, and in the end, converting them to liquid hydrocarbons," he says.

Mobil has developed a process, with many potentially important variants, for converting methanol (which is easily produced from coal) into a range of synthetic

COAL TO MOTOR FUELS: METHANOL ROUTE

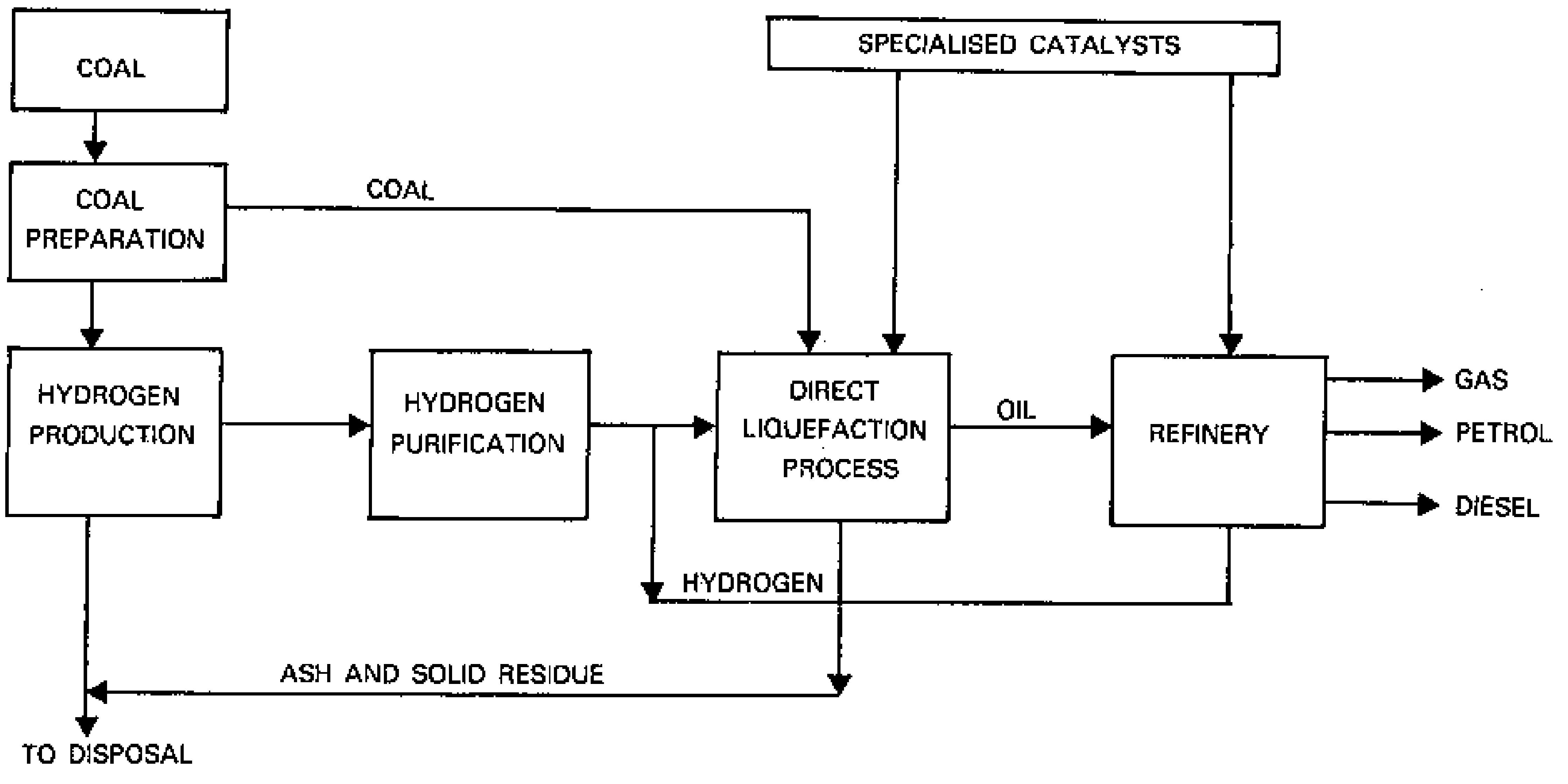


COAL TO MOTOR FUELS: DIRECT LIQUEFACTION ROUTE



Note: this is the route actually used by Sasol at Sasol I II II to produce liquid fuels.
(Sasol I also uses the Arge method — which is quite similar to synthol in principle to produce mainly waxes)

COAL TO MOTOR FUELS: SASOL SYNTHOL ROUTE



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products. Soekor is examining the Mobil process as one option for its proposed natural gas conversion project.

Van der Pas explains that AECI obtained a Mobil licence to produce olefins (which are important to AECI as intermediates for the synthesis of plastics). The licence went from Mobil to ICI, thence to AECI, who built a pilot plant and confirmed the findings.

Andries Brink, gm of Sastech, considers that if the Mobil process turns out to have an advantage over Fischer-Tropsch, it will be small, as the beginning and end points are chemically the same. He says: "Thermal efficiency and type of products are all similar."

There are two routes from methanol to hydrocarbon liquids. The first is methanol to gasoline by the Mobil process. A plant using natural gas as the starting point is being built in New Zealand to do just this.

The second possibility is to convert the methanol to olefins, also by the Mobil process, and then to polymerise those olefins to petrol and diesel. This option is being tried out on a pilot plant scale in Germany, while Mobil itself has run one of its refineries in America for a few months to test the process.

Close to being proven

Brink considers that this variant of the Mobil process "is fairly close to being proven" although it has not been run on a commercial scale as yet. Again, in the end the real difference from Fischer-Tropsch will be marginal. Says Brink: "It is important to know the economic difference."

Van der Pas reaffirms that Sasol has found that where the process chain consists of a multitude of units. "Although you may be able to save meaningfully on a given unit, in the total process from coal to the final product, you achieve only marginal improvement," he says.

This conclusion would apply to the replacement of circulating fluidised beds with fixed fluidised beds, for example. Van der Pas reckons that step itself might save as much as 20%.

Similarly, if you look at gasification, you find only marginal gains and not a total breakthrough. "That," says Van der Pas, "is the way we see Mobil as well." And Sasol knows that unless you can make diesel or its precursers in addition to petrol, the Mobil process would be of less practical use here (because of the "diesel swing" required).

In New Zealand they have overcome this limitation by modifying the refineries to produce extra diesel.

Van der Pas says it was proven subsequently that even in the US where you have the possibility of swapping final products between companies, it is not that easy. This is why Mobil has come out with a process making it possible to produce diesel as well as petrol.

But the modification has added to complexity and to cost. For this reason, Mobil's methanol route can have only marginal advantages over Synthol. But Sasol "watches everything." It has a commitment, says Van der Pas, not to a process, but to making products as economically as possible.

With alternatives to Sasol's present methods, the operational advantage is lost very quickly because of Sasol's 30 years of operational experience with Lurgi Synthol.

In the late Sixties, more and more people said the Sasol process was far too expensive, arguing that coal liquefaction showed tremendous advantages in theory.

"They even convinced us to start research. But Sasol found it was comparing real plant with paper plant," says Du Toit. And as the direct route became more real, with the construction of pilot plants, the economic differences shrank.

Sasol now believes that once the process is fully proven, direct liquefaction might have some advantages over Fischer-Tropsch, with the very great proviso "that you have got to have the right coal." And during the necessary beneficiation of SA's only marginally suitable liquefaction coals, "you find that you lose part of the carbon, and much of the thermal advantage over the indirect method," says Du Toit. Still, for large-scale coal conversion, it looks as though Lurgi/Synthol has an unchallgengeable lead over its competitors, certainly in SA, for the forseeable future at least.

Brink also notes that a German study shows that the advantage of the direct over the indirect route is a function of coal cost because the direct route is thermally more efficient and so uses less coal. As coal costs increased the direct route became competitive.

At SA's coal costs then, the indirect route may be cheaper. ■

Environmental hum

As it happens, this has little to do with bees and nature — as anyone who has experienced "that smell" will tell you. But Sasol is working on it

A **chemical** giant like Sasol, processing an untidy material like coal on a vast scale, must expect challenges in avoiding environmental damage. There are various environmental issues affecting Sasol — some actual (water pollution and hydrogen sulphide) and some possible (sulphur dioxide and car exhaust fumes.)

Sasol's Theo van der Pas, gm of Sasol Ltd and one of the directors of Sastech (Sasol Technology), Dr Andries Brink, assistant gm at Sasol Ltd as well as gm for R & D at Sastech and Andre du Toit, among other appointments senior gm of Sasol Ltd, explained these issues.

Andries Brink and Andre du Toit are the men most closely involved in problems of environmental control. The problem of hydrogen sulphide ("rotten eggs" smell) remains to be dealt with effectively, but the water issue appears to be firmly under control at both synfuels plants.

Water and air pollution are receiving high priority on the list of environmental issues according to Brink. As far as water is concerned, there are two aspects.

At Secunda, Sasol built the world's largest "zero effluent" plant, "which was quite a challenge." The plant is working but still needs to be improved. Zero effluent implies the repetitive reuse of water, to make the most of every litre of intake.

Sasol has used an interesting alternative approach at Sasolburg, where waste water is treated and returned to the Vaal.

However, because of the drought, water in future "will have to be even purer," says Brink, to conform with certain upgraded specifications. Sasol has employed consultants to assist.

Van der Pas makes the point that "environmental priorities need to be established." In SA conditions, lead emissions from car exhausts are less of a priority than the prevention of water pollution. The reason is simply that water shortages are a genuine limiting factor to growth. "Sasol wants to use even less water at future plants, than at Secunda," he says.

The problems associated with the sulphur content of some 30m tons of coal burned or gasified at Secunda are not so easily disposed of.

Van der Pas notes that Sasol starts with 1% to 1,2% of sulphur in the coal.

This is a relatively "pure" coal, as compared with the USA East Coast coal, with about 6% sulphur. One third of the

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coal goes to the power station where the sulphur comes out as sulphur dioxide. "In future, no doubt something will have to be done there too, but so far it has been acceptable to discharge sulphur dioxide into the atmosphere."

However, the *FM* draws attention to the uncomfortable fact that sulphur dioxide from the combustion of coal or oil is the cause of "acid rain" in Europe and America, now a serious environmental problem in densely populated countries burning large quantities of sulphur containing fuels.

The rest of the sulphur — extracted from the synthesis gas by the Rectisol process — turns up as hydrogen sulphide and causes the smell. Says van der Pas: "You could argue about the degree of health hazard of the hydrogen sulphide, but it is undeniably an unpleasant smell."

And with this, all Johannesburg heartily agrees.

The technicalities involved in getting rid of the troublesome hydrogen sulphide hinge on converting it to elemental sulphur, for which a good market exists in SA.

Hydrogen sulphide along with carbon dioxide from the "expansion gas" at the Rectisol scrubbing plant, used to go into the atmosphere at Sasol 1.

But Sasol then installed a process to convert the hydrogen sulphide to sulphur through catalytic oxidation using vanadium. There have been problems though, mainly because of the process proven elsewhere in the world, but on different gas compositions.

This process takes fully oxidised vanadium in solution, which is able to oxidise the hydrogen sulphide to sulphur and in the process is itself reduced to a lower oxidation state. The vanadium catalyst is then reoxidised with air to close the cycle.

Sasol's gas differs from overseas gas compositions in that the high carbon dioxide content results in a lower pH — that is, higher acidity — which interferes with the operation of the catalyst.

Sasol has gone a long way in experimenting with other processes, and has changed the plant at Secunda to start on a modified process, developed together with a different company, but still using vanadium.

The modified plant has run into mechanical problems rather than chemical. When operational, however, it is hoped that it will capture the sulphur and remove the smell. The sulphur will be recovered as a prill (a non-polluting solid form).

The first phase of ironing out these difficulties — the purely experimental — has already been achieved, and the group hopes that the modified sulphur extraction plants should be in operation by the end of 1986.

As to the economics of sulphur recovery, Du Toit is hoping to achieve break-even on operating cost. At present sulphur prices, helped of course by the current extremely low rand exchange rate, there may even be some return on the expected investment of R150 to R200m. It was originally expected to recover only the operating expenditure. DuToit expects that the recovered sulphur "will be easily absorbed on the local market."

Van der Pas acknowledges that sulphur recovery is an area where further research is really required. "If we build another synfuels plant in future, we may not do the same as we have done at Secunda." But the difficulty lies in finding another commercially proven sulphur-recovery process.

He notes that Sasol had trouble with the first plant at Sasolburg (which was relatively small). Sasol expected it would solve those problems as time went on and under pressure from the authorities decided to use the same plant at Secunda. "While we were building a second sulphur removal plant we realised the problems we had at Sasolburg were much more serious than we originally envisaged," he says.

But, says Du Toit, "we are now reasonably confident we have solved the problems with the modified process. Still, certain problems do not seem to go away and this is one of them."

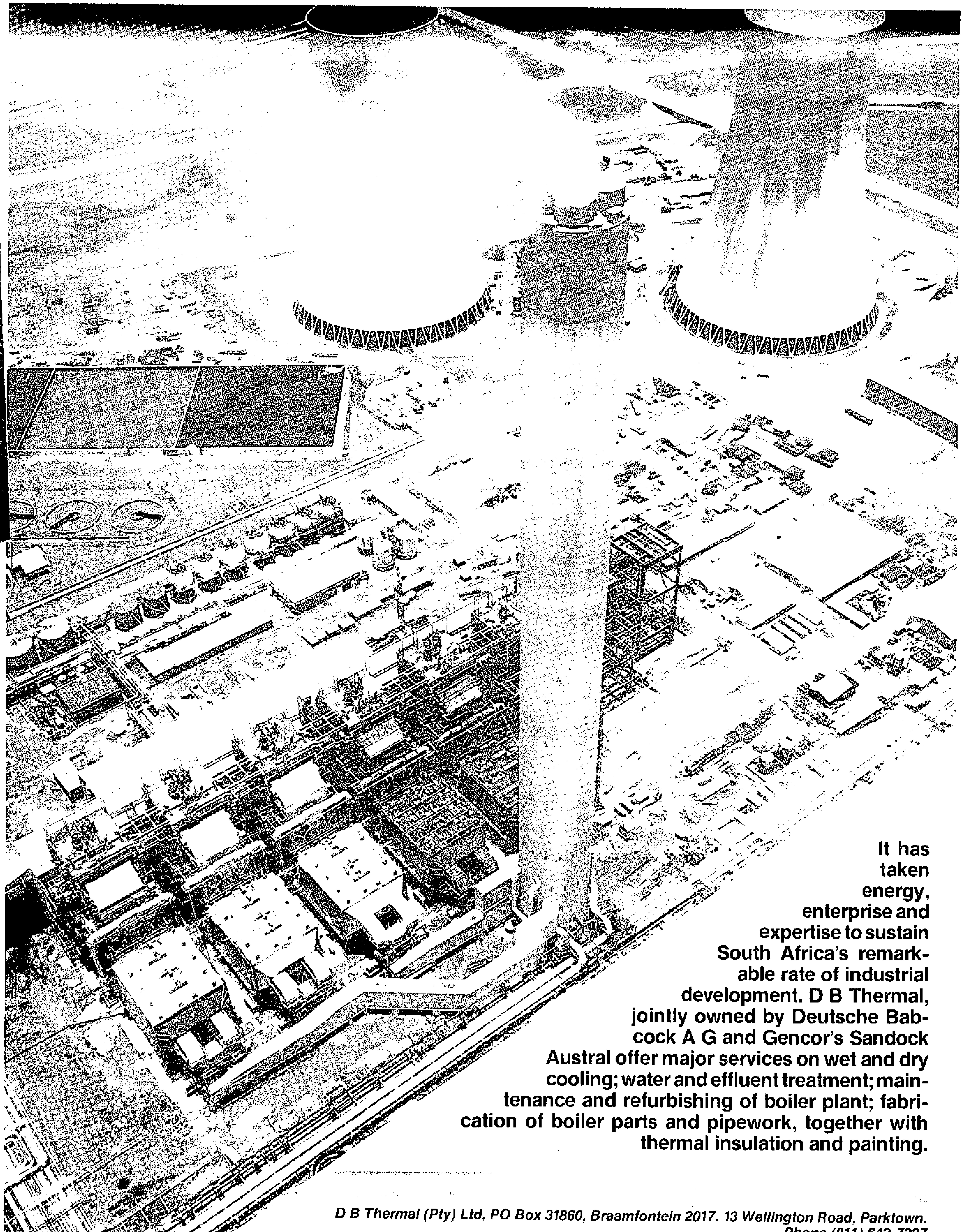
Brink notes: "The trouble is that there are some things you have to test on a very large scale. At Secunda we had a problem with the air dispersion in the vanadium reoxidation step — which was a 'first off' at that large scale of operations."

Another environmental question potentially affecting Sasol concerns car exhaust emissions.

Would Sasol be ready for a situation where SA followed the US (and now perhaps Europe, too) in requiring car manufacturers to instal anti-polluting devices?

The use of platinum catalysts to remove nitrogen oxide emissions and other pollutants would require the exclusion of lead-formulated anti-knock compounds (which poison the catalyst). Brink says that Sasol is studying how to reformulate the petrol blend, in case it is ever required to do so. This procedure might involve "an increase in the severity of the refining operations" in an effort to restore the octane rating of the petrol in the most economical way after excluding lead anti-knock additives. No matter how this were to be done Du Toit says: "It would cost money." Sasol will attempt to quantify the possible future cost.

"The group does co-operate with the oil majors on some technical issues, but some kinds of technical knowledge are "not interchangeable" (although some work done overseas is applicable to Sasol's case). The



reason lies in the fact that Sasol's Synfuel processes are so different from ordinary oil refining that the group has to do its own research relevant to its unique processes.

Van der Pas admits that Sasol has contingency plans to deal with an anti-pollution move, but Brink says it is debateable whether lead, nitrogen oxides or unburned hydrocarbons are serious health problems in SA, with its "wide open spaces."

The notorious problem in California arises through atmospheric conditions which sometimes prevent the dispersion of hydrocarbon vapour plus nitrogen oxides, resulting in a high concentration of "smog" or photochemical fog.

The main objection to lead additives overseas is their effect on the catalyst used to burn other pollutants, not the health hazard of the lead itself. In SA the question of lead "would be looked at for its own sake," says Brink, so the question is whether present atmospheric lead levels are dangerous from a medical point of view. That will be hard to to judge, as there are conflicting expert opinions and the subject is difficult to investigate. Van der Pas insists that to remove lead completely would involve "a considerable cost in additional capital investment as well as increased running costs."

He argues however that it may not be necessary to remove all lead, merely to consider a reduction to a stipulated level — which could be far less expensive to achieve.

Says Van der Pas: "To eliminate lead completely is going to be an extremely costly affair, and I query very much whether that would be money well spent in terms of SA's current priorities." ■

Digging for black gold

Ensuring that Sasol receives the coal it needs involves tight, lean mining operations — and a great deal of perseverance

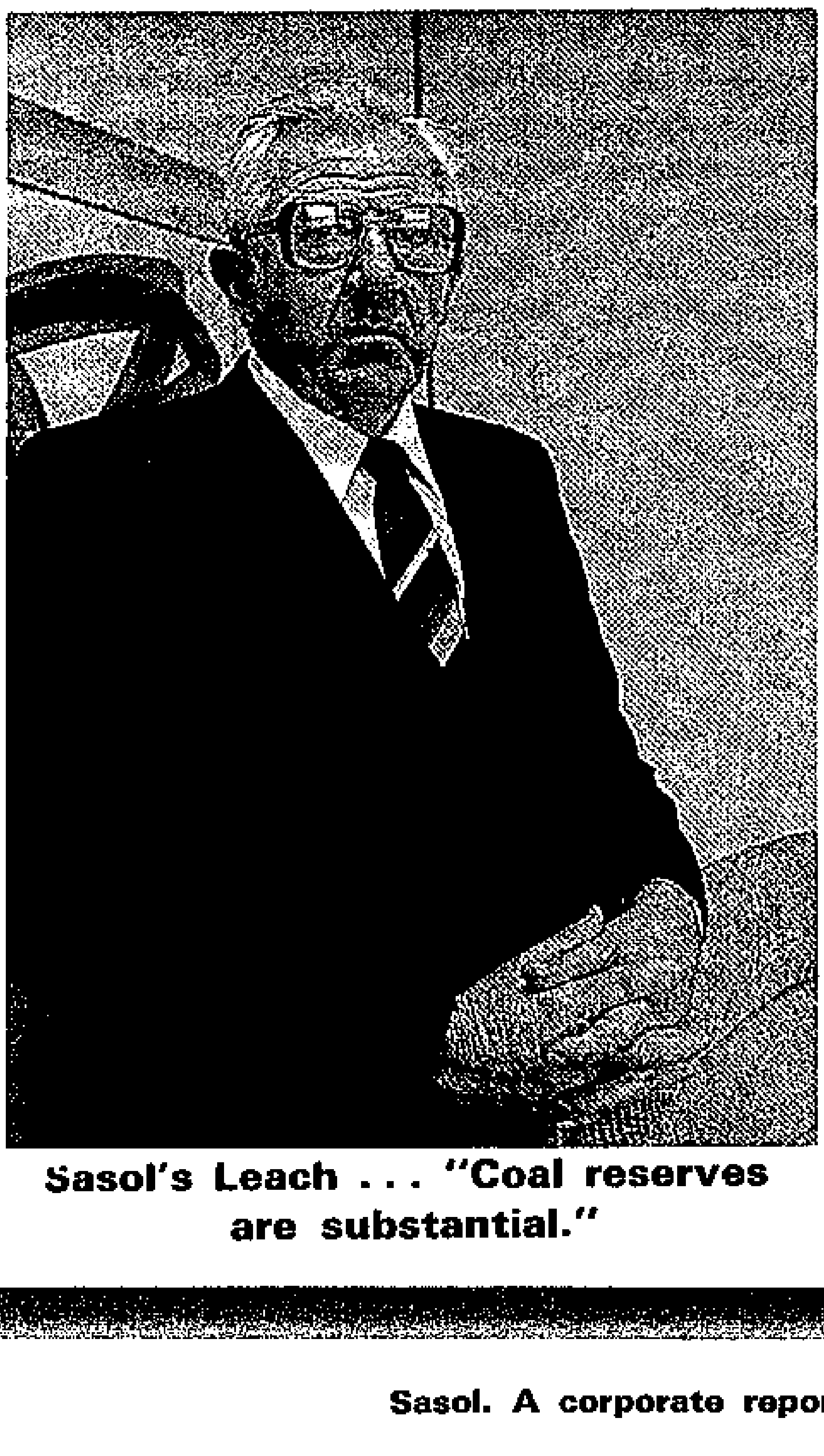
South Africa's plentiful, easily mined but high-ash coal is the foundation of the vast edifices at Sasolburg and Secunda. Yet, the story of coal extraction is undramatic compared with the fascinating chemistry involved in converting it into synthetic fuels. But the technical achievements in mining Sasol's coal are nevertheless substantial.

Ben Leach, a Sasol GM whose main concern is coal mining, planning and exploration, explains that Sasol's mining operations take place in two areas — the Sigma colliery at Sasolburg and the Secunda Collieries under the management of GM Peter Cox. The operation actually consists of four collieries under separate mine managements. The mine management of these mining centres and geological services report to Leach.

Shaft sinking started at Sigma in 1951 and, by 1953, the mine was producing coal. "The coal reserve is substantial," says Leach, "but because of the number of seams, it was difficult to achieve a good extraction rate. This was particularly true when the only economically viable method available was room and pillar mining with conventional mechanisation." This method consists of the processes of blasting, mechanical loading and coal transportation with pneumatic-tyred vehicles or conveyor belts."

Only 38% of the coal *in situ* in a mining panel could be extracted. So, improving the extraction rate — with the object of optimising use of the coal resource — was a major technical challenge. In 1967, Sasol started experimental longwalling, that is, the extraction of entire panels of coal, allowing the overlying strata to collapse subsequently.

"The tests proved technically successful, but uneconomic with the equipment then available in the world market," explains Leach. But it was demonstrated that longwalling could, in principle, deal with the problem of weak strata above the coal seams and the geological problem of the uncertain behaviour of the dolerite sill which overlies the coal seam. The collapse of a substantial area of pillar at Coalbrook Colliery (with a similar geological structure) suggested caution.

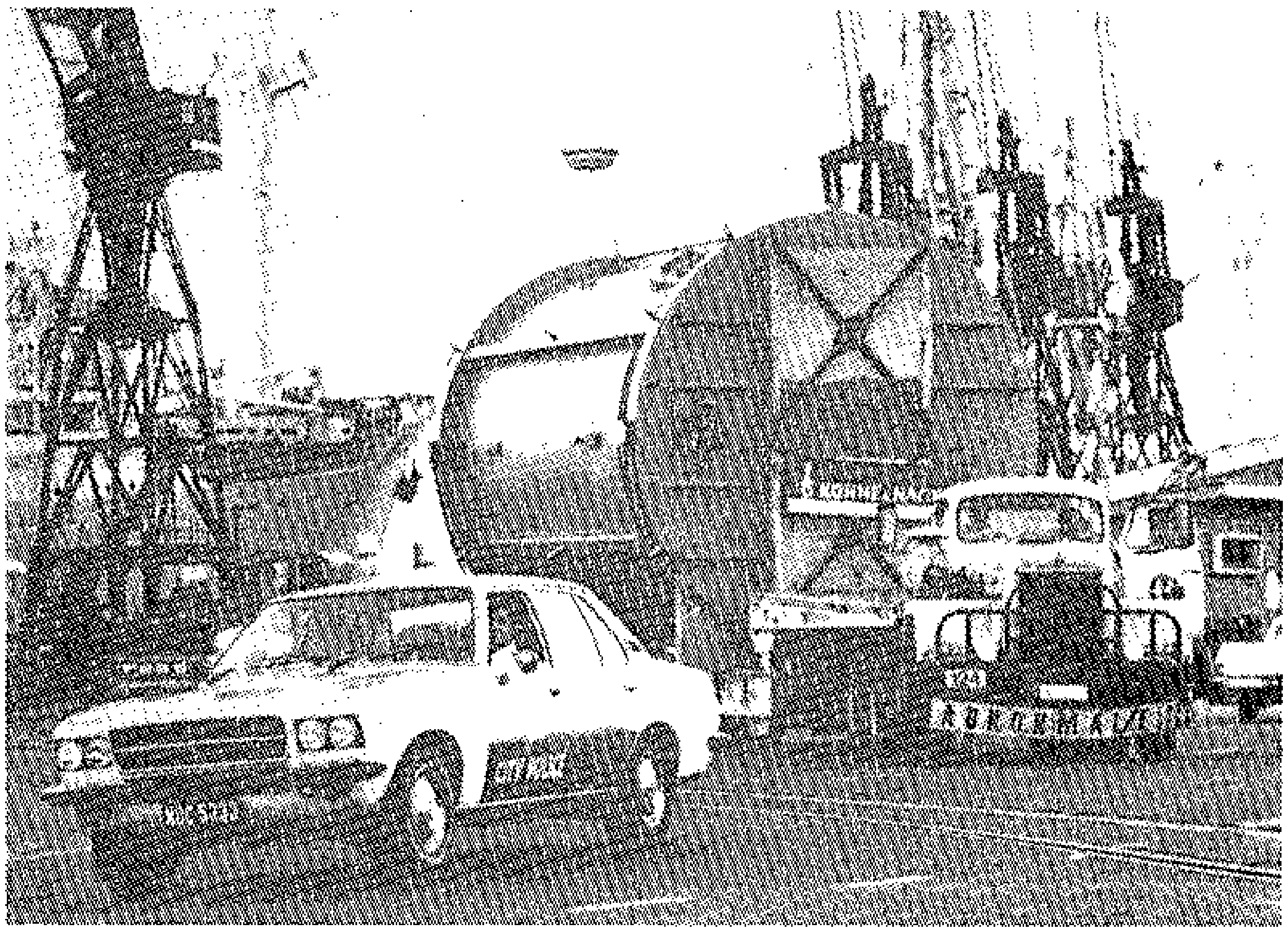

Sasol's Leach . . . "Coal reserves are substantial."

"Sasol then awaited the development of equipment suitable for longwalling under SA conditions," says Leach. "The shallowness of the SA coal seams did not provide sufficient pressure at the working face to provide at all times the desirable fracturing of the coal, which occurs in deep-level coal mines. This requirement is of considerable importance in coal-breaking economy, particularly where coal-cutting resistance, as at Sigma, is greater than overseas. The European manufacturers were keen to tackle these problems."

When Peter Cox was project manager at Sigma Colliery in 1975, he made a selection of equipment for use at depths from 60 m to 200 m. "That equipment has been going ever since and still functions exceptionally well," he says.

The longwall method is capital-intensive — a unit producing 1 Mt to 1,5 Mt coal/year now costs R12m. "So capital servicing costs are high, although operating costs are low," explains Cox. "Although it is difficult to generalise with overall costs, longwalling is broadly on a par with other mining methods."

In its constant efforts to develop new coal extraction methods, Sasol became involved in the technique of pillar extraction. For many years this method was practised in Natal, and at one time even in the Transvaal, on one old mine. But pillar extraction was abandoned for various reasons. ➡



Sasol developed a method called rib pillar extraction after examining mining methods in Australia and America. This method has been extensively introduced. At Secunda, roughly a third of output comes from longwalling, a third from pillar extraction, and a third from room and pillar. Room and pillar methods are used mainly for main entries, and much of the coal locked up will be extracted at the end of the life of the area secured by any particular pillars.

Sasol did its initial experimental work with pillar extraction at Sigma. Says Leach: "Pillar extraction and longwalling have put this colliery into a position to go into the top seam also, starting systematically from the top and working downwards in the multiple-seam coal deposit at Sigma — at Secunda Colliery there is only one main seam." Compare the original low extraction at Sigma, where the colliery extracted the middle seam or the bottom seam only on the room and pillar system.

But some of these seams are very close to each other, and Leach is "not convinced" that all three can be recovered in all areas with the existing methods. Although the mining methods used are still in transition, the extraction rate has already been increased from 38% to around 90% in the panels mined after the introduction of high extraction methods of longwalling and pillar extraction.

Experimental work is still in hand to address the problem of the maximum economic extraction of contiguous thick coal seams. But Sasol has already virtually doubled the life of the coalfield allocated to Sigma. The lifespan is now about 50 years at the current level of production.

Sigma coal is low grade, with ash at 32% and volatiles at 22%. "It is a coal with limitations, which one cannot beneficiate to attain the quality requirements for export coal to any extent," says Leach. However, it remains usable for gasification or power generation. By comparison, Secunda coal, used raw, runs at around 22% ash, making it an average SA coal.

Sigma's rate of production is about 6 Mt/year at the moment, increasing slowly as the group "squeezes a little bit more each year" out of the gasifiers at Sasol 1. The mine could also be geared up further with more men and equipment.

When rib pillar extraction is used, the end result is much the same as with longwalling — a high rate of recovery of the coal resource followed by "a controlled collapse of the overlying strata to leave a stable long-term condition," as Leach puts it. The capital cost of mining with the rib pillar method is less than a third of that of longwalling, while the direct operating costs are much the same as with conventional mechanisation in room and pillar operations.

Within a panel used for rib pillar extraction, one can recover up to 90% of the coal — "as good as with longwalling," says Leach. At Sigma, all the seams are of almost equal quality, and thus all usable at present, starting at the topmost seam and then moving down with the extraction process.

Sasol employs some 2 200 people at Sigma, comprising a stable labour force with good labour relations. It includes migrant blacks with a high proportion of returning labour. Leach says employment conditions are "much the same as in the rest of the local coal mining industry."

There are several factors, apart from labour costs, that make SA coal among the cheapest in the world.

Seams are shallow, at 60 m to 200 m, compared with depths of as much as 1 000 m to 2 000 m in Europe. "At Secunda, geological conditions are typically South African. Our seams are thick, ranging from 2 m to 4 m, so extraction takes place in a relatively spacious environment," says Leach. In terms of free stone (the ash being inherent), the coal is clean. In many European mines there is up to 50% in rejects in the course of production. And the SA seams are virtually horizontal. So the transport system is also simple. All these factors favour low-cost production.

MILESTONES IN THE ESTABLISHMENT OF SECUNDA COLLIERIES

December 1973	Exploration of Secunda Coalfield commenced
December 1974	Sasol Two announced
November 1975	Brandspruit shaft sinking commenced
June 1976	Bosjesspruit shaft sinking commenced
June 1977	Brandspruit production commenced
July 1978	Bosjesspruit production commenced
September 1978	First million tons produced since start up
February 1979	Sasol Three announced
September 1979	Twistdraai shaft sinking commenced
January 1980	First coal to Sasol Two
March 1980	Middelbult shaft sinking commenced
June 1980	Twistdraai production commenced
June 1981	Middelbult production commenced
September 1981	Fifteen million tons produced since start up
November 1981	First coal to Sasol Three
January 1982	One million tons production for a calendar month exceeded
June 1982	Twenty-five million tons produced since start up
December 1982	Two million tons production for a calendar month exceeded
September 1983	Fifty million tons produced since start up

Source: Sasol

Generally, the overlying strata are strong. So local support systems do not add much to costs. Finally, SA has underground conditions that are easy to ventilate because of shallow depths and thick seams. They are also suitable for the use of high-capacity equipment with commensurate economies of scale.

As for the black labour factor, SA is an emerging country that provides employment opportunities for developing peasant migrant labour. This leads to a high turnover and an extensive training programme. This includes a "refresher" retraining and a language programme.

In the *FM*'s opinion, these local Third World characteristics make direct comparisons of SA wage rates with those in advanced Western countries rather misleading, especially in the light of other benefits in kind given locally.

As for productivity, European coal output is 2 t to 3 t/manshift in an underground mine, against 10 t/manshift in our mechanised collieries. Some Australian and American collieries could do as well or better.

SA does use more labour per operation than Australia or the US. One reason for this is the training programme. It results, in many operating positions, in there being almost one helper in training for each operator. And SA is not yet as productivity-conscious as some overseas countries.

Cox maintains that SA puts more labour into "housekeeping," like keeping mines clean. SA also does more in-house repair work. But SA adopts a more paternal attitude towards feeding and housing, "so a strict cash wage comparison is not fair," he agrees.

Secunda mines — feeding the giants

Cox describes the Secunda mines as having a resource *in situ* of some 3 000 Mt that determined the location of the entire Secunda complex. With the mix of mining methods adopted, there is already an extraction rate of close on 70% of the coal reserve. This gives the Secunda coalfield an expected life of some 70 years.

The resource in the Secunda area is largely in one coal seam — No 4 Lower Seam — hence, the high extraction rate. There are also minor reserves in No 2 seam, but "we do not expect to mine it for another 15 to 20 years."

For the moment, the average depth of cover is around 120 m, getting to 180 m in some parts of the operation. These are suitable depths for an underground operation, especially for the application of total coal extraction methods like longwalling or rib pillar extraction.

The coal, says Cox, "is an average-quality steam coal at 25MJ/kg and 22% ash." Sulphur is low — under 1%.

The coal seam is flat, with some intrusives dividing the coal into mining compartments. "It is on the whole a favourable area for mining," says Cox. The three methods in use at Sigma are also employed, yielding 10 Mt/year from each, giving a total production of some 30 Mt/year.

Sasol continues to use room and pillar despite a 45% extraction rate. This is in part because the main mine entries are formed by this method. Another reason is that when the mine was started, it was believed that coal mined by conventional mechanised methods, where the coal is broken with explosives, would give a better yield of coarse coal than longwalling or continuous mining. The higher yield of coarse coal would, in turn, result in a greater proportion of output being suitable for the Lurgi gasifiers.

The intention remains to take out the pillars ultimately on retreat from the boundary of the mine, so achieving the maximum possible extraction.

Sasol has, however, made an adjustment in its methods, says Leach. "We are being convinced today that coal particle size is independent of mining methods after the second crushing, being an inherent property of the coal which manifests itself in subsequent handling and crushing processes," he says.

> *“The limiting factor on future expansion at Sasol is not likely to be coal”*

SA collieries, including Sasol's, have a major advantage over those of Europe, where the main entries within the coal seams require substantial support in the form of steel arches. They often have to be formed in "country rock" rather than in the seam itself.

The Secunda collieries have had to buy in coal at times because the synfuels plants built up their output so rapidly. The original plan to mine at a rate of 27,4 Mt/year was rendered insufficient by increments to the initially contemplated demand from Sasol 2 and 3. So the target was raised accordingly, and additional men and equipment deployed.

The goal, now that intended output has been attained, is to optimise operations and consequent profitability. The mine receives a transfer price that, says Cox, is "very tight" at a level below the controlled price for that grade of coal. This price provides an incentive for "a lean operation." He says the mine only makes a profit on the last 3% to 4% of output.

About 50% of mine labour has had no previous experience. Yet, two of the mines already have a four-star rating by NOSA (National Occupational Safety Association) despite the rapid build-up in production.

Like any other mining house, Sasol will not reveal the results of its coal exploration, except to say, according to Leach, that "the programme has been fairly successful" in locating extensions to existing coalfields and, to some extent, in identifying other smaller deposits.

"The limiting factor on future expansion is not likely to be coal," he says. As far as coal mining is concerned, further extension from Secunda will be proportionately less of a strain than the vast scaling up from the relatively small Sigma colliery to the four mines at Secunda. ■

Getting all fired up

The marketing of Sasol's fuels is perhaps more comprehensible than the technology of their production. But it is still the last, vital link in the chain between coal in the ground — and petrol in the pump

Sasol now runs its fuel marketing separately from the sale of its chemicals. The latter fall into more specialised areas and are produced in more modest quantities. And patterns of fuel marketing in SA have, of course, been influenced significantly by the arrival of the full flow from Secunda.

Dr Dirk Mostert, a senior GM of Sasol Ltd, has line responsibility for marketing Sasol's fuels. This is apart from his duties in all corporate commercial and secretarial matters, as well as responsibilities for other areas, including line responsibility for Sasol's interest in the Natref Refinery at Sasolburg. (Sasol holds 52,5% of the equity in Natref, Total Oil 30%, and National Iranian Oil Company still 17,5%).

Sasol operates a "group product optimisation programme" reporting to Mostert. This determines where and to what extent a given product will be manufactured within the group.

It makes sense, says Mostert, to have separate fuel marketing divisions within Sasol, having regard to the relative output of fuels and other products.

He acknowledges that there is an inevitable problem of overcapacity in SA's natural crude oil refineries — an "intended and unavoidable consequence of large-scale local liquid fuel production." And the overcapacity is the counterpart of the saving in foreign currency for oil imports achieved by Sasol.

There is an agreement among all local oil refiners, including the Natref partners, called informally the "equality of misery" agreement. This agreement allocates cuts in output equally among the refiners.

It is stating the obvious to acknowledge that the extent to which SA's crude oil refiners will need to run their plant in future depends on market growth for liquid fuels and the start-up dates of any future synfuels plants.

The Natref refinery itself is well located in this market. Being remote from the ocean, Natref has not had scope to sell the "heavy end of the barrel" for ships' bunkers. So Natref initially installed crackers to convert this fraction into diesel and petrol. When oil prices increased, that cracking capacity became a valuable asset.

Natref is therefore a sophisticated refinery with equipment to make efficient use of the whole barrel, compared with the so-

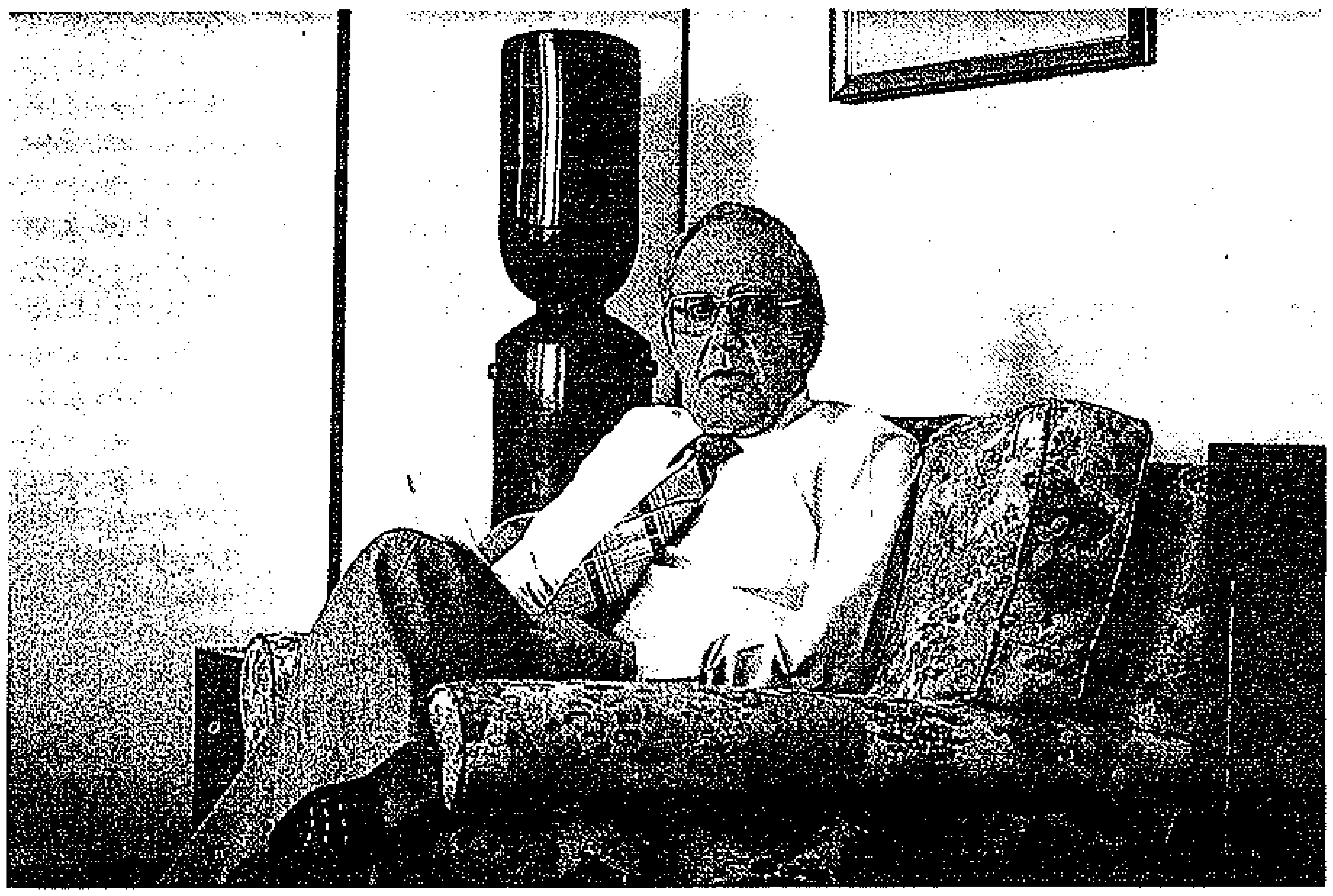
WORKING IT OUT

Sasol likes to believe it maintains an enlightened policy towards benefits for black workers. Main items in worker benefits are:

☐ **Housing:** Sasol has spent over R30m in the past eight years on high standard hostel accommodation for single employees, including those at Secunda mines. A further R10m is being spent at present on accommodation and recreational facilities, while R15m is to be spent over the next five years on upgrading hostel accommodation at the Sigma colliery.

It has spent R13m on the development of stands and the erection of 460 family houses of a high standard over the last three years. Another 100 houses are now being erected at a total cost of R3,7m.

Rents of all company-owned houses and hostels are heavily subsidised. Two house ownership schemes are available to all employees; one for the purchase of company-owned houses and the other for building a new house or the purchasing of a house in the open market.



Sasol's Bezuidenhout ... enlightened labour policies

About 300 of the company's black employees are homeowners under these two schemes, while around R45 000 is paid out monthly in subsidies on housing loans.

☐ **Education and training:** Sasol financed the construction of a high school in the black suburb of Sasolburg. A contribution of R1,5m is being considered for the construction of a comprehensive high school in the black township at Secunda. This type of school provides a combination of technical and academic education. And financial assistance of about R60 000 has recently been given to the schools there for the financing of various smaller projects, and R100 000 for developing youth facilities.

☐ **Organised labour:** Sasol is negotiating agreements with the Chemical Workers Industrial Union (CWIU) at the Secunda colliery and at Sasol 2 and 3 synthetic fuel plants. Union membership at Secunda mines is about 4 500 and at Sasol 2 and 3 about 1 900. There is no direct black union involvement at other group plants as yet.

☐ **Employment policy:** Sasol has a policy of rejecting discrimination towards any ethnic group, believing that the most suitable person should be appointed for every position. It also commits itself to the elimination of existing discriminatory situations wherever possible.

But Sasol will, of course, not create jobs merely for the purpose of creating additional employment. Jobs are created according to company needs.

☐ **Advancement of black managers:** black employees should be afforded the opportunity to advance to supervisory and managerial positions. But Sasol points out this is in practice a slow process needing special and careful managerial attention.

☐ **Desegregation:** it is Sasol's declared objective to eliminate unnecessary practices of segregation wherever possible. But this is not simply a company issue. The group argues it cannot isolate or dissociate itself completely from the environmnet in which it operates.

☐ **Benefits:** Sasol's pension and medical funds for black workers are, as far as benefits are concerned, identical to the funds for white employees.

called "skim" refiners. These simply remove the light fractions from the crude oil and resell the heavy end for bunkering, or as fuel for land-based boilers.

In any event, the problem of surplus refinery capacity is hardly peculiar to SA, so severely has the demand for oil products been damaged by the oil price shocks. In a sense, the SA refineries simply add to the pool of surplus capacity worldwide. In turn, the majors juggle to their least disadvantage. Mostert says that theoretically there could be scope to generate exports of refined products from the coastal refineries, but there would be "some problems."

As for the SA petrol market, Sasol expects the hike in the petrol price to result in a 2% consumption reduction in the short term.

Some interesting factors emerge on a worldwide basis. During the last oil crisis, when SA weighed in with conservation measures, the drop in consumption was 10%. Moreover, the real petrol price in SA (that is, adjusted for inflation) is today lower than in 1979 (see chart).

Nor is it generally understood that SA's petrol price is still among the lowest in the world (see table).

Mostert notes that car ownership among SA whites is near to saturation — 2,1 persons to one car. So the only major source of growth in petrol sales for the future lies in the growth of the black market. Currently, there is one car to every 8,5 Asians, one car to every 23,6 coloureds, and one to every 93,4 blacks.

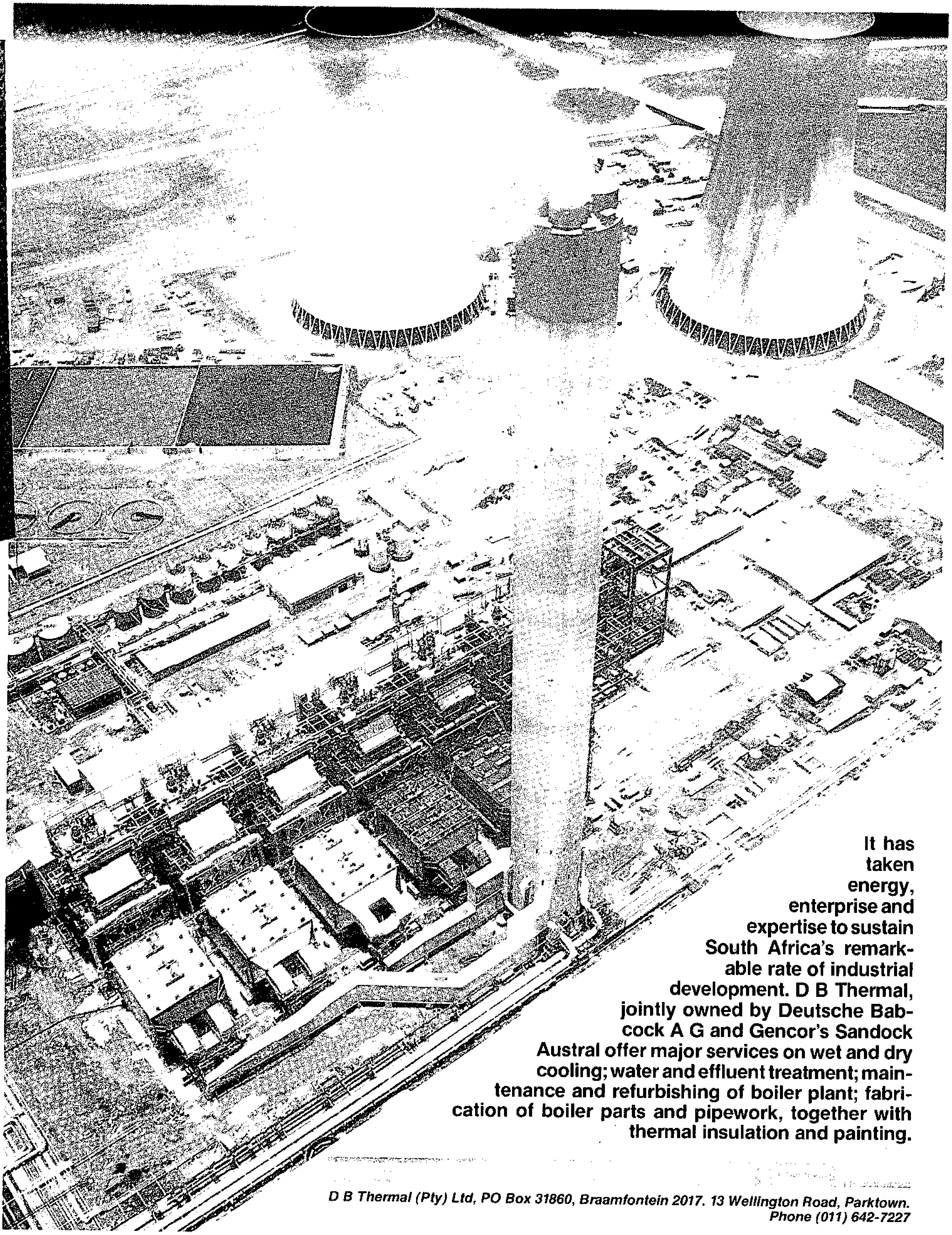
Each time the price of petrol in nominal rands is substantially increased, there is a sharp short-term reaction in sales. But these responses should not be allowed to obscure the very real prospects for great growth in the black market in the long term.

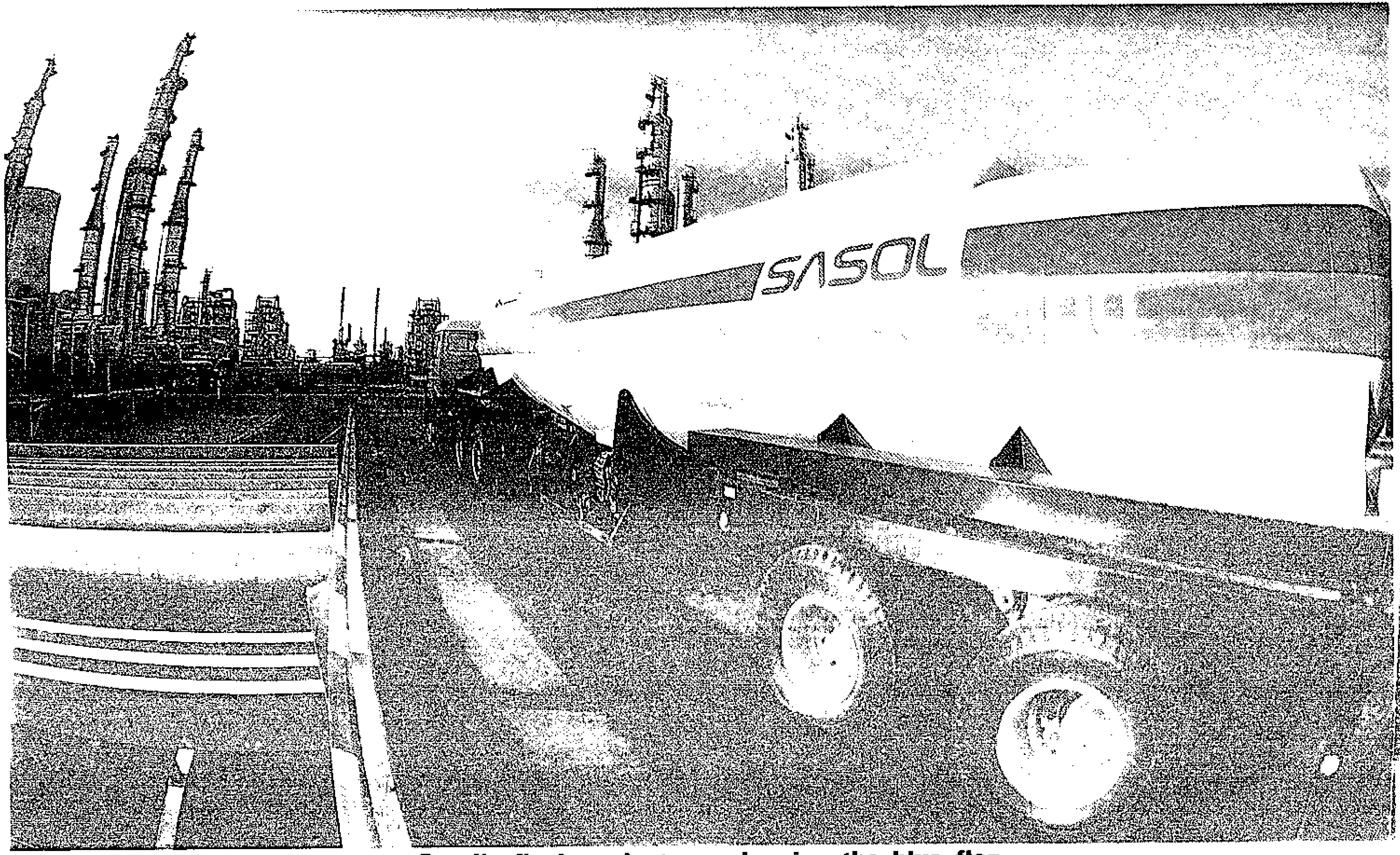
Alcohol in petrol blends is nothing new. Petrol with a significant alcohol content was first introduced in the early Thirties. Alcohol blend petrol remained on the market until 1971 when it was withdrawn. Sasol's alcohol output was taken up industrially until October 1980, when it was reintroduced to the fuel blend.

The alcohol problem

Mostert concedes that the public relations and trade procedures and technical measures made necessary by the use of alcohol in petrol "could have been better."

Despite that concession, Mostert points out that the SABS looked into fuel specifications before the alcohol blend was introduced; that the Minister himself made an announcement; that the oil companies made their own announcements; and that the AA helped to publicise the implications of the





Sasol's final product . . . showing the blue flag

change in fuel composition to their members. Placards were displayed at filling stations, warning that there might be certain transitional problems, particularly until the storage tanks were purged of water.

Unfortunately, this good work was not kept up long enough, and not enough effort was put into continued dissemination of the information.

Filling station owners have, however, been taking care of their storage tanks since the changeover. But some foreign manufacturers have introduced carburettors which cannot handle the blend.

Why the outcry? Three potential problems were foreseen: damage to carburettors due to alloys of a composition which could not withstand alcohol, especially if water was present, damage to rubber fuel lines which were soluble in alcohol, and damage to paintwork which was similarly soluble.

But, at the time of writing, there are some 3,5m cars running effectively on the alcohol blend — which contains between 8% and 12% of (mainly) ethyl alcohol at various times. (At present, the range is running from 10% to 11%.)

The procedures to be followed were publicised extensively, through brochures and in other ways. In any event, the few problems that did occur, with damage to some carburettor types, were limited to a few models and makes of car and were soon overcome. Motorists who had bought cars affected, were handled "commercially" by Sasol and the motor company concerned.

Unfortunately, certain new models have been introduced subsequently without the local distributors giving sufficient thought to the alcohol-blended petrol. But where problems have arisen, the manufacturer has accepted liability.

Mostert maintains vigorously that alcohol-blended petrol is "not an abnormal motor fuel," although it does have specific characteristics. And these have to be catered for.

If contamination by water is allowed, phase separation into two layers will occur — a hydrocarbon layer and a water-alcohol layer.

Corrosion of metal surfaces can become a problem when a water-alcohol layer makes contact.

But, says Mostert, "no car can run on water" and petrol retailers have a strong responsibility to ensure that water does not contaminate the petrol they supply to their customers. Conversely, far fewer cases of water contamination now occur. The alcohol stops the accumulation of water in the system, which used to take place.

Sasol's marketing arrangements

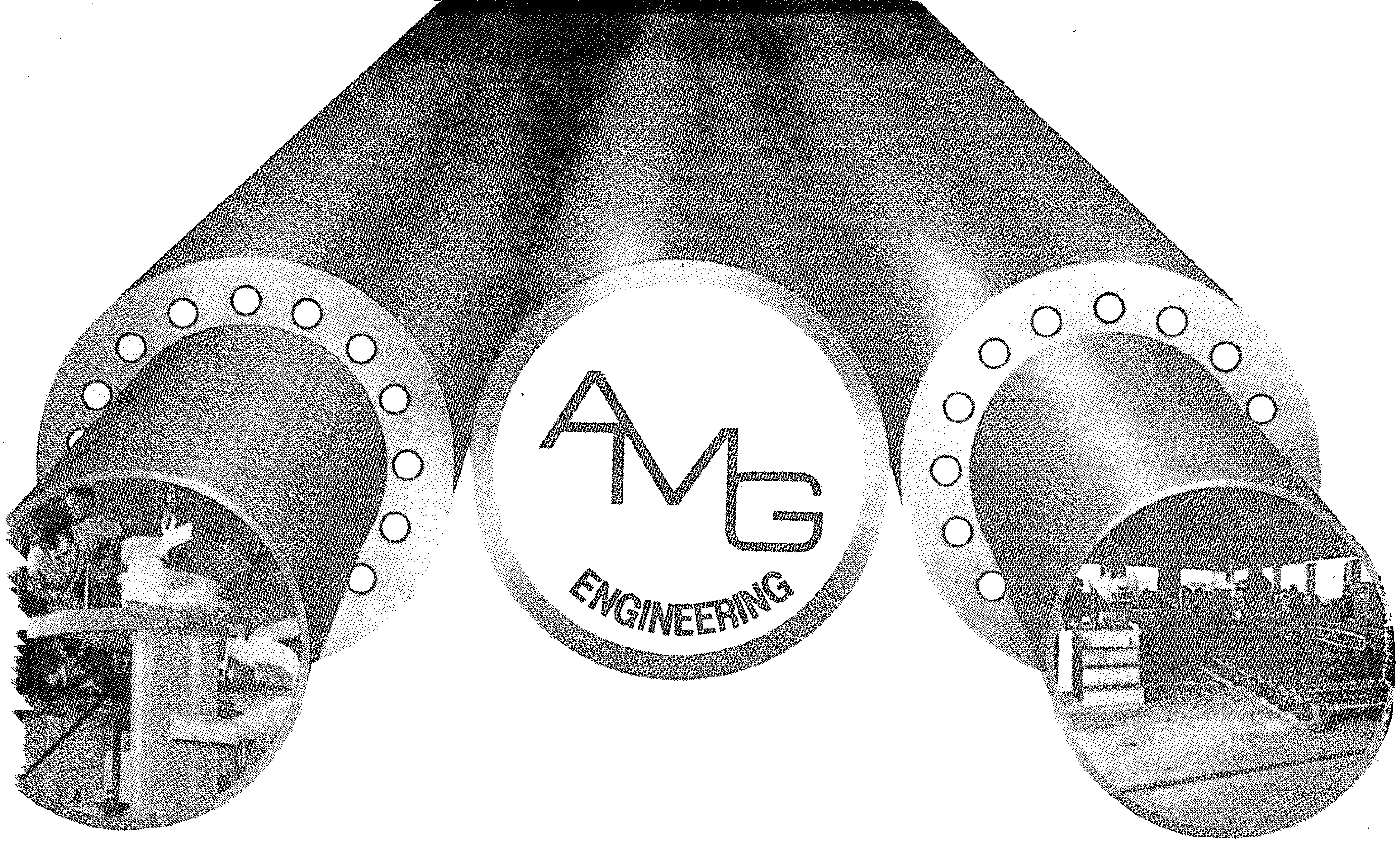
Within its geographical market area, Sasol follows a dual system. The bulk of its output is sold wholesale to the other oil companies, but "shows the blue flag" at filling stations by marketing a small proportion retail. Any producer wants to know what is happening in the marketplace — one reason alone for doing some retailing.

Sasol's selling agreement with the oil companies is based on an import-related price.

SA RATIO OF PEOPLE TO CARS

YEAR	WHITES (including companies)	COLOUREDS	ASIANS	BLACKS
1920	62,5	—	—	—
1930	13,3	—	—	—
1940	6,8	—	—	—
1950	6,1	356	88	4 216
1960	4,2	150	40	544
1970	2,8	42,4	14,3	186
1980	2,1	23,6	8,5	93,4

Source: Sasol


AMG
ENGINEERING

This description of the contract price does not mean that Sasol gets more if the pump price goes up in order to adjust retail margins. Sasol sells at a market-related price, and only a modest component of that price is controlled. The same marketing arrangements apply to diesel as to petrol.

If the output of synfuels grew in SA ahead of market growth, the oil majors would lose some of their refining margin, not their retailing margin. This would be retained regardless of whether the product sold was

EUROPEAN RETAIL PETROL PRICES MARCH 1985

COUNTRY	(CONVERTED AS AT) 2/4/85		PREMIUM	REGULAR	CONVERTED TO RSA CENTS PER LITRE		
					PREMIUM	REGULAR	
Austria	10,95	Sh/100l	1 210,00	1 160,00	110,50	105,94	
Belgium/					109,84	106,03	
Luxembourg	31,50	B/F/l	34,60/26,50	33,40/25,80	84,13	91,43	
Denmark	5,5985	KT/l	6,43	6,29	114,85	112,35	
Finland	3,28	F/Ml	3,89	3,75	118,60	114,33	
France	4,7985	FF/100l	574,00	542,00	119,62	112,95	
Rep of Ireland	200,1995	IP/l	49,68	48,89	248,15	244,20	
Italy	1 004,00	Lire/l	1 300,00	1 250,00	129,48	124,50	
Netherlands	1,773	DG/100l	176,00	171,00	99,27	96,45	
Norway	4,526	N Kroner/l	523,00	512,00	115,58	113,15	
Portugal	86,60	Esc/l	109,00	105,00	125,87	121,25	
Spain	87,10	Pesetas/l	97,00	87,00	111,37	99,88	
Sweden	4,521	SW/Kroner/l	4,72	4,62	104,40	102,19	
Switzerland	1,3275	SW Frank/l	133,00	130,00	100,19	97,93	
West Germany	1,5715	DM/100l	149,90	131,90	95,39	83,93	
United Kingdom	242,488	p/gall	197,65	195,62	105,57	102,41	
FOR COMPARISON					**PREMIUM 93**	**REGULAR 87**	**SUPER PREMIUM 98**
SA Price — Reef (Johannesburg)					90,10	87,70	
SA Price — Coastal (Durban)					82,90		86,40
Zimbabwe	,7872	Z$/litre	1,04		132,11		

Reference: Petroleum Times Price Report 15 March 1985.
Rand/Dollar ex/rate .5025.

produced by Sasol or by some other future synthesiser, instead of by their own refineries.

The oil majors might find it possible under such circumstances to make use of their added surplus refinery capacity in a world context. In any event, oil refining, worldwide, is not very profitable today.

But the growth potential of the black automotive market is such that it will very likely require great efforts by all potential SA synfuel producers to maintain the present market share of synthetics.

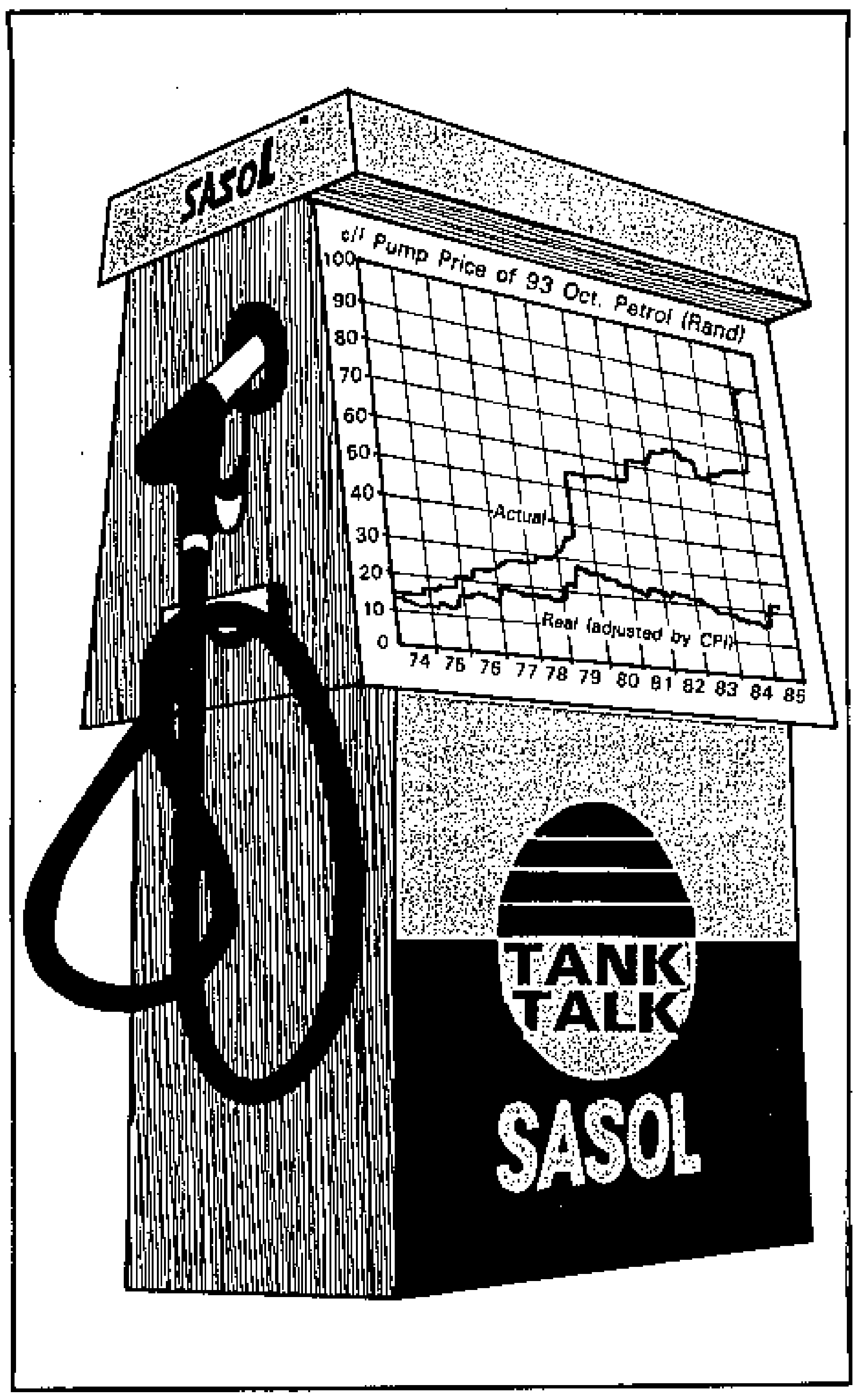
Import parity pricing

Import parity means that product prices are tied to the product prices at, for example, Bahrain and Singapore to give a unit price in so many US cents/gallon. That part of the price is international and market-related. To get your fob price, you convert that international price to SA currency, then add insurance and freight to get the cif SA price.

You take the cargo notionally to the most economic entry point — for example, Maputo or Durban — where you have to add a wharfage charge and an adjustment for sea losses. Then you have, finally, the "in-bond landed cost."

The price advantage to an inland producer under this system lies in the possible difference between transport costs from the coast to the point of sale and the inland producer's transport costs to that same point of sale. The small proportion that Sasol sells retail, adds a retailer's margin for that proportion.

This price situation is affected by the international oil price and the rand/dollar exchange rate as the major factors, as well as by minor factors like changes in tanker rates. Customers, says Mostert, tend to take a "snapshot" view and complain that Sasol is doing very well. But not so long ago, these factors did not help very much.



Whenever the dollar-denominated oil price or the rand dollar rate shifts in Sasol's favour, the cry goes up that Sasol should not be entitled to benefit. The opposite does not happen however. Apart from Sasol's own strong opinion in the matter, it is the *FM*'s opinion, too, that this approach reeks of a naive populism and mistrust of the profit motive.

An import replacement company like Sasol cannot be obliged to suffer the hardship when these factors go against it, but not be entitled to benefit in the contrary situation. In effect, to refuse Sasol a price increase when the rand falls would be to oblige Sasol to subsidise its customers. This approach would negate the benefits from a falling rand and damage the freedom of markets and business confidence more seriously than the proposers of these ideas usually realise.

Sasol, argues Mostert, is not a utility operating on a cost-plus basis, and must remain free to follow the market.

According to Andre du Toit, senior GM of Sasol Ltd, responsible, among other things, for corporate finance, the public does not realise that the local liquid fuels market has a character quite different from that apparently given by a fixed price at the pumps.

The producers of petrol and diesel, including Sasol, remain exposed to the fluctuations in the international market price of oil and to the vagaries of the rand/dollar exchange rate. Consequently, price control at the pump should be really regarded only as price stabilisation. The only proportion of the price subject to actual control is the "marketing margin" (of the order of 5c/*l*) and excise and similar imposts. In effect, the remainder of the price is control-free.

How then can the main component of the price fluctuate while the price at the pump is kept constant? Du Toit explains that the fluctuations are absorbed through what government and the industry calls "the slate." This is a bookkeeping means of monitoring over-recoveries and under-recoveries receivable by the fuels marketer. The slate is adjusted through setting a new pump price when a new price trend in the rand price of crude oil becomes established.

Recently, however, the crash in the rand was not fully reflected even in the greatly increased pump prices, because government absorbed and, in effect, subsidised consumers through releases from the strategic stockpile. Government felt that the high level of output from Secunda justified releases from the stockpile.

Some critics of local pricing policy argue also that it is unfair that Sasol should receive the equivalent of the "in-bond landed cost" of imported oil plus the notional cost of transport inland to the major SA market. Du Toit, like Mostert, notes that the synfuels industry is an import replacement industry which operates in effect in the international market for crude oil and its products. When you build a synfuels plant, you locate your plant so as to optimise overall cost advantages — including tranport costs.

Sasol's Mostert . . . defending the fuel price system

So the plant is placed as near as possible both to supplies of raw material and to the major market. This chosen location will put the synfuels plant on the strongest possible basis to compete against imported oil or its refined products. This system has long been established in SA for import-replacement industries.

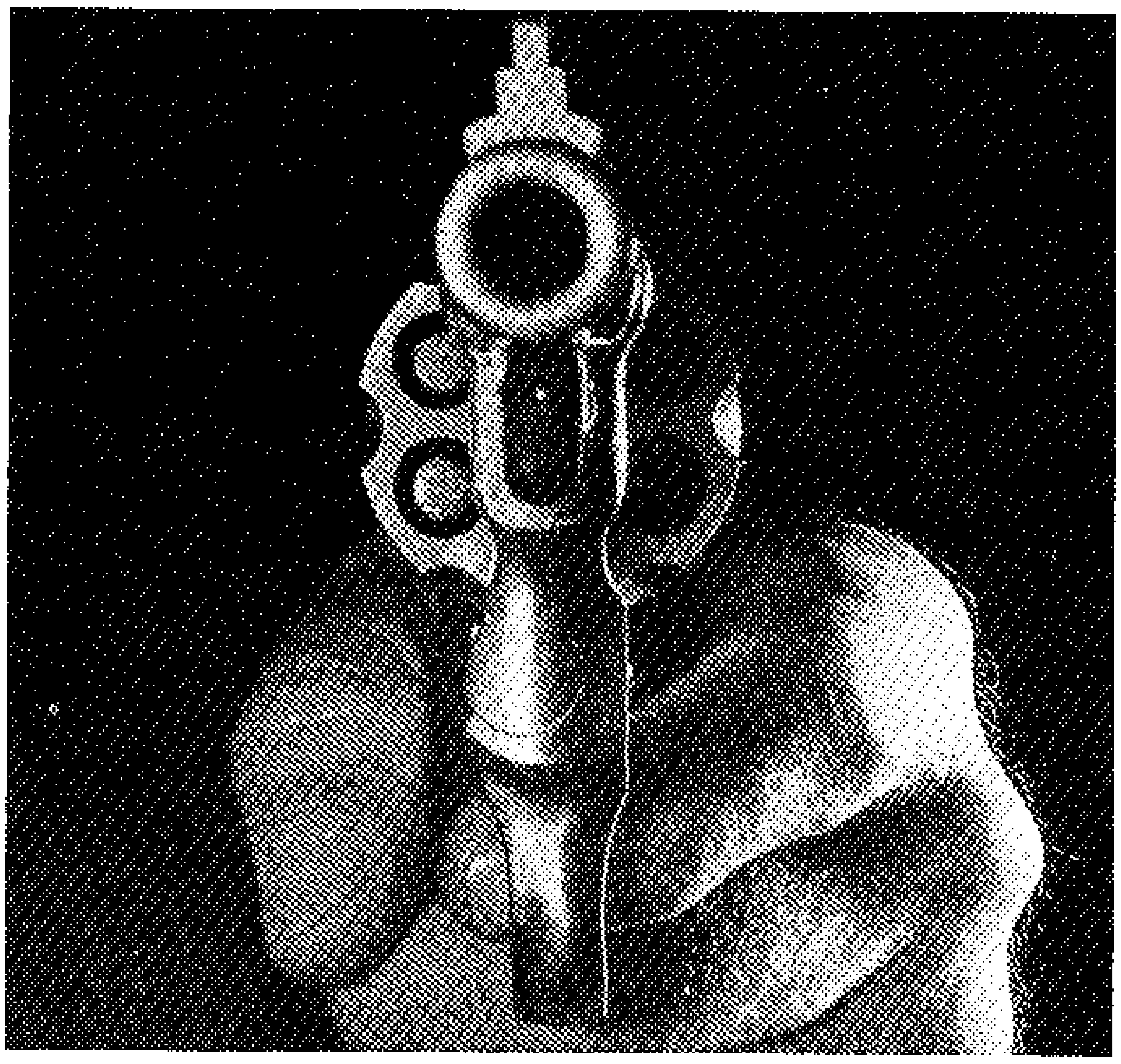
In 1978 or thereabouts, the Board of Trade and Industries investigated the inland transport-related system of pricing fuels — the so-called "grid system" — and found it to be market-related. The board concluded that the system of having higher prices inland should therefore not be interfered with, because selling fuels nationally at a uniform price would, in turn, interfere with market signals for the optimal location of industries. In other words, SA would be increasing the cost structure of the country as a whole the moment it moved away from market-related fuel pricing.

What is worse, any inland producer (read Sasol) which initially located itself in relation to the initially given structure of market costs would later find itself non-optimally located if government subsequently interfered with the market-related structure.

And nothing could be more detrimental to investor confidence than such retroactive nullification of a carefully calculated location policy. ■

CASH CARRYING DIVISION

Who said cash is hard to come by in a recession?



When Fidelity Guards, at a surprisingly low cost, will make a daily call to carry money to and from the bank for you, what happens?

Instead, large numbers of businesses, of all sizes, are sending their own staff with hundreds, even thousands of Rands out onto the street.

Many usually astute businessmen will justify that by saying that money is hard to make.

But it's not hard to take.

Unfortunately you're entrusting the fruits of hard work to someone who's a sitting duck for a hold-up by a professional — or even worse — a mugging by a panicky violent amateur.

Put your money, and the risk into the hands of trained professionals. It's our responsibility, it's guaranteed.

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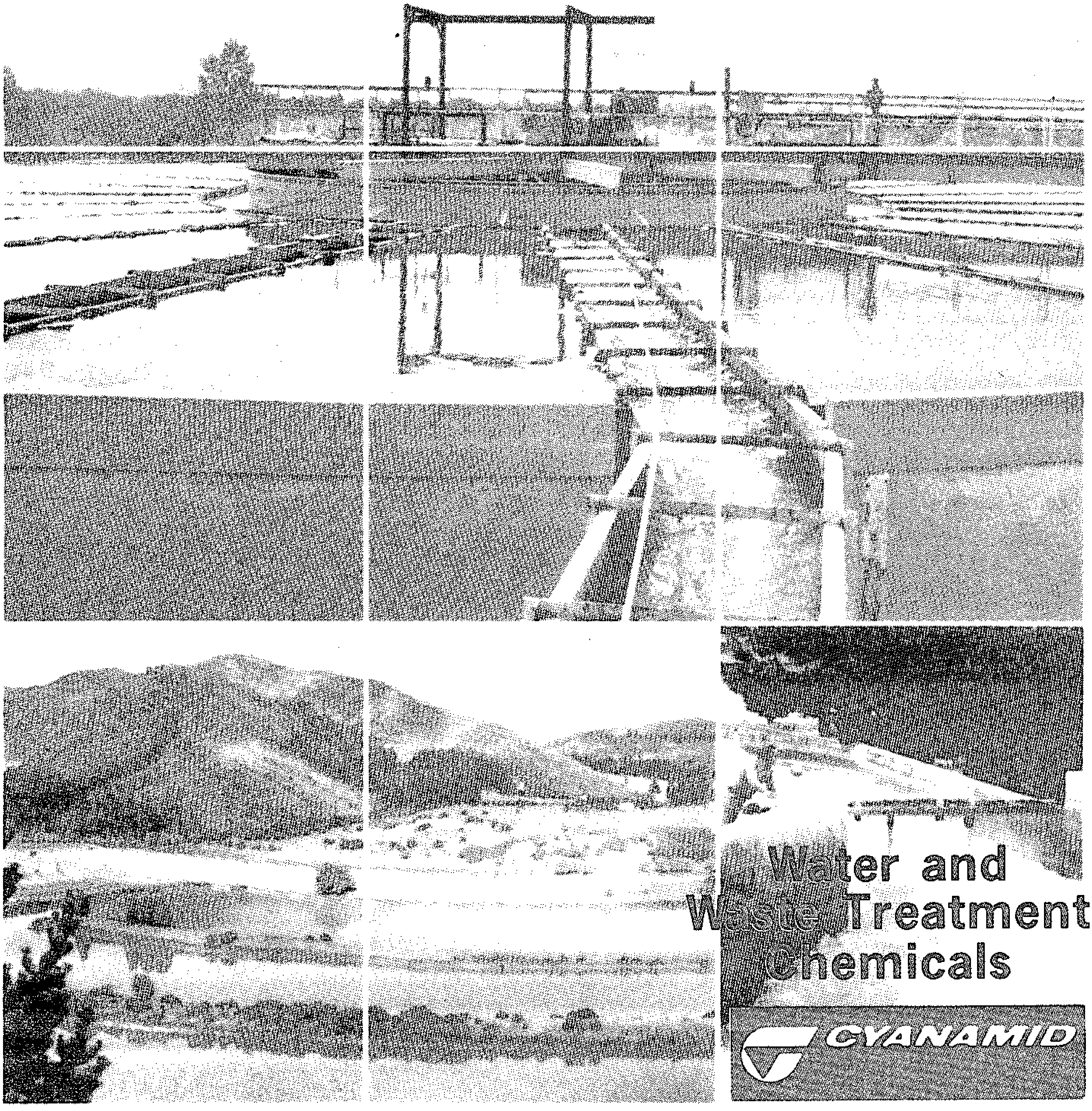

Water and
Waste Treatment
Chemicals
CYANAMID

A chemical reaction

Developments in the world oil market are important to Sasol. And MD Joe Stegmann says a number of large chemical plants have been erected in the Middle East. Some are coming on stream about now. So there will be a "not insignificant" effect in the markets in South East Asia, Europe and the Middle East itself. These products might move down Africa too, he says, "so we must be sensitive to these developments."

But this increment to output will be less embarrassing than originally thought. Although feedstock costs will be relatively low, production costs will be relatively high.

Furthermore, they are unlikely to attack American markets. And American markets are so large they will continue to determine their own prices anyway.

On balance then, the effect of the new Middle East production is likely to be less traumatic than was expected a few years ago.

Sasol might seem gigantic in local terms. But it's merely a cog in the mighty wheel of the world market. But Sasol, too, is going global

The rapid rise in oil prices has had a strong impact on the production of major chemical commodities. Inefficient chemical plants all over the world tended to be taken out of production, or revamped and retrofitted with more efficient equipment so as to reduce the cost of oil-based feedstocks and energy.

America has by and large operated its petrochemical plants on gas fractions (mainly ethane) obtained from natural gas rather than from petroleum, so that the US chemical industry has always had an advantage over Europe. This advantage has been intensified by the fact that America has always had rather rigid controls over inter-state gas prices. Even now decontrol is incomplete.

In Europe and the US, as the result of the rapid increase in (oil-based) chemical prices, there has been a strong negative response on the demand front. Thus, plastics are being produced in a lighter gauge and in many cases alternatives have entered the market place.

"In SA," notes Stegmann, "we have seen a similar response." The industry's earlier projections for ethylene demand (ethylene being the most important intermediate for plastics) were far too optimistic. SA's estimated consumption for 1985 is only about 40% of the projection made in the mid-Seventies. In response, Sasol too has shut down petroleum-based ethylene production units.

EEC AND RSA TARIFF/IMPORT DUTIES ON VARIOUS CHEMICALS

PRODUCT	EEC	RSA
Ethylene	14,1% (if authorised end-user, 'free')	Free
Propylene	8,0%	Free
Anhydrous ammonia	11,1%	Free
Nitric acid	7,4%	15%
Ammonium sulphate	8,1%	Free for fert., 10% for ind. use
Ammonium nitrate	8,0%	Free
Sulphur	5,3	Free
Sodium nitrate	3,0%	Free
Various alcohol blends	10,2%	10%
Iso-Propyl alcohol	8,8%	R1,43/l
Normal propyl alcohol	8,8%	R1,43/l
Iso-Butyl alcohol	10,9%	20% or R770/ton less 80%
Normal butyl alcohol	10,9%	20% or R770/ton less 80%
Amyl alcohol	11.0%	20% or R450/ton less 80%
Acetone	8,3%	20% or R260/ton less 80%
Methyl ethyl ketone	8,3%	20% or R610/ton less 80%
Toluene	11,0% (if authorised end-user, 'free')	R103,41/m^3
Creosote oils	3,5% (there could be excise duty too)	Free
Coal tar pitch	Free	Free
Paraffin waxes	5,0%	Free
Oxidised waxes	5,0%	15%
Scale wax	5.0%	Free
Polyethylene waxes	6,3%	Free
Montan wax	5,0%	Free
Slack wax	5,0%	Free
Phenol, synthetic	3,1%	5%
Phenol, natural	2,5%	5%
Cresylic acid	Free	15%
O, M & P-Cresol	2,5%	5%

Source: Sasol

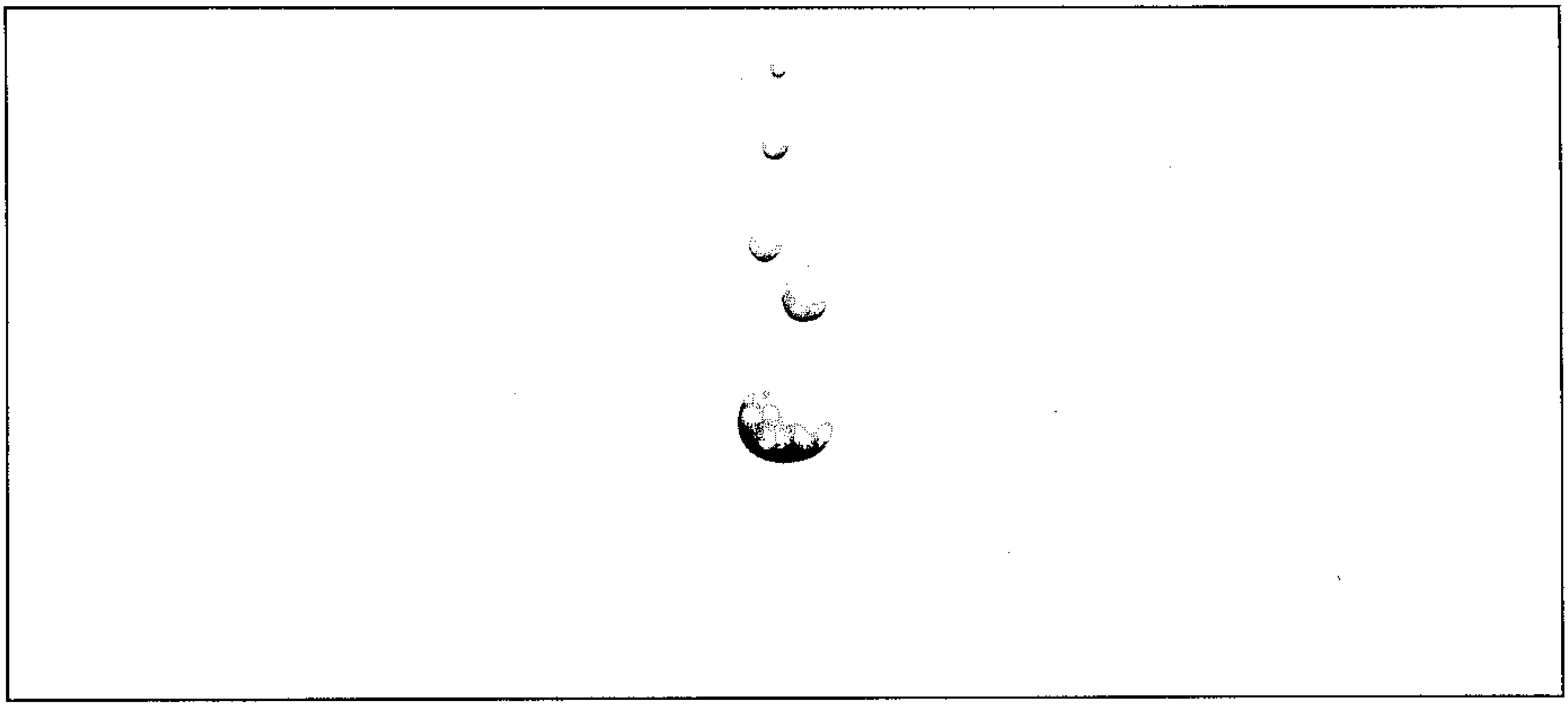
But there is the chemical market too.

André Bedeker, MD of Sasolchem, which is responsible for Sasol's chemical operations, says his company sells its chemical products in exceptionally competitive markets. And it has to ensure that Sasol's production and research activities are constantly geared to meet changing market requirements.

Sasolchem sells more than 70 chemical products to about 1 000 local customers, who purchase from as little as 25 kg to more than 100 000 tons/year. Current turnover of chemical sales amounts to about R360m/year, with exports contributing about 21%.

Sasol has been in the chemical export business since production started in 1954. The first export product was tar acids, and in 1956 the export of Sasol's unique, hard high melting point paraffin waxes started. These waxes and their derivatives have been the mainstay of Sasol's chemical export business, and today some 30 000 tons/year of waxes are being exported world-wide to no fewer than 26 countries.

The advent of Sasol 2 and 3 has boosted export volumes and enabled Sasolchem to enter the international market with acetone and MEK (methyl ethyl ketone). The recent weakening of the Rand has made exports



Even more terrifying than a Hitchcock movie.

If you had installed a genuine Saunders valve, you'd be sleeping peacefully, instead of having recurring nightmares.

You know what it is like. Lying awake in the dead of the night. Silence. The gnawing edge of worry eating into your stomach.

There are 101 questions you ask yourself. Like, how are things at the plant? Those new valves you've just installed — will they handle the job? What if they leak? Will the staff be safe? What about the downtime . . . and the consequences?

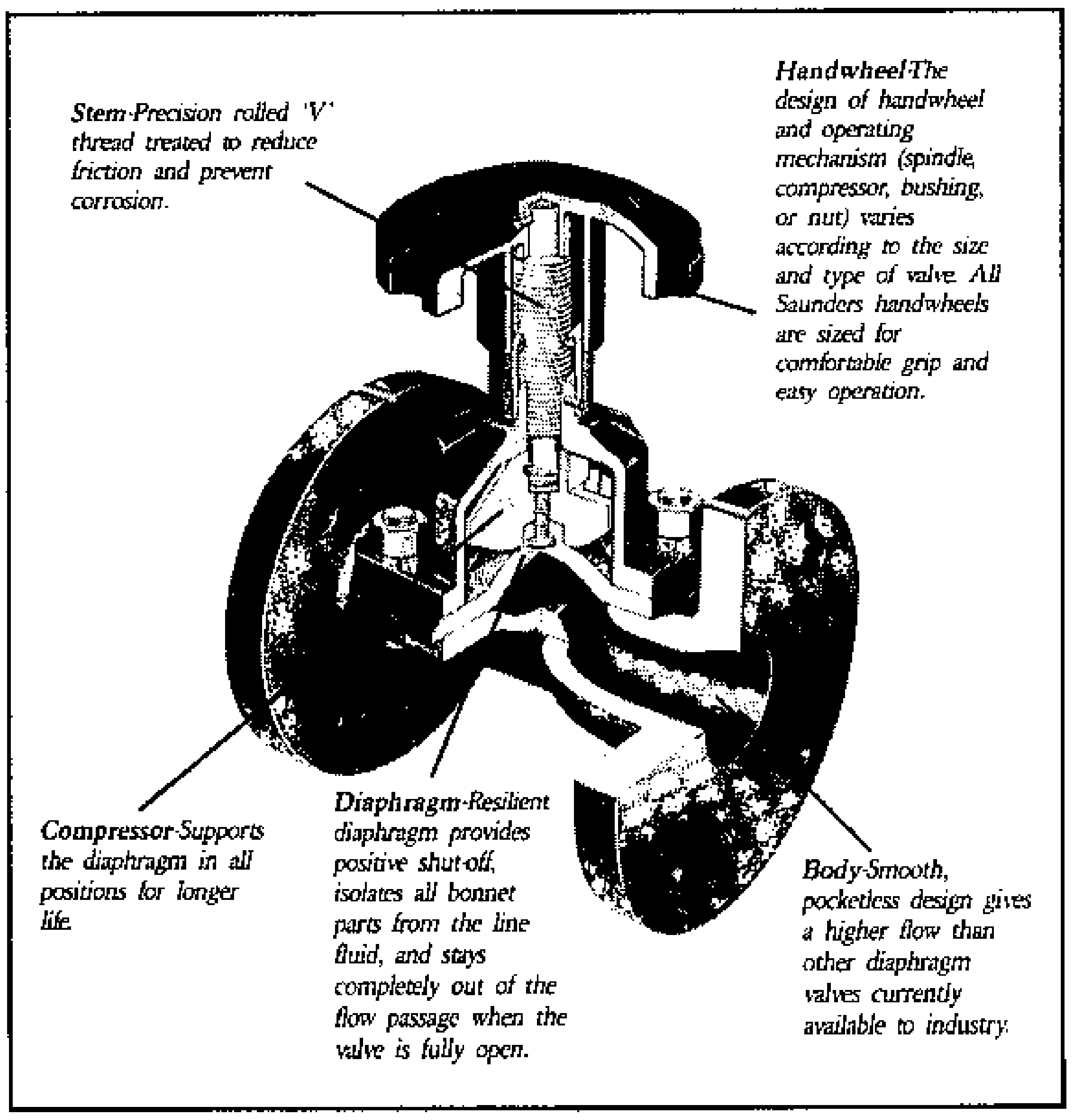
You wait. Alone. Waiting for that phone call. Hoping it never comes.

Is it really worth it?

For, if you had insisted on genuine Saunders Diaphragm Valves, you'd be enjoying a good night's rest — knowing that there will be no leak. Because genuine Saunders valves are 100% leak-proof. Period. End of story.

After all, Saunders invented and patented the diaphragm valve over 50 years ago. They are market leaders and the world's largest manufacturers. They know everything there is to know about diaphragm valves.

They're confident that their valves will perform, even under the toughest conditions. Which is why Saunders will travel to all corners of South Africa to make sure they do just that.



Stem-Precision rolled 'V' thread treated to reduce friction and prevent corrosion.

Handwheel-The design of handwheel and operating mechanism (spindle, compressor, bushing, or nut) varies according to the size and type of valve. All Saunders handwheels are sized for comfortable grip and easy operation.

Compressor-Supports the diaphragm in all positions for longer life.

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COMPLETE INDUSTRIAL 3105/1

more competitive in world markets and gross income from all chemical exports has more than trebled in the past five years, to about R75m/year.

Sasolchem's most important product, in terms of both volume and turnover, is ethylene. Sasol is the only company in the world producing ethylene from coal. Ethylene is the most basic building block of the petrochemical industry and in SA it is used mainly for the production of polyethylenes, PVC and such chlorocarbons as aerosol propellants and the solvent used by dry cleaners.

Sasol's range of about 20 waxes, produced at Sasol 1, extends from soft, low melting-point products with a relatively high oil content, to hard, high melting-point waxes which are virtually oil-free. The hard wax is chemically modified by further processing to yield products which are especially suitable for use in polishes and emulsions. Wax blends tailored to specific end-uses, such as the "curtain coating" of banana cartons, are also produced.

Perhaps the best known use of wax is in candles, where Sasol's medium melting-point wax features, although the bulk of candle wax is being imported. Wax was once thought to be a dying industry, but its use locally for candle manufacture has grown at an average rate of almost 9%/year in the past six years, to reach some 50 000 tons year.

APPLICATIONS OF TAR PRODUCTS

SAKRESOTE
Wood preservative
Constituent in mining chemicals

KRESIDE
Black disinfectants

COAL TAR PITCH
Pitch-fibre pipes
Binder for coal briquettes
Bitumastic paints

TAR ACIDS
Feedstock for production of individual refined tar acids

PHENOL
Phenol-formaldehyde resins (used in wood lamination, foundry resins, moulding powders, brake pads/linings, grinding aids/abrasive wheels)
Overseas: Bisphenol-A (for epoxies); pharmaceuticals

CRESYLIC ACID
Mining chemicals (frothers)
Exports: Feedstock for recovery of individual tar acids

Source: Sasol

Sasol is now considering the possibility of expanding its wax production in order to meet the growing international demand for hard waxes and the local demand for candle wax.

Sasol's hard waxes have unique properties, but they nevertheless face stiff competition in export markets from such products as polyethylene waxes and microcrystalline waxes derived from crude oil. Sasol's oxidised waxes compete with such natural waxes as Carnauba (obtained from the leaves of palm trees) and waxes extracted from East German lignite (brown coal).

Sasol's hard waxes are sold into a diversified market and find their way into a variety of applications, one of the most important being in the formulation of hot melt adhesives and coatings. Other interesting applications are in electric cable compounds, chewing gum and high quality printing inks. In the latter application, the wax, supplied as a very fine powder, forms only a small but critical part of the final ink formulation. The development of a range of powdered waxes is a recent innovation.

Sasolchem, in conjunction with the Sastech research division, continually strives to develop new products and new end-uses. Production of "specialities" is its aim. This has led to establishment of a wax crystallisation plant which is due to come on stream in the second half of 1985.

In the identification of new opportunities,

Sasolchem's Bedeker . . . waxes are the mainstay

Sasolchem has been ably supported by its overseas agents and distributors, some of whom have sophisticated research facilities of their own. Sasolchem has had excellent long term relationships with many of its overseas agents and views them as a very important extension of its marketing arm.

Sasolchem also markets a range of organic solvents, consisting of five alcohols, the ketones acetone and MEK, and an aromatic solvent. In addition, various solvent blends are produced to suit customers' specific needs. Ethyl alcohol is denatured according to various formulations, including the well-know "blue meths."

As indicated by the name "solvents", these products are used mainly by the surface coatings industry, and in the manufacture of paints, varnishes and lacquer thinners. They are also used as solvents in such non-paint applications as the manufacture of adhesives, printing inks, de-greasers, lubricating oils and nail polish removers.

Sasol's solvents are, however, also used by customers in non-solvent applications — as precursors in chemical manufacture. Examples are the use of acetone for the production of poly-isoprene rubber, MIBK, hexylene glycol and diacetone alcohol. Xanthates (mineral floatation agents) are produced from alcohols and carbon disulphide as raw materials.

In the overseas market acetone is used as feedstock in the manufacture of methyl methacrylate, which is then polymerised to form the plastic generally known as "Perspex".

Another interesting product group is the so-called "tar products". The best-known is probably creosote, used for timber preservation. Coal tar pitch is used for the impregnation of cellulose fibre pipes and the binding of coal fines in the production of coking coal briquettes, thereby extending SA's coking coal reserves.

APPLICATIONS OF WAXES

WAXY OILS

Chlorination (chloroparaffins)
Mould release agent for concrete castings
Extender for petroleum jelly
Wire drawing lubricant
Paint strippers
Hand cleaners
Temporary corrosion protection
Waterproofing of chipboard, paper
Impregnation of leather
Explosives carrier
Milking salves
Tick salves for cattle
Wax blends for cheese rind
Lubricants for cotton thread in textiles

SASOLWAKS M

Candles
Polishes
Waterproofing (leather, paper, tarpaulins)
Crayons
Rubber (blooming agent)
Hot melt adhesives
Ice cream cartons
Impregnation of textiles
Hair, face and hand creams
Wax blends for cheese rind
Paper impregnation in explosives
Carbon paper
Paint removers
Miling salves

SASOLWAKS H

Hot melt adhesives and coatings
Electric cable compounds
Feedstock for oxidation
Wax blends
Polishes
Master batches for plastics
HDPE 'shopping bags'
Candles
Carbon paper
Chewing gum
Printing inks
Paints and varnishes
Crayons
PVC lubricant
Laundry ironing
Mould release agent for extrusion of plastics
Rubber lubricant

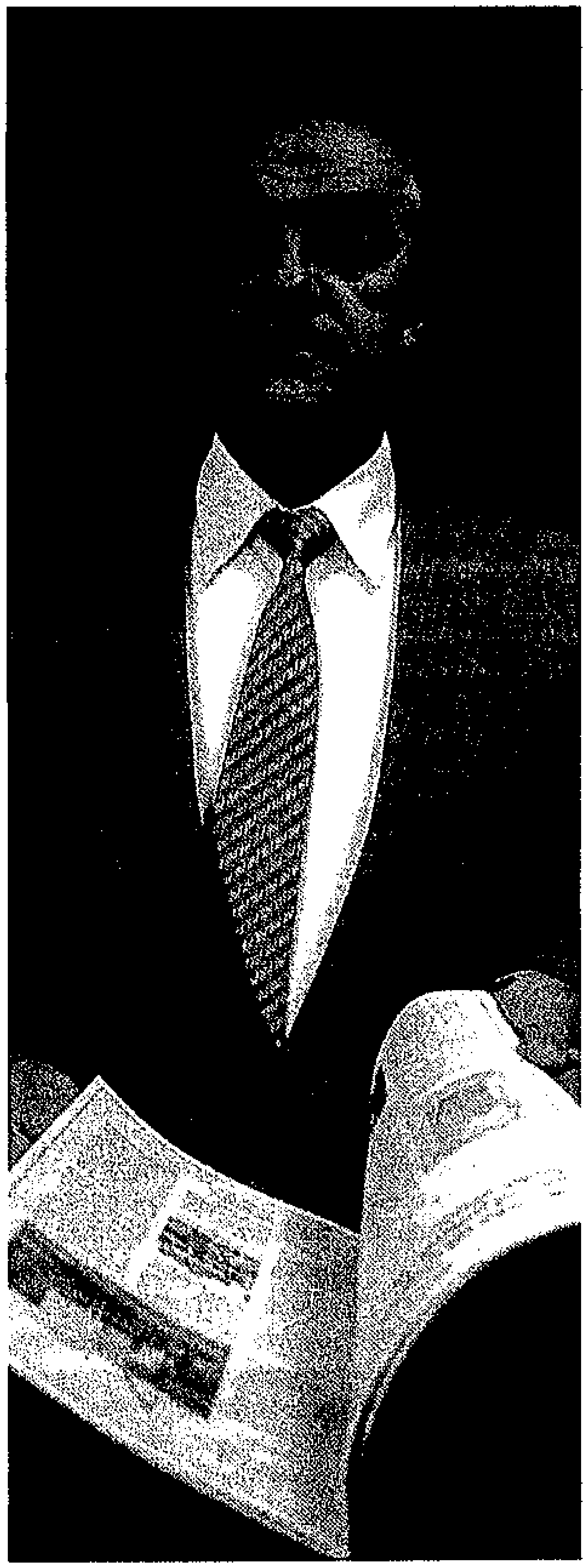
SASOLWAKS A

Polishes
Textile emulsions
Fruit coating emulsions
Anti-corrosion coatings
Precision castings
Master batches for plastics (PVC)
Car seat spring lubricant

The company, Allied Tar Acid Refiners (ATAR), of which Sasol own 75%, was established to distill tar acids into individual final products, such as phenol and cresylic acid. Phenol is an important chemical intermediate, its main application being in the manufacture of phenol-formaldehyde resins. These are used for wood lamination and in the production of abrasives, brake pads and bakelite products. About half the phenol production is now being exported, mainly to South East Asia.

The balance of Sasol's tar acid production — over and above ATAR's requirement —

EXPLOSIVE NEWS



Janse Uys . . . challenging explosives makers

The Sasol group's explosive interests are long standing — over 20 years in some product lines, as Janse Uys, GM of Sasol Ltd with head office responsibility for these activities, explains.

Until now, Sasol has primarily been a supplier of materials to other explosives manufacturers, including ammonium nitrate solution, sodium nitrate and incidental items. The wax used to waterproof cartridges is one such item; diesel-type oils and waxy oils used in formulating ammonium nitrate fuel oil (anfo) explosives are others.

Sasol is now constructing a plant at Sasolburg to manufacture porous prilled ammonium nitrate (ppan) and anfo itself at Secunda. In marketing ppan and anfo, Sasol Explosives will supply a full range of computer-aided design services to the customer.

Sasol already produces — at a decentralised bulk plant — emulsion explosives and so-called "heavy anfo," which consists of anfo in a blend with an emulsion. The precise formulation of explosives for a given mining situation is a vital part of the knowhow in this field, and may require the setting up of a bulk plant to serve one mine only.

The formulation problem is tricky, since blast holes can require filling up to three weeks before a blast, and the formulation must remain stable during this period.

Ppan must, as its main requirement, have the ability to absorb 5,5%-6% of fuel oil. Traditionally, diesel oil is used for the formulation of this explosive. The formulation of "heavy anfo" created requirements for density variations in ppan and the ppan plant being erected.

Apart from the above, Sasol explosives will also produce the so-called "high-tech" cartridged emulsion explosives to cater for the wide range of applications in gold and other metal ore mines, the construction industry and "permitted" products for use in "fiery" mines.

is either exported to overseas refiners or is hydrogenated, together with creosote, to liquid fuels at Secunda.

The products obtained from the refining of tar acids are important ingredients of many mining chemicals. Sasolchem sells a range of mining chemicals into a highly competitive market. These products, mainly frothers and collectors, are used in the recovery of such minerals as platinum, coal, copper and gold.

Mining chemicals are very specific in their application, often requiring a product to be "tailored" to the end-user's needs. This obviously calls for market orientation by the sales team and a significant input by research.

Apart from fertilisers and explosives, (dealt with separately in this survey), Sasol's nitrogenous products are also used in other industrial applications.

Ammonia, together with methane (also supplied by Sasol), is used in the manufacture of cyanide for the gold mining industry. Nitric acid is used in the recovery and refining of platinum and uranium, while ammonium sulphate is used in such fields as leather tanning and fire-proofing of wood.

In order to prevent air pollution, the hydrogen sulphide in Secunda's gas streams will be recovered as elemental sulphur. Sulphur is mainly used for the production of sulphuric acid, an important fertiliser raw material, but is also converted to sulphur trioxide, which is used in the production of detergents.

A seemingly useless product, such as the ash emanating from Sasol's coal gasifiers, is used to produce bricks and for road building.

Chemical products, especially basic or primary products, enjoy less protection in SA than is generally believed. In Sasol's case, most competitive products can be imported duty-free. Exceptions are alcohols and ketones, where import duties of 15% to 20% apply, and phenol where a 5% duty applies. In many cases, the tariff protection applicable to Sasol chemicals is lower than that enjoyed by overseas manufacturers of the same products.

Because of the competitive environment in which it operates, and to gain greater market penetration, Sasolchem recently established a regional office in Durban. Stocks of Sasol chemicals are now available in the Natal coastal area. ■

APPLICATIONS OF SOLVENTS

ALCOHOLS

Paints and lacquers
Lacquer thinners
Printing inks
Foundries
Industrial detergents
Degreasers
Rust removers
Etch primers
Stains and varnishes
Adhesives
Cleaning agents
Domestic burners
'Blue meths'
Disinfectants
Hand cleaners
Glass forming
Manufacture of esters
Manufacture of xanthates and other mining chemicals

SOLUMIX

Lacquer thinners
Dip coatings
Printing inks
Adhesives
Degreasers
Foundries

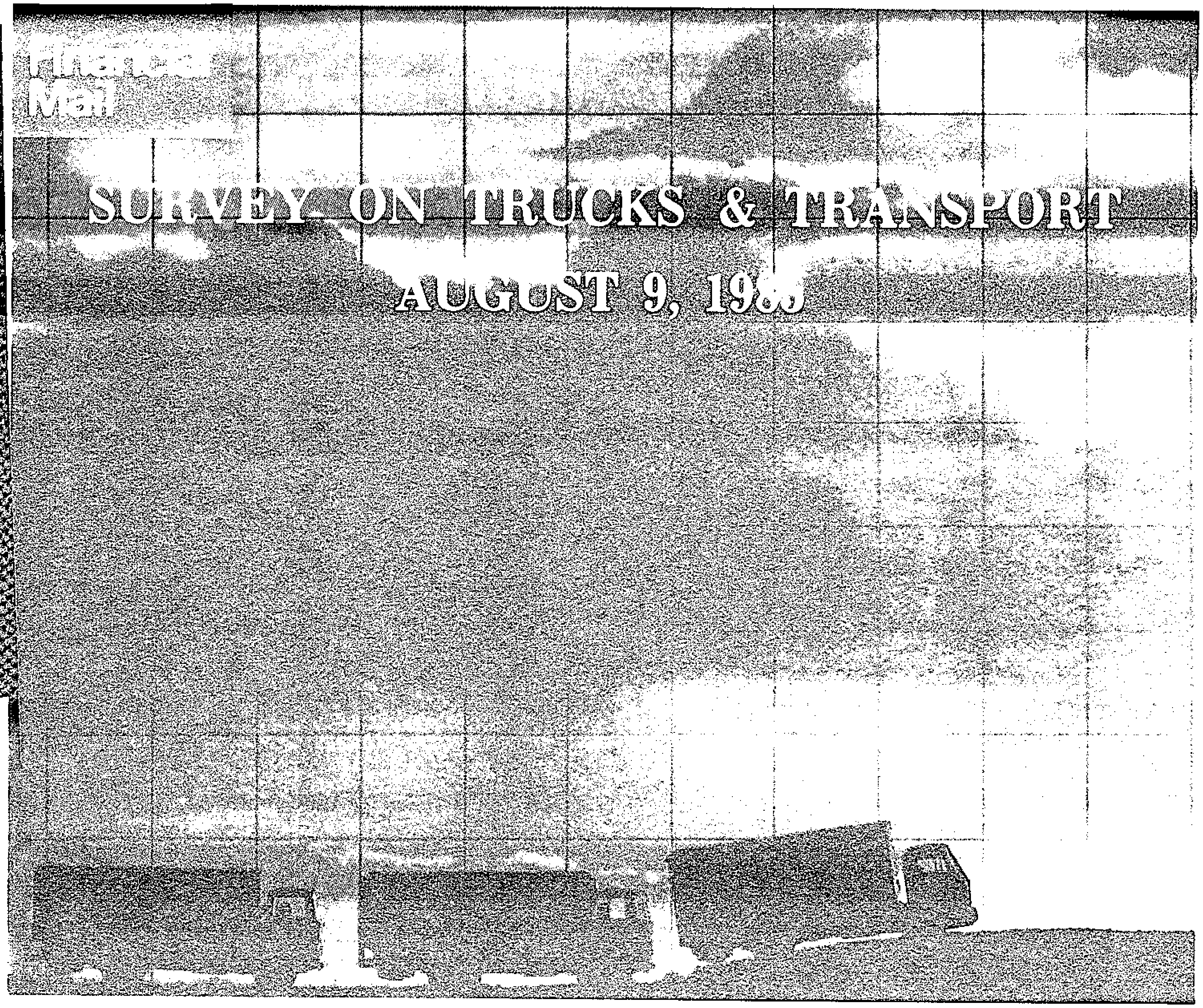
ACETONE

Manufacture of poly-isoprene rubber
Manufacture of DAA, MIBK and HG
Paints and varnishes
Lacquer thinners
Printing inks
Adhesives
Acetylene cylinders
Nail polish remover
Exports: Manufacture of methyl methacrylate

MEK

Paint and lacquer thinners
Solvent for resins, gums and rubber
Adhesives
Printing inks
PVC cloth manufacture
Manufacture of lubricating oils

Source: Sasol


Financial Mail
SURVEY ON TRUCKS & TRANSPORT
AUGUST 9, 1985

Growing pains?

Fertiliser manufacture is not new to Sasol. But thanks to the Secunda plant, Sasol now markets a full range of such products — direct to the consumer

Sasol has been in fertilisers for a long time — since the Sixties, in fact. Sasol 1 has been producing final fertiliser products like limestone ammonium nitrate (lan) as well as intermediates like ammonia.

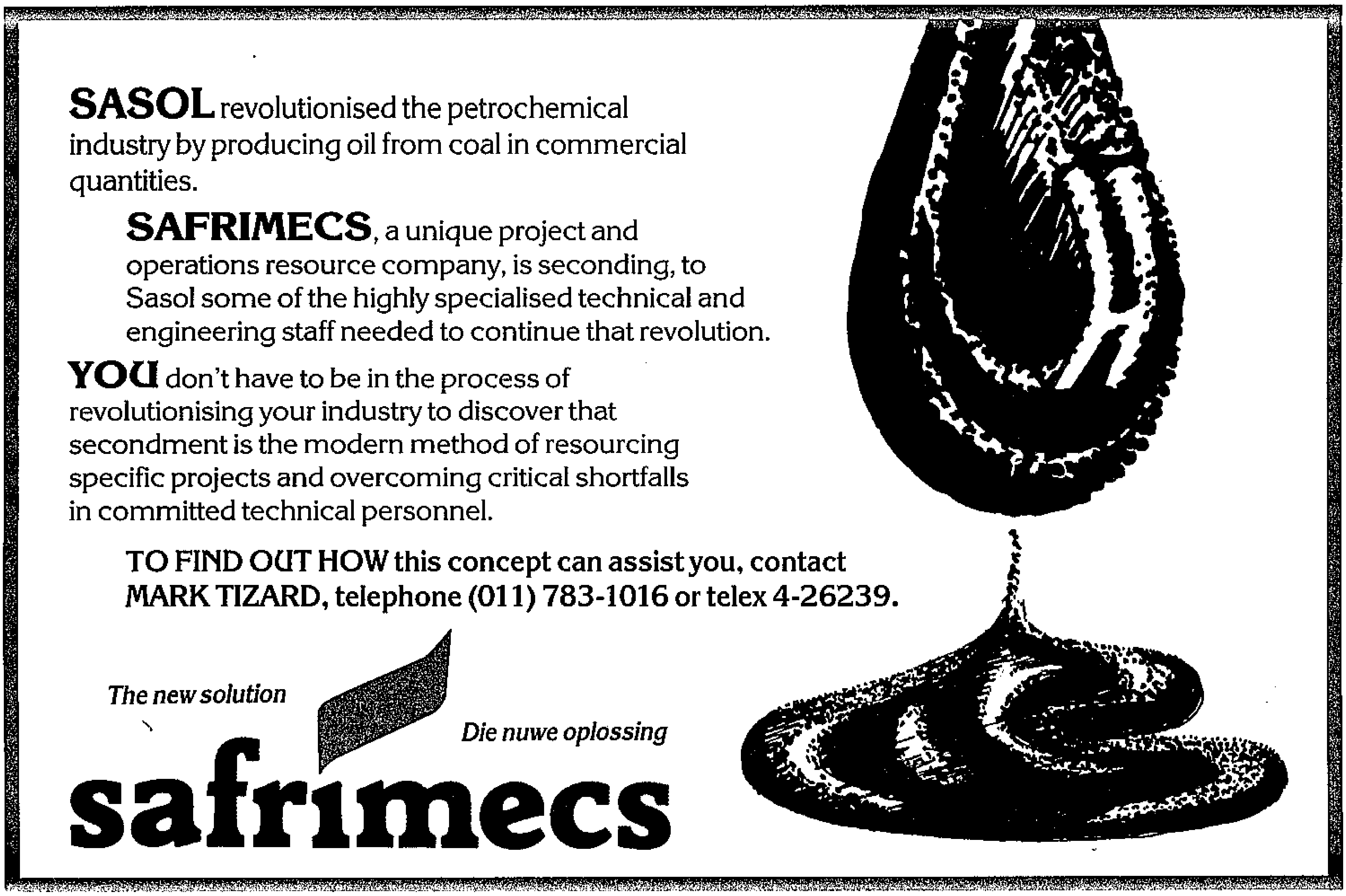
But Secunda has made all the difference. Now that it is in operation, Sasol is able to offer a full range of fertiliser products direct to the end user.

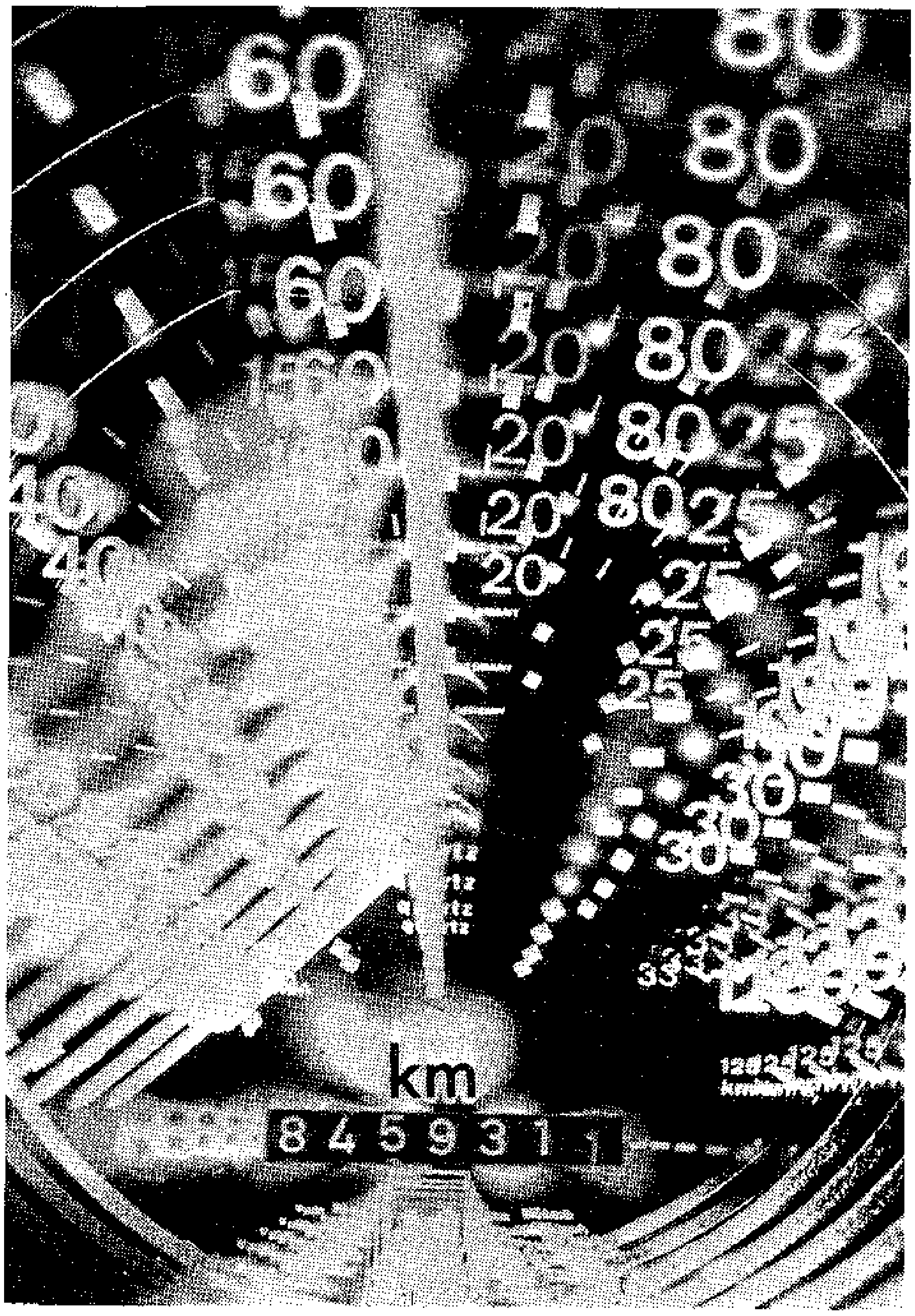
The Secunda project should be seen as part of the implementation of the total long-term strategy of the group. Its aim is to achieve a better balance between upstream and downstream production. But it's not merely a case of growing its own. The Sasol fertiliser project can currently only use about half the Secunda ammonia output. Consequently, Sasol is supplying the surplus 50% to other fertiliser producers.

Sure, at the moment there is a substantial surplus of fertiliser capacity in SA. But when Sasol started to invest in the Secunda project in 1981, and when other companies also expanded, SA was then looking back at 20 years of substantial growth in this industry. Under such conditions, it was not unreasonable to project those rates of growth a few more years into the future.

If growth had continued along the trends of the previous years, then the fertiliser project at Secunda would have gone on-stream just in time to prevent SA from having to import final fertiliser products. So the Secunda project was perfectly timed to keep SA fully self-sufficient.

It was not forseeable, argues André du Toit, Sasol Ltd senior general manager and an economist by training, that not only would the fertiliser market stop growing, but



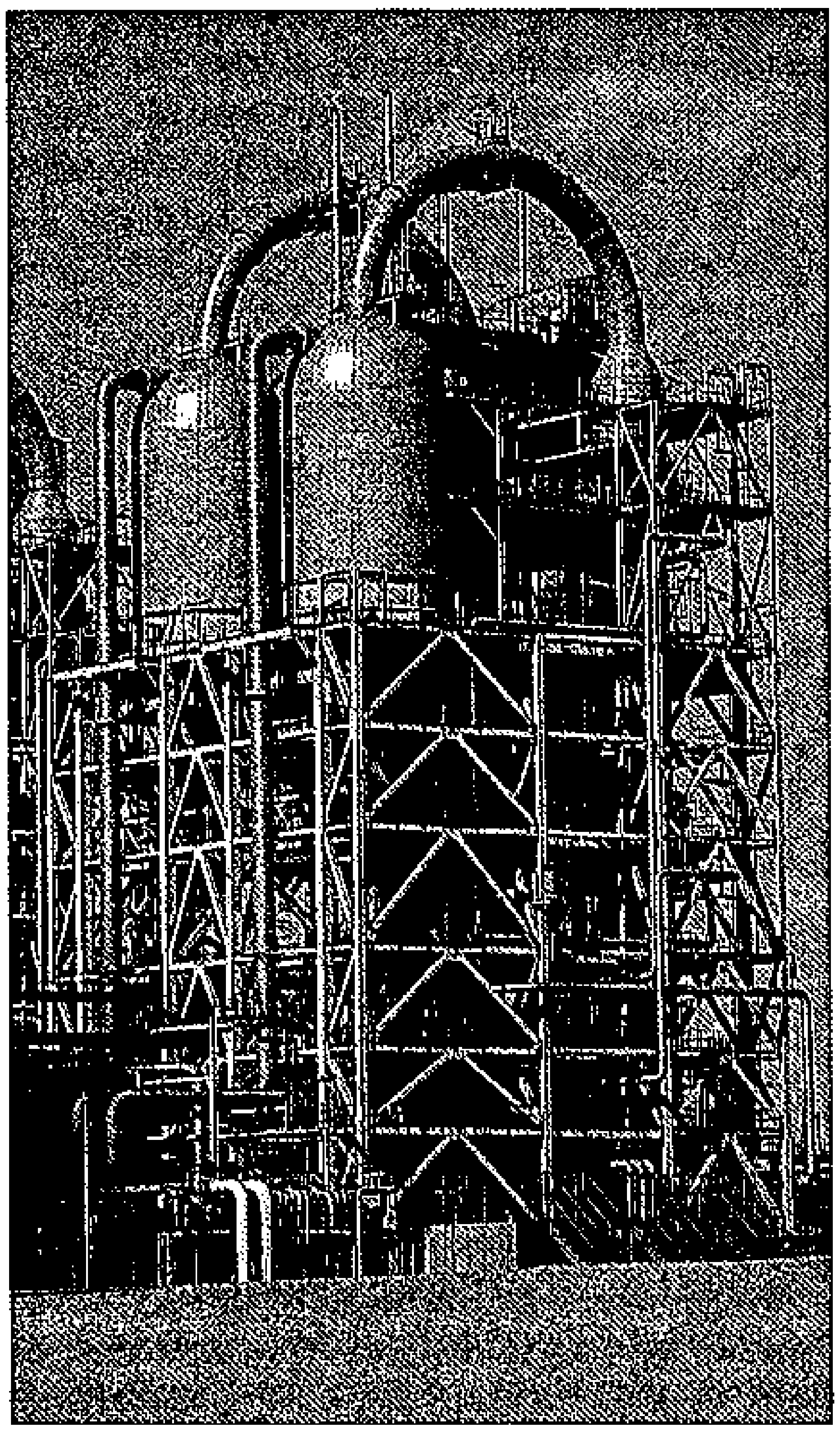


it would also shrink more than 30%.

Although demand has recovered slightly from the level hit in 1984, Du Toit believes that it will be a long time before SA again attains the 1981 offtake. Even a few good agricultural years will not restore farmers to their 1981 financial positions. The drought has bitten deeply.

At the moment, Sasol is not being too aggressive in its development programmes. Indeed, full design capacity is not being used. But the basic commitment to the new ventures has been made. Du Toit concedes there is some room for rationalisation in the fertiliser industry to diminish excessive price cutting, as nobody is earning an acceptable return. However, it is doubtful if this goal can be achieved under fully competitive conditions with the number of suppliers substantially increased. Sasol, however, feels strongly that the industry should not go back to market sharing and price rationalisation agreements.

Sasol does not regard its fertiliser capacity as being the marginal unit in the industry. The group treats its fertiliser plants on an arm's length basis. They pay the same price for ammonia as other fertiliser producers. So pressure on Sasol to produce profits is no different from the pressure on anyone else.



Synthol units . . . produce chemicals too

Nor is it fair to blame the price war on Sasol as the worst phase in price cutting was in April to May of 1984 — before Sasol's output hit the market. Sasol has by now achieved a retail market share in excess of 10%, which could increase "a little bit."

There is no real difficulty through manufacturing at two different locations, because the lan produced at Sasol I is still being sold wholesale to other fertiliser producers like Omnia and Triomf. Sasol itself, therefore, concentrates on marketing the Secunda output. So far as ammonia, nitric acid and lan are concerned, Sasol I is fully balanced, hence no need to cross-rail ammonia from one plant to the other.

Secunda is conveniently near its market in the eastern Transvaal, as well as being better located relative to its supply of ammonia and to its supply of phosphate from Phalaborwa.

The first section of the plant which converts ammonia to nitric acid was built by Uhde, who built most nitric acid plants in SA. The downstream plants for converting nitric acid to ammonium nitrate and the final product granulation plant have been built by DM Weatherly of the US, a reputable firm specialising in erecting fertiliser plants. Over 50% (25% of toal project cost) of the equipment was imported, but this does not mean that one could not physically shift to more local content in future.

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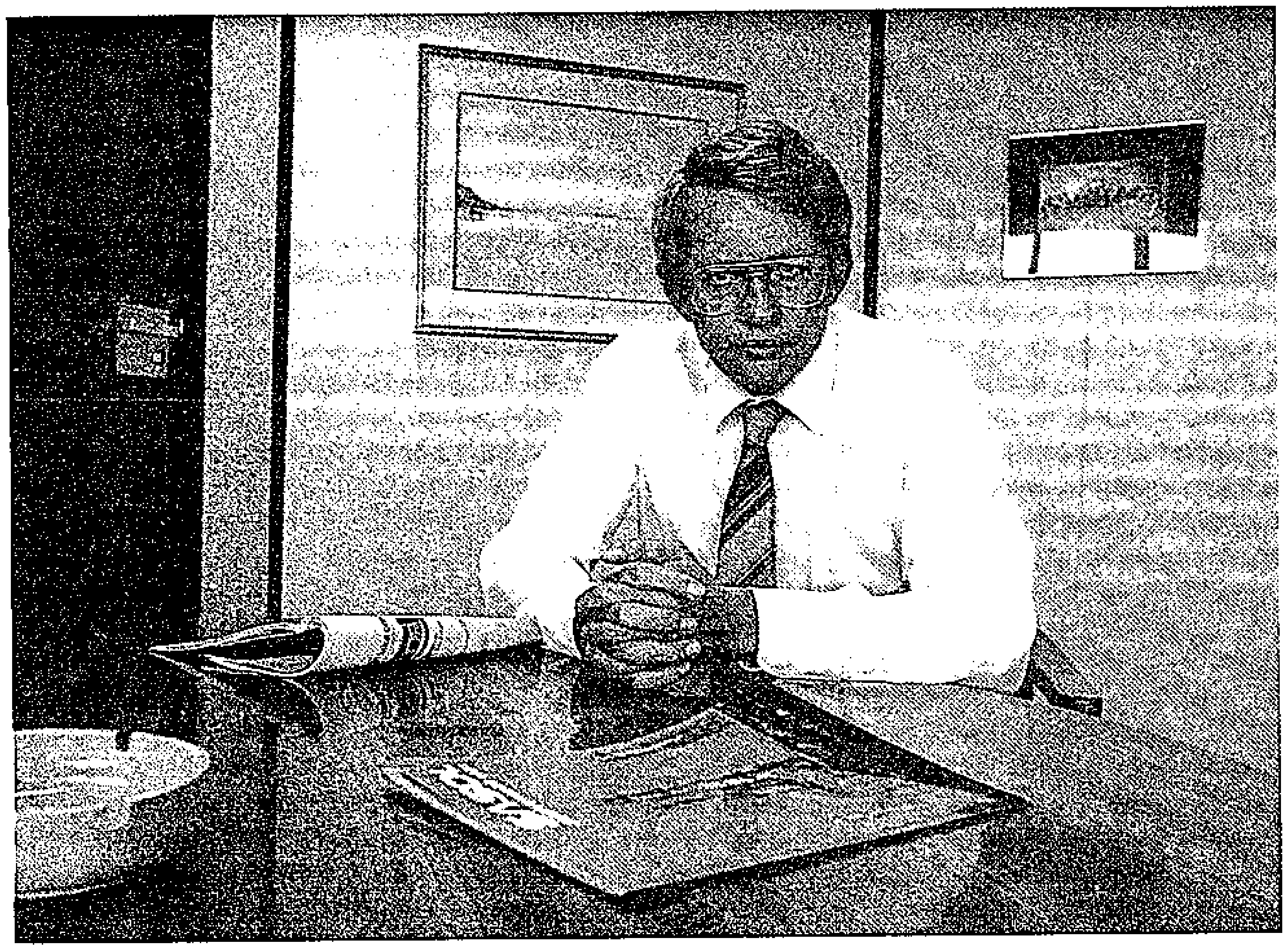
However imports are no threat at present given the weakness of the rand. At the present exchange rate, the effective inland rand price of imported ammonia is R90/ton to R100/ton above Sasol's price. AECI, which does sell some ammonia, is nevertheless a net buyer, taking supplies from Sasol.



André du Toit ... a slight tilt towards chemicals

By Board of Trade criteria, imported ammonia is not being dumped in SA at the moment as the price for imports is related to the domestic US Gulf price.

But the world as a whole is worried by the large ammonia production capacity coming on stream in the Middle East and elsewhere. This capacity does pose future problems to other world ammonia producers, and could conceivably pose a threat to SA producers too, under (admittedly highly hypothetical) circumstances of a strong rand and weaker international chemical prices.

The price increase for ammonia awarded on January 1 1985 was the first in three years. This reflects an annual rate of increment of 7,5% in rand terms over the last four years, against increases in the prices of downstream products of around 12% per year — thus the margin for downstream producers has increased substantially. In any event, the prices of urea and lan had increased at rates below the inflation rate.

At the moment the whole future of the fertiliser industry is in the hands of the weather. There is no chance of a quick recovery to 1981 levels, even on the best assumptions. And as there is no increase in the local price of maize in 1985, these best assumptions are not going to be realised. ■

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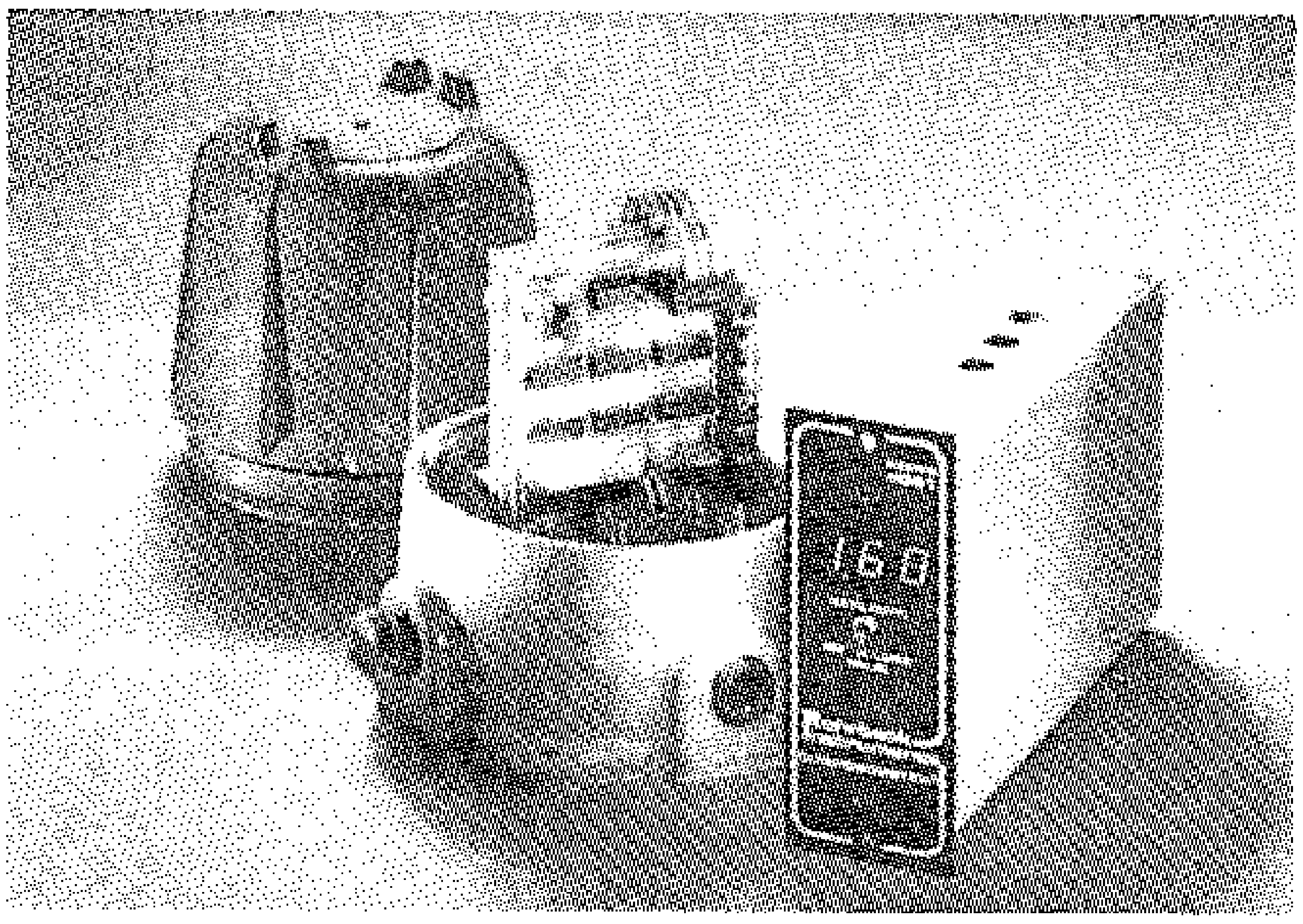

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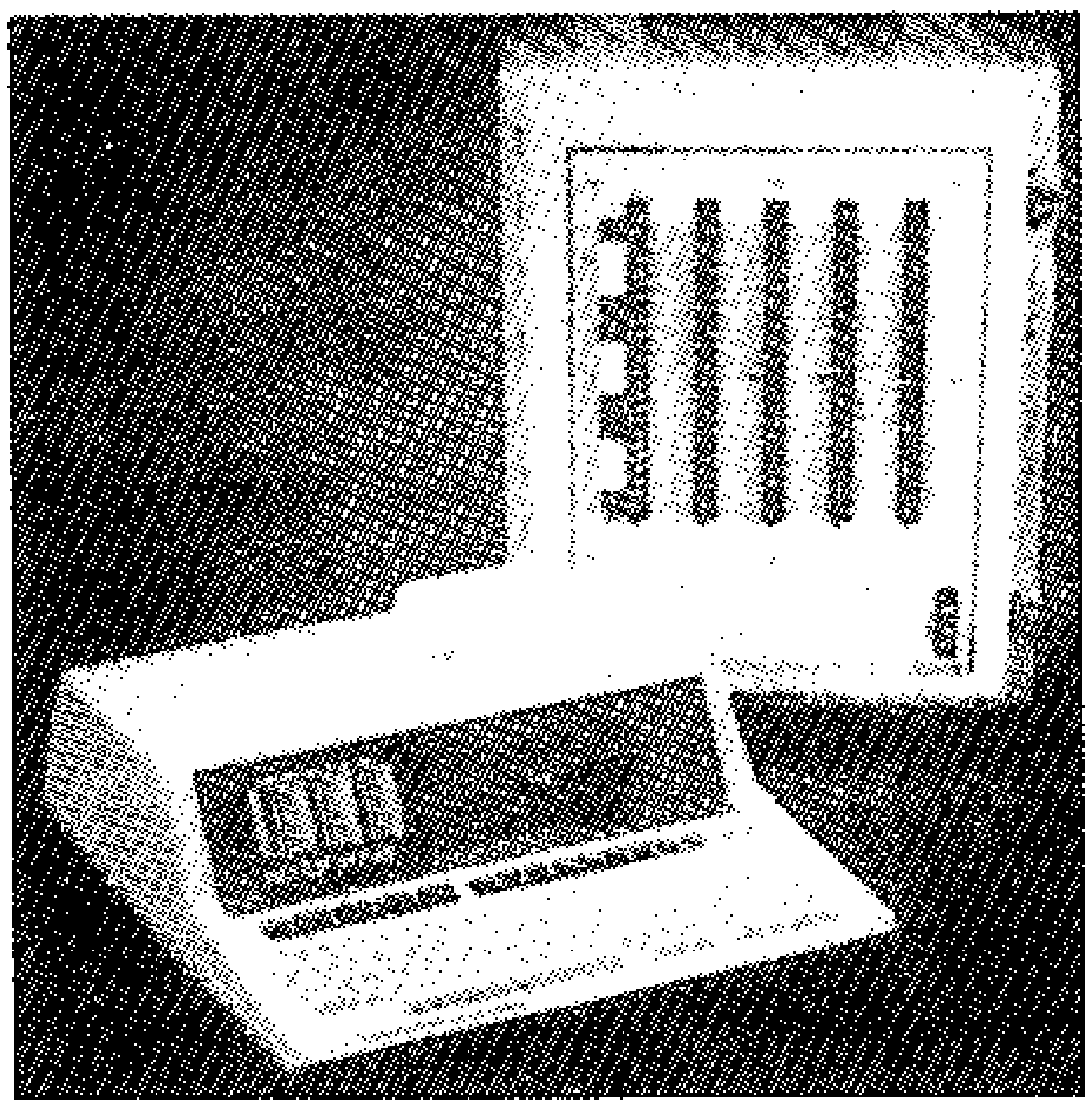

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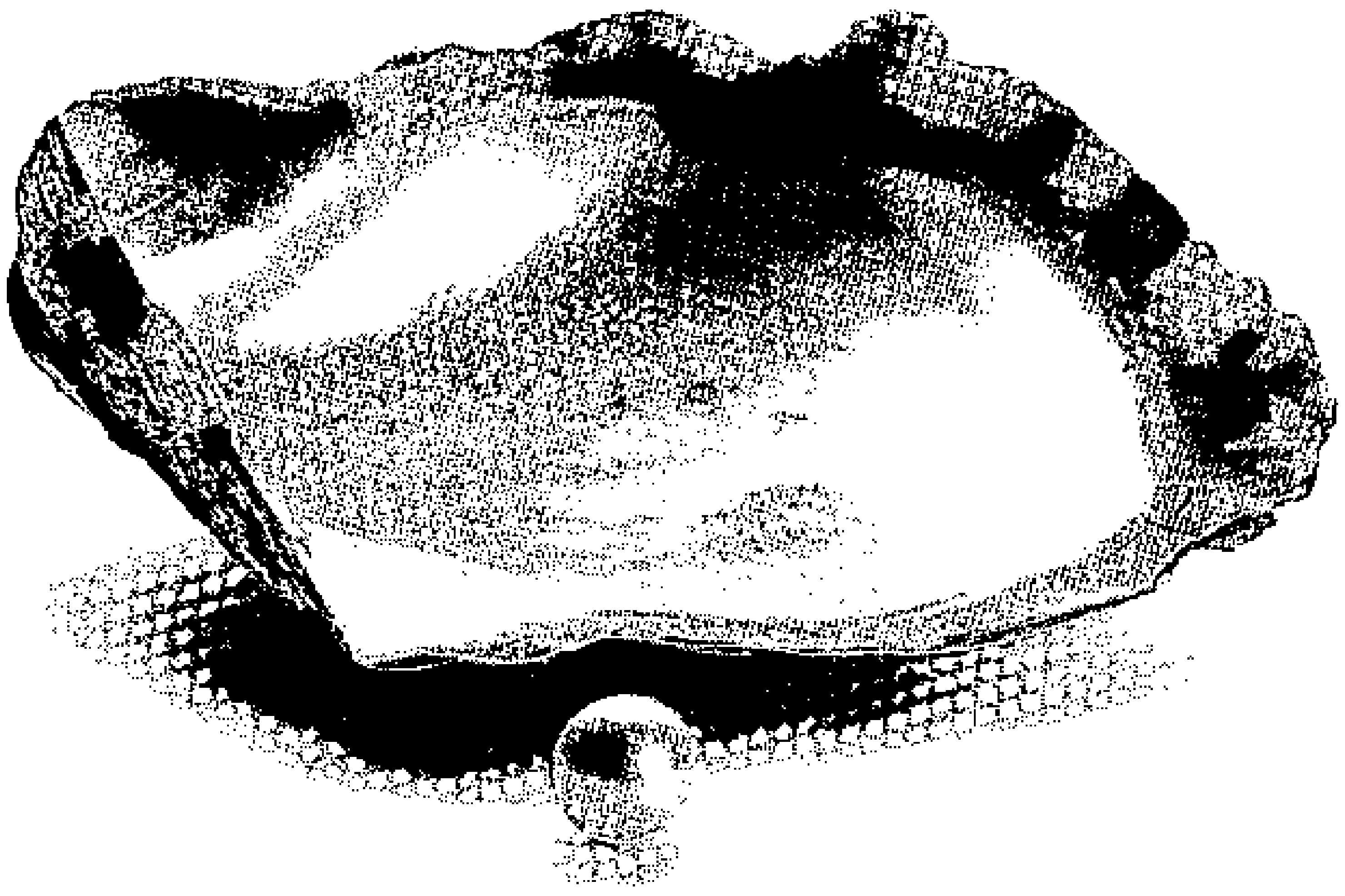
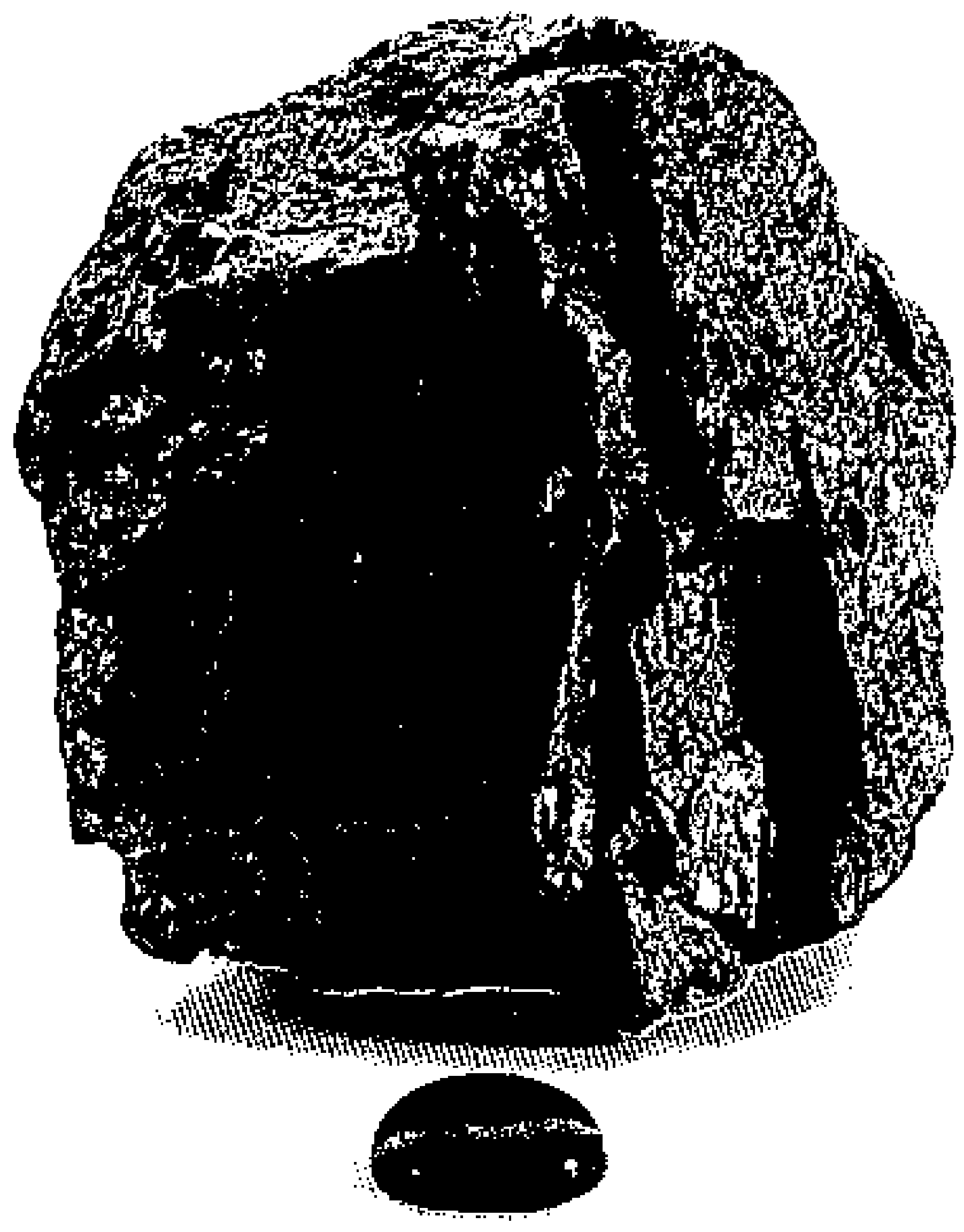


WHEN NATURE CREATES A MIRACLE COST IS THE LAST CONSIDERATION.



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TREK

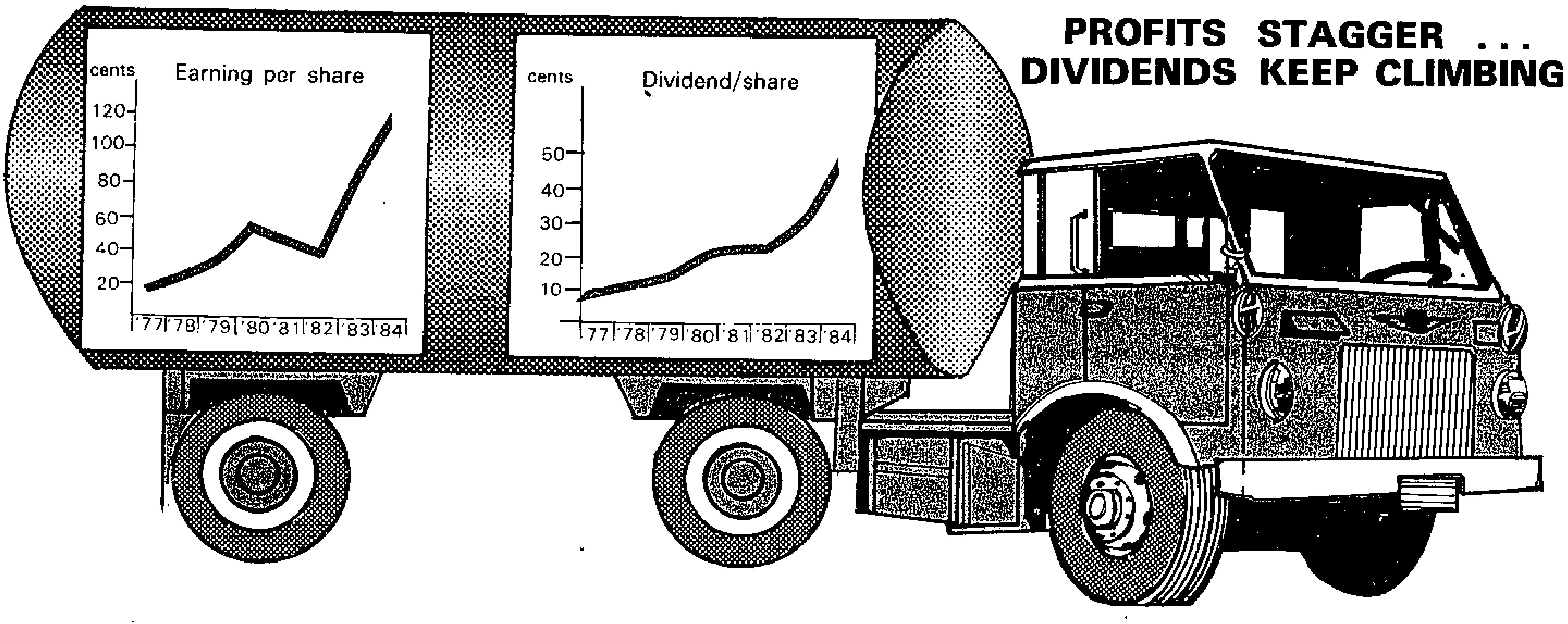
Fuel for an energy stock

There have been two outstanding performers in the chemical sector this year, both involved mainly in petroleum products. The most conspicuous is Sasol, which has been in a consistent long-term upward trend since 1982 and steadily outperformed the industrial board in 1984 and 1985.

No less impressive a performance has been achieved by Trek Beleggings in recent months. It has enjoyed a major re-rating, with its share price more than doubling to 790c from 350c last October.

Looking at the improvement in profits over the past two years, and the reasons for the turnaround, it is plain that the share moved too low during last year — and the price rise was to be expected. But some are arguing that the advance may not be over. Two factors may account for the interest in the share. One is the prospect of further improvements in earnings; the other could be speculation that Trek will participate in the exploitation of the Mossel Bay gas fields.

As far as earnings are concerned, the company has always been vulnerable to short-term fluctuations. These occur when demand for its products swings significantly, as happened during and after the 1980-1981 boom. But they can also be caused by under-recoveries or over-recoveries on the "slate," which is a record kept by government of deviations — possibly caused by factors such as changes in the international oil price, or the rand/dollar exchange rate — from the allowed gross profit margin for marketers of petroleum products. Deviations are corrected by adjustments to the petrol price or to government levies.



**PROFITS STAGGER . . .
DIVIDENDS KEEP CLIMBING**

Trek's accounting policy is designed to average out the effects, but there are time lags that can play havoc with the 6-12 month profit pattern. The market has at times taken a somewhat jaundiced view of the share, probably because of the erratic income flow and the difficulty of forecasting prospects. However, when the long-term earnings trend and the dividend policy is taken into account, the counter starts looking more interesting.

Trek is well geared to tackle diversification involving the Mossel Bay finds. While the company has given no indication of its plans or even thinking on the project, it could be contingent on Pretoria's commitment to allow Trek to build SA's next oil refinery.

By adjusting cover between 2,8 and 1,7, the board has increased dividends consistently since 1977. In this period, earnings a share fell twice, by 16,7% in 1981 and by 9% in 1982. The worst effect of this was to slow the increase in the dividend to 2,2% in 1982. In the other years, the dividend increase was between 12,5% and 53,9%.

The year to end-December was one of the company's better ones. Earnings rose 40,5% to 118c, and the dividend was lifted by 50% to 45c. Chairman Basil Landau attributes the recent profit surge to several factors: continued high productivity, an increase in sales volumes, improved margins, increased dividends from subsidiary Samco (SA Lubricants Manufacturing Company), higher income from short-term investments and a balanced "slate" situation at the end of 1984.

One thing that is not expected to be of much direct help this year is the 40% increase in the retail price of petrol announced in January. Because of the extent of the rand's fall against the dollar, petrol marketing companies would have been suffering from unacceptably high under-recoveries on the slate if government had not been meeting the shortfall from its own resources. All that the petrol price increase did was transfer the cost of meeting such shortfalls from government to consumers of fuels.

In fact, Landau said in his review published in March that the combination of poor economic conditions and the petrol price increase was bound to have a negative effect on demand for petroleum products during 1985. He added that "although preliminary estimates indicate a possible increase in sales volumes, sales revenue is expected to increase as a result of the recent price increase, while inflation is expected to have a negative impact on operating costs. As a result, marginally reduced profits are forecast for 1985."

Volumes are important to a group like Trek, which operates on fixed margins in its core petroleum marketing business, and also runs several capital-intensive plants such as Samco. Petrol is generally considered a relatively price-inelastic product, and it remains to be seen whether sales will decline significantly because of the price hike.

Trek Petroleum MD Sarel Steyn tells me that the reduction in sales so far is less than expected: "We were expecting a much larger effect on garage sales. But many people just don't have the money to buy petrol, so demand could decline further."

There was, in any event, an adjustment to the marketing margins in July last year, after completion of a government investigation. The extent of the adjustment has not been officially quantified, but it must help improve the return on assets earned by the oil and petroleum industry. Trek is the listed company to benefit from this.

Samco increased its dividend to Trek last year from R2,3m to R4,9m, because there were no maintenance shutdowns. Provided nothing goes wrong with the plant, the dividend could easily remain at this level.

Financially, the group is highly liquid, with short-term debt at R445 000, and last year's interest bill only R262 000. At year-end, cash and money market assets stood at R11,8m, from which the interest earned of R6,3m amounted to more than 12% of pre-tax profits. Obviously, interest income could fall this year if rates decline much further, but the cash holdings — which amount to 59c a share — are an important asset at present.

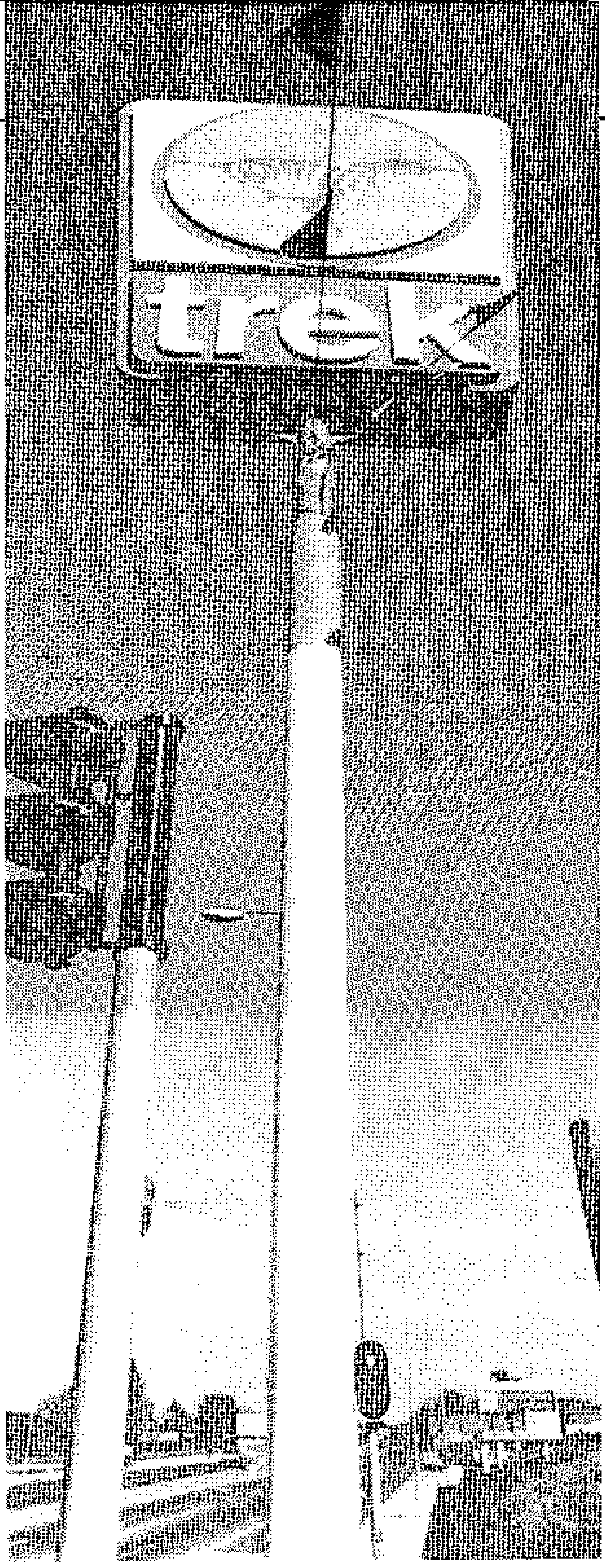
Trek has expanded its profit base where possible — but the scope is limited, given the rigidly controlled fuels industry in SA, and the large amounts of capital required for any diversification into fuel-producing plants like Sasol. The number of petrol stations operated by Trek has risen to 360, but here, too, expansion is dependent on government quotas.


Chairman Landau . . . maintaining profits in a welter of controls

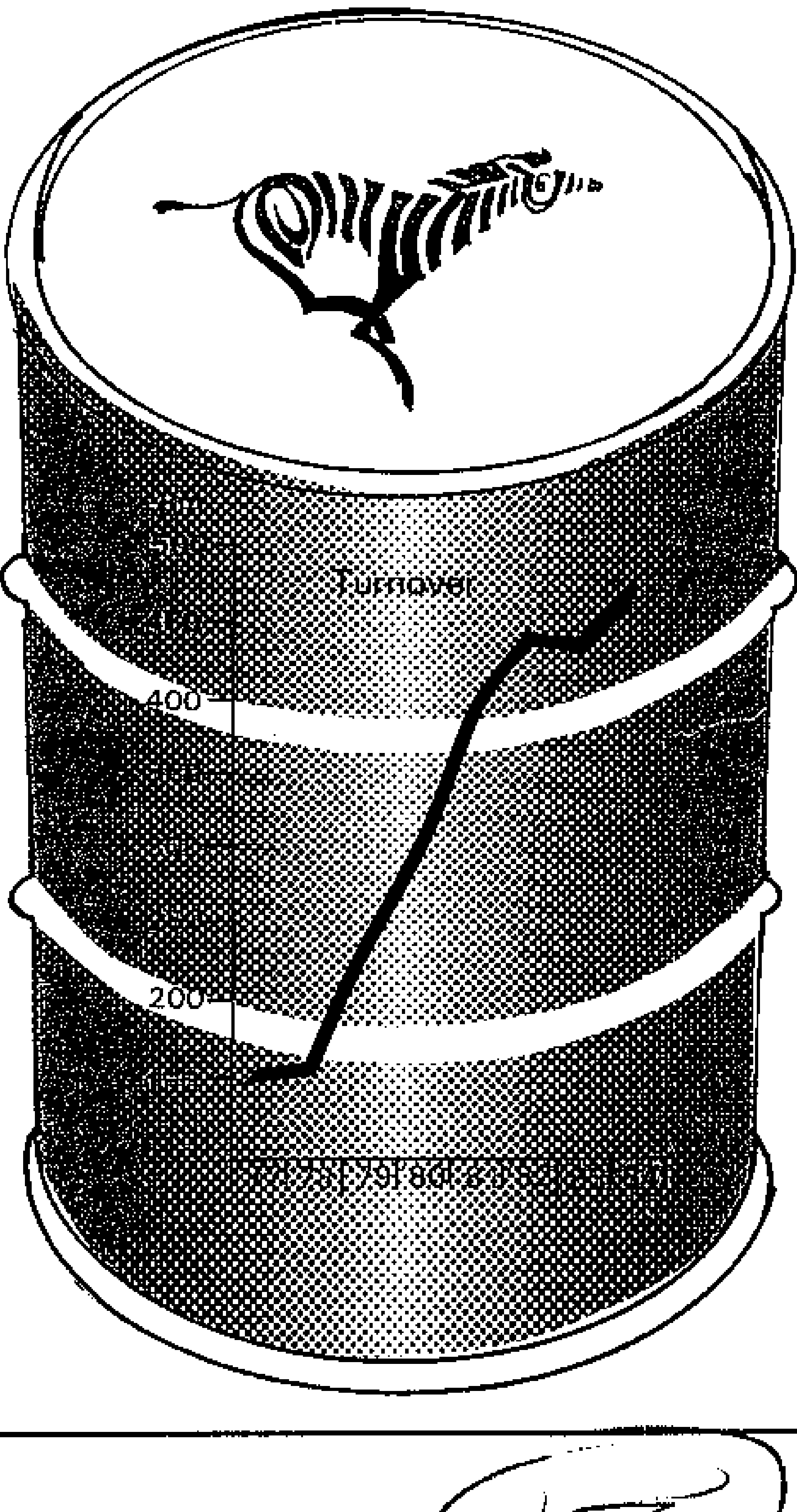
Mossel Bay may present the best prospect for a strategic diversification. With its liquid assets, and ample room to increase borrowings, the group is well placed for an involvement in the project. Certainly, the market has been talking along these lines. The company has said nothing officially to encourage the idea, but the argument rests partly on a commitment once given by government that Trek would be given the right to build SA's next oil refinery.

Steyn points out that the government said this sometime before the 1973 oil crisis, when Richards Bay was seen as the next site for a refinery. "That is out of the question now," he says. "Everything has changed since then, and a Richards Bay refinery is no longer needed."

However, in my view, much of the same logic that probably compelled the commitment to Trek then might just as easily apply now, perhaps more cogently. The company has expertise in running certain oil plants, and already has a marketing network that sells petrol to consumers in SA and Namibia. Most important, as a subsidiary of Gencor, it is a wholly SA-owned fuel marketing company. Government must prepare for the possibility of an eventual withdrawal of the multinationals from SA.



SALES SOAR



At Soekor's invitation, Trek is a member of the offshore and onshore consortiums that are investigating the feasibility of the project. Steyn stresses that there is still no indication that government will go ahead, but he concedes that if it does, it is "not impossible" that Trek may have a shareholding in the venture. "But if we are offered a shareholding, it's not a foregone conclusion that we would accept it," he adds. "We may decide we would not get an acceptable return on capital."

I understand that a decision on Mossel Bay is expected in the next few months, certainly before the end of 1985. Precisely what form of a stake in this project Trek may get is not clear, nor is there any guarantee that it will be involved. But there would be obvious benefits. It could, for example, create a new base for Trek to expand its distribution network. There is no gainsaying that the local fuel industry is at the stage where it will have to move into the next expansion phase. This must involve local companies other than Sasol.


MD Steyn . . . the oil equation has changed

Short-term earnings would be at risk if the rand fell and stayed around US40c-45c, or if demand declines markedly in the second half. At this stage, though, prospects are for a solid rise in interim profits, and, with cover now back at 2,6, there should be a further healthy rise in the dividend this year. At 790c, where the yield is 5,7%, the share may not merit rushing out with buy orders, particularly for those who believe the industrial market is overvalued. But it is a good hold, and could still be worth buying on long-term considerations.

Andrew McNulty

ST

Reactor back on stream at Koeberg

ARG
2/6/85

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Staff Reporter

KOEBERG nuclear power station's number one reactor came back on stream at 4am today, exactly six months after being shut down.

A statement by Escom today said the unit had started delivering power to the national grid and would be delivering full power by the middle of next week.

During maintenance work in January small iron "inclusions" were found in stainless steel piping in the uncommissioned second reactor unit. Both units were then closed for "extensive inspections".

"The Atomic Energy Corporation licensing branch and the Council for Nuclear Safety have reviewed the evidence submitted by Escom and have given permission to restart unit one and to continue the commissioning of unit two," today's statement said.

"Escom commissioning activities on unit two have been resumed and it is expected that the unit will deliver its first power in August 1985. After tests, power will be increased gradually, leading to full power delivery in October 1985."

Argus 2/7/85 55

Escom go-ahead for R2500-m power station

By Frank Jeans

JOHANNESBURG. — The construction industry, in despair over plunging workloads, is to receive a shot in the arm with the announcement by Escom that it intends to give the go-ahead again to the multi-million rand Majuba power station.

Majuba was "put on ice" in October last year — a decision which shocked construction companies hoping for a share of the R2 000-million contract.

Escom's postponement of the contract followed a forecast then that electricity demand would grow more slowly than had been expected.

This meant a saving for the commission of an estimated R3 000-million in contract and infrastructure cost.

Now the massive Majuba project, near Volksrust in south eastern Transvaal, should be back on the tender market in March next year and although the restart date is still some way off, civil engineering companies will be heartened by the Escom decision.

In April and May, the total value of new civil engineering work dwindled to a mere R140-million, one of the lowest levels for many years.

"We intend to go out on tender for the civil works at the Majuba power station towards the end of the first quarter of 1986," said an Escom spokesman.

Construction companies will have to re-negotiate tenders at new prices and the original R2 000-million figure is now likely to touch the R2 500-million mark because of rising building costs.

Majuba, with its six generator sets of 657Mw each, is considered a large project even by the standards of power station contracts.

Tenders have already been given on the boilers (Steinmuller), turbine generators (GEC) and the dry-cooling structures (GEA).

Now the planning teams will be gearing up for the tendering battle to come.

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[redacted]

Sowetan
12/7/85

Tembisa families to get power back

By MOJALEFA MOSEKI

THE Tembisa Town Council yesterday promised to restore electricity to 50 families in Mthambeka Section after they had petitioned it for the restoration of the service.

But, that is not the end of the electrical blackout blues for the families because they may have to wait until the end of the year, according to Mr Anthony Relihan, the township manager.

"The equipment needed to restore the service needs a special order, and takes time to be delivered. It is costly and the council has no money. They will have to wait," he said.

Asked if the services will be restored by December, he said: "I cannot say. We have no money.

"The equipment in that section was damaged by irresponsible children and we have informed the insurance people," said Mr Relihan.

The handy man who controls our nuclear age

(55)

B. Day
12/7/85

● **DE VILLIERS . . .** "someone has to cope with drudgery of management"

As executive chairman of the Atomic Energy Corporation, Dr WYNAND de VILLIERS has the awesome task of overseeing the recent reorganisation in the administration of SA's nuclear industry. BERENICE MARGOLIS spoke to him

GOING TO bed at night is a far more hazardous occupation than working at Koeberg — more people die in their beds than anywhere else. This from Dr Wynand de Villiers, executive chairman of a restructured Atomic Energy Corporation (AEC).

Although given to *grappies*, he's not joking. "The risk accepted by the AEC, in an accident situation — to people living on the perimeter of Koeberg, and they're the most exposed — is one in one hundred million. The safety of those living in the environment of that plant is our only criterion."

He's adamant that when Escom closed down Koeberg amid the glare of publicity and adverse comments it was not a panic reaction. There were no certainties, he says, although after rigorous testing just four stainless steel pipe fittings had to be replaced.

"In the Western world, in the 30 years since the inception of the civilian nuclear industry, no one has died as a direct result of an accidental radiation overdose at a nuclear power station.

"When you get Class F meteorological conditions — with slow winds — in a 'worst case' accident, radioactivity will remain concentrated in a radioactive cloud which could eventually reach densely-populated areas. It's been stated that, even though the AEC disagrees, in such a 'worst case' about 6 000 people might be over-exposed and die within the next 30 years."

In context, Three Mile Island is an obvious (if odious) comparison. In that instance it was calculated only one more person in Harrisburg than the 200 000 who would naturally die of cancer there might also subsequently develop the disease. He restates his original thesis, serious now. More people die annually by going to bed, through road accidents — or from smoking. He lights another cigarette.

Business Day spoke to De Villiers in his bland office on the ninth floor of 228 Visagie Street, a street surely Pretoria's drab equivalent of Whitehall — Armscor, the Land Bank and other parastatals present their dull facades here.

However, De Villiers, 55, not the quintessential civil servant, enjoys his job. He concedes that had he the potential of a brilliant research physicist he'd be one. "But someone has to cope with the drudgery of management." He grimaces faintly. "The satisfaction comes from getting the work done and understanding enough about it to ensure it's well done. Also in helping to take worries off guys' shoulders."

He's been involved in the streamlining exercise of the previous "troika arrangement" that included the AEC, the Uranium Enrichment Corporation (Ucor) at Valindaba and the Nuclear Development Corporation (Nucor) since 1982. That year nuclear licencing was handed over to the AEC from the former Atomic Energy Board (AEB).

"We'd been looking at further rationalisation since 1980, when the late Dr Ampie Roux was asked by government to head a committee to investigate reorganisation of State-funded nuclear activities. The government accepted its proposals in principle and the present change is a result of the process started in 1982."

Because of unnecessary duplication, Ucor and Nucor have been taken over by the AEC, vesting central control in it. There might be staff cut-backs, De Villiers admits, but these will be achieved by natural attrition over two years. Vacancies that crop up will not be filled. Frequent staff movement between various sections means employee re-allocation, where feasible, will be eased in the new setup. "There'll be no immediate shocks."

With rationalisation, the separate identities of AEC's three sectors will come to an end. Ucor will become a fully-fledged industry supplying enough enriched uranium to meet SA's needs in about two years and will be known as AEC's Nuclear Fuels Section. Nucor will continue with research and development and will be designated the Research and Development arm of the AEC. Corporate Services will take in all crucial needs of the various nuclear activities.

It's while talking to a sensible and cheerful executive ("I'm not always available but the door's always open") that the insanity of SA's exclusion from certain United Nations bodies — whatever the colour of your politics — hits you between the eyes.

Take the International Atomic Energy Agency (IAEA). Originally set up to promote nuclear energy in all its forms, it's been authorised by all member countries to administer safeguards. It employs about 150 inspectors.

Most suppliers stipulate IAEA precautions to ascertain exclusively peaceful use by the recipient country. Two or three inspectors have access to Koeberg and Safari several times a year. In a word, relations between the IAEA and SA are "strained".

Yet SA is one of seven founder-members and had always been on the Board of Governors. "Until, in 1978, the group of 77 non-aligned nations voted us off the board. In 1979, in New Delhi, when I led the SA delegation to the general conference there, our credentials were improperly rejected — an illegal move. While some participants didn't even present theirs."

De Villiers passes up a question on a home-grown atomic deterrent. "The government has flatly denied that we have it." He allows that SA has the ability to enrich uranium to 40% and, therefore, commensurate technology to enrich it further. The cost, however, would be prohibitive. "The 40% is used to fuel our research reactor, Safari 1, at Pelindaba.

Born in Smithfield in the Free State, he got his BSc in 1949 and MSc (*cum laude*) in 1951, and in 1957 earned his doctorate in physics — all at the University of Stellenbosch. He also serves on several public and semi-public bodies and is chairman of the Scientific Advisory Council.

De Villiers demurs that his job is a weighty one. "I get a bit frustrated, but that's because of external factors. Outside work I'm interested in too many things — carpentry, electronics. I fix my own cars and work around the house". He plays tennis and, under pressure, "I even play the piano".

He's married with four children, the youngest 26. "I won't tell you the age of the eldest as she's female. I'm a very quick reader — of anything — novels, whodunnits, you name it. I finish a book in an evening when I have the time and I never take work home if I can help it."

~~244~~. (55) B. Day 16/7/85

Petrol price hopes fade

By PETER WALLINGTON

DESPITE the wholesale price reduction of a wide range of oil and petroleum products, the consumer may not benefit and there is no chance of a drop in the petrol price.

An oil company spokesman in Cape Town said the wholesale price cuts were in respect of non-price controlled products and retailers were not compelled to pass the benefit on to the consumer.

But government is allowing diesel used for road transport other than passenger buses to be cut by 1,7c a litre at the coast and 1,6c on the Reef.

The driver of a diesel-engined car with a 72*l* tank will save about R1,22 when filling up.

PFP finance spokesman Harry Schwarz said: "On the face of it there is a strong case to bring down the price of petrol."

He added that it did not make sense to wait for the rand to strengthen further against the dollar because the exchange rate had stabilised well above the 0,47 January price and the indications were that it would continue to improve.

The company spokesman said the wholesale price on all petroleum products was increased in January when the rand was worth only 46 US cents.

"The exchange rate has improved since then to range just over 0,50. This has resulted in over-recoveries in terms of government's petroleum price formula and has enabled the price reductions."

Despite the improved exchange rate, a spokesman for the Department of Mineral and Energy Affairs said it was unlikely the petrol price would be adjusted.

He said that when the exchange rate reached 60 US cents, and remained stable for at least a month, then an adjustment might be considered.

He said that though the rate had improved recently it had for a time dropped as low as 42 US cents. The price of petrol was not increased because money was drawn from the Equalisation Fund and oil was obtained from the country's reserves.

Among the oil and petroleum products affected by the reductions are:

☐ Aviation fuel	down 9c/*l*
☐ Liquid petroleum gas	5c/*l*
☐ Heavy furnace oil	3,5c/*l*
☐ Bitumen	3,5c/*l*
☐ Aviation turbine fuel	2c/*l*
☐ Benzine	2c/*l*
☐ White spirits	3c/*l*
☐ Power paraffin	2c/*l*

BUSINESS TODAY

Shell SA to invest R60 million in new mining venture

ARGUS
25/7/85
55

By DEREK TOMMEY
Financial Editor

SHELL South Africa, one of the country's major oil distributors, is on the way to becoming an important mining company as well.

Already a major coal exporter, Shell is spending R60 million developing an open cast lead and zinc mine at Pering, near Vryburg, the chairman, Mr John R Wilson, reports in a review of the company's activies.

Shell is also planning to develop a tin-tungsten mine near Upington, once market conditions for these metals improve.

Expenditure on the new mine will push Shell's investment in South Africa to above the R1 billion-mark, making it one of the biggest foreign investors in the country.

COAL EXPORTS

The Pering mine will be open cast and worked with conventional truck and shovel equipment. It will produce 60 000 tons of zinc concentrates and 9 000 tons of lead concentrates a year.

Shell exported 5,8 million tons of coal last year, which was a million tons more than in 1983.

Mr Wilson says that the capacity of the Richards Bay Coal Teminal, in which Shell has a 12,5 percent stake, has been raised to 44 million tons, and could be raised to 80 million tons by 1997.

However, he warns that future South African coal sales overseas could be constrained by political considerations.

He says discussions are taking place between the oil industry, the Government and motor vehicle manufacturers on the desirability of lowering the lead content of petrol.

A programme has been designed which, if implemented, will lead to a reduction in the lead content of locally manufactured petrol by 1986.

Should this happen it would substantially increase production costs of petrol.

SELF-SERVICE STATIONS

New filling stations were being designed to facilitate fast flow and to be converted at short notice to accommodate self-service.

Under the oil industry rationalisation plan Shell has been able to open only five new filling stations in the four years ended December 1985, and a further one, up to a maximum of five, for every four filling stations closed.

Since 1981 Shell has spent R3 million on an educational programme for blacks, aimed at upgrading their language, mathematical and scientific knowledge and skills to acceptable levels for university education.

Liberty, UBS form new life company

A NEW life insurance company with the medium and lower end of the market as its target has been formed by Liberty Life and the United Building Society.

The company, Charter Life Insurance, initially will have assets of about R70 million and premium income of R19 million.

Liberty will have a 67 percent stake and UBS Insurance will hold 33 percent.

● **Metal Closures Group** is paying an unchanged interim dividend of 31c although net profit dipped to R2,2 million from R2,4 million.

● **Free State Development and Investment Corporation** is raising its final dividend to 55c (37,5c) after a rise in earnings to R3 million from R2,2 million.

● Sage Group's three property trusts, Fedfund, Pioneer and CBD Fund, all raised their earnings and dividends for the half-year to June.

Fedfund's interim is up by 9,7 percent to 11,39c, Pioneer's is 11,83c, up by 17 percent while CBD Fund is paying 11,95c.

● Everite's total dividend is a same-again 60c after an unchanged final of 40c although

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Sinclair sued for R4 milli

(55)

7/8/85

New fuel supply ahead for SA

B. Day

South Africa would be almost independent of foreign oil supplies in the next five years, said a spokesman for the Department of Mineral and Energy Affairs.

Dr Robert Scott, director of energy planning at the department, told a Pretoria newspaper yesterday that two synthetic fuel processes would be put before Parliament for approval next year.

A third process was in development stages.

The report said that the three methods involved the conversion of natural gas, the indirect liquefaction of coal and the distillation of oil shale.

The energy policy committee, the national co-ordinating body of energy policy and strategy, would consider the synthetic-fuel proposals as a top priority to achieve the desired level of self-sufficiency by 1990, Scott was quoted as saying.

The new processes would not produce all the by-products of the Sasol plants, but would basically produce synthetic petrol and diesel oil.

If the projects were passed, they and future projects would be financed by a central energy fund, Scott said. — Sapa.

'No' to oil plant for PE

By DIRK VAN ZYL

53

E. Post 7/8/85

Political Correspondent

THE Government will site the new oil-from-gas plant at Mossel Bay, it was reliably learnt today.

This scotches hopes that Port Elizabeth would be chosen for the project.

All indications from a Government-sponsored viability study have pointed to Mossel Bay, which is close to the off-shore gas strike, as the best site for the plant, the Evening Post was told.

The decision is expected to be announced within the next few months. The issue is being handled on an *ad hoc* basis and is not bound by a White Paper on energy to be tabled in Parliament early next year.

Meanwhile, Dr Dirk Neethling, Chief Director, Energy, of the Department of Mineral and Energy Affairs, said today the Government was aiming at "a confidential level of energy self-sufficiency" it had targeted for 1990.

He had been asked to comment on a South African Press Association report today that South Africa would be almost independent of foreign oil supplies in the next five years.

Dr Neethling said he felt the report — a summary of an article in a Pretoria newspaper yesterday — created a wrong impression by omitting the words "aimed at".

It had always been and would remain part of South Africa's energy policy that a percentage of foreign crude oil would have to be imported.

A prelimenary White Paper on energy was at present being sent out for comment by all interested parties, the deadline being the end of next month.

A final paper would then be prepared for submission to Parliament early next year, Dr Neethling said.

The White Paper could contain recommendations for three synthetic fuel processes — the conversion of natural gas, the indirect liquefication of coal and the distillation of oil shale.

"We are building more Sasols and will still import crude oil." Dr Neethling added.

The new processes would be aimed at helping achieve the energy self-sufficiency level the Government wanted to reach by 1990.

The White Paper to be presented to Parliament would be finalised in about November by the Department's Energy Policy Committee.

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Inside . . .

Raw materials · Energy · Environment

Making the most of South Africa's natural resources

LURGI

Raw materials · Energy · Environment

Methanol: Lurgi goes full steam ahead

LURGI

Raw materials · Energy · Environment

Synfuels from Coal: Lurgi knows how.

LURGI

A productive partnership:

South Africa's raw materials + Lurgi process technology

LURGI

... the plants are built by Lurgi

Raw materials · Energy · Environment

Coal
n the metallurgical
dustries.

Raw materials · Energy · Environment

Pollution:
Vith Lurgi know-how you will be
n complete control.

LURGI

Software, Hardware, everywhere...

LURGI

... the plants are built by Lurgi

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Shape of things to come

Energy means power. Throughout history, the need for a reliable source of power has been a motive force in man's development.

It can be used to destroy or create; it can retard or advance whole civilisations; it can be used as a weapon and as a means of defence.

Yet, despite their total dependence on it, most nations have been slow in recognising its importance. As one source of energy has dried up or become less accessible, man has turned to alternative sources — believing somehow that energy is his right and that the earth's resources are infinite.

Dependence on energy grows as economies expand and develop. This century, with the introduction of electricity worldwide, has seen energy consumption become as commonplace domestically as it is industrially.

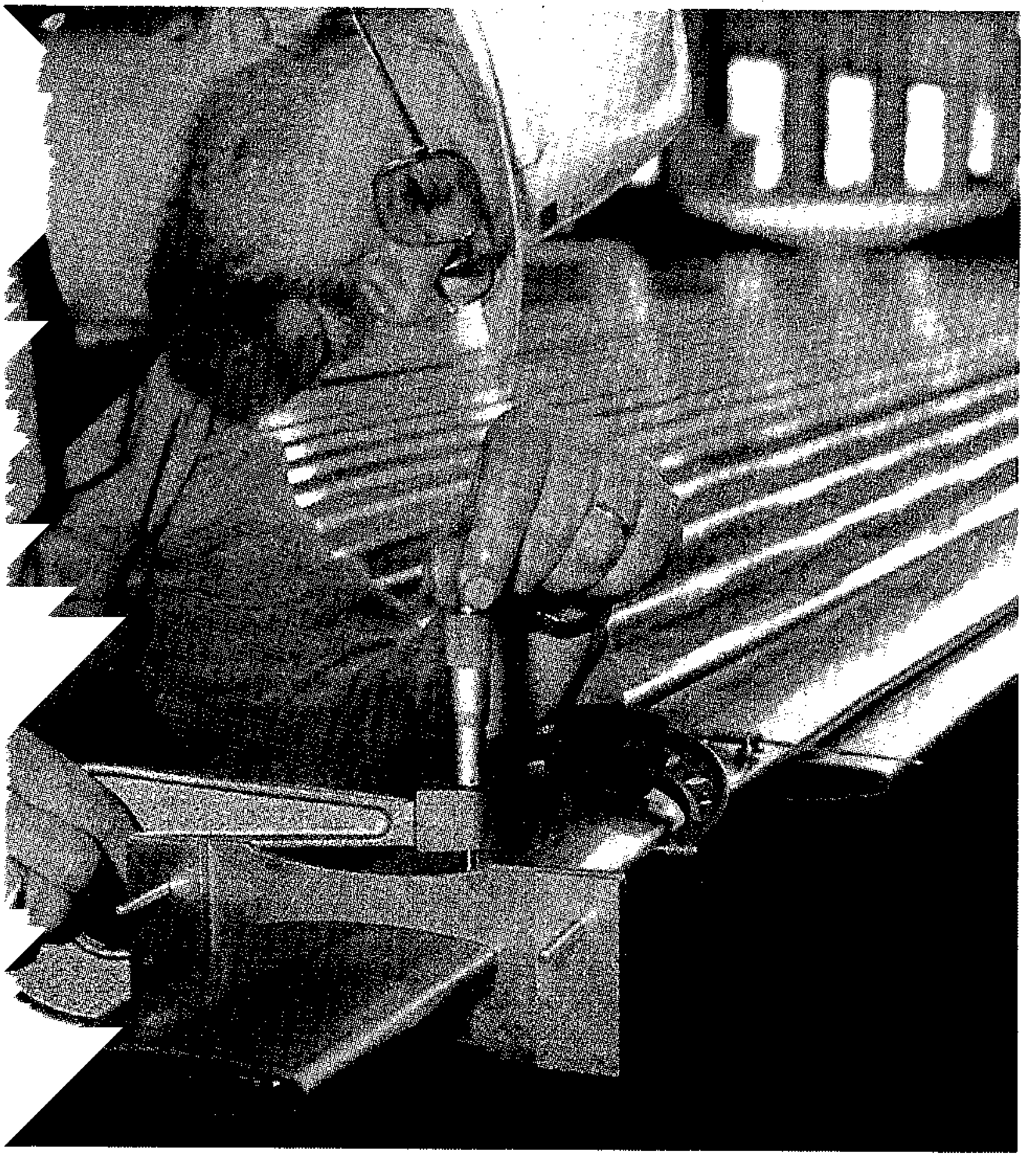
Energy has also become a weapon in the power struggles taking place between the world's richest nations. It is hardly surprising then that those countries supplying essential forms of energy, such as oil, should decide to use their commodity to make themselves richer or other nations poorer.

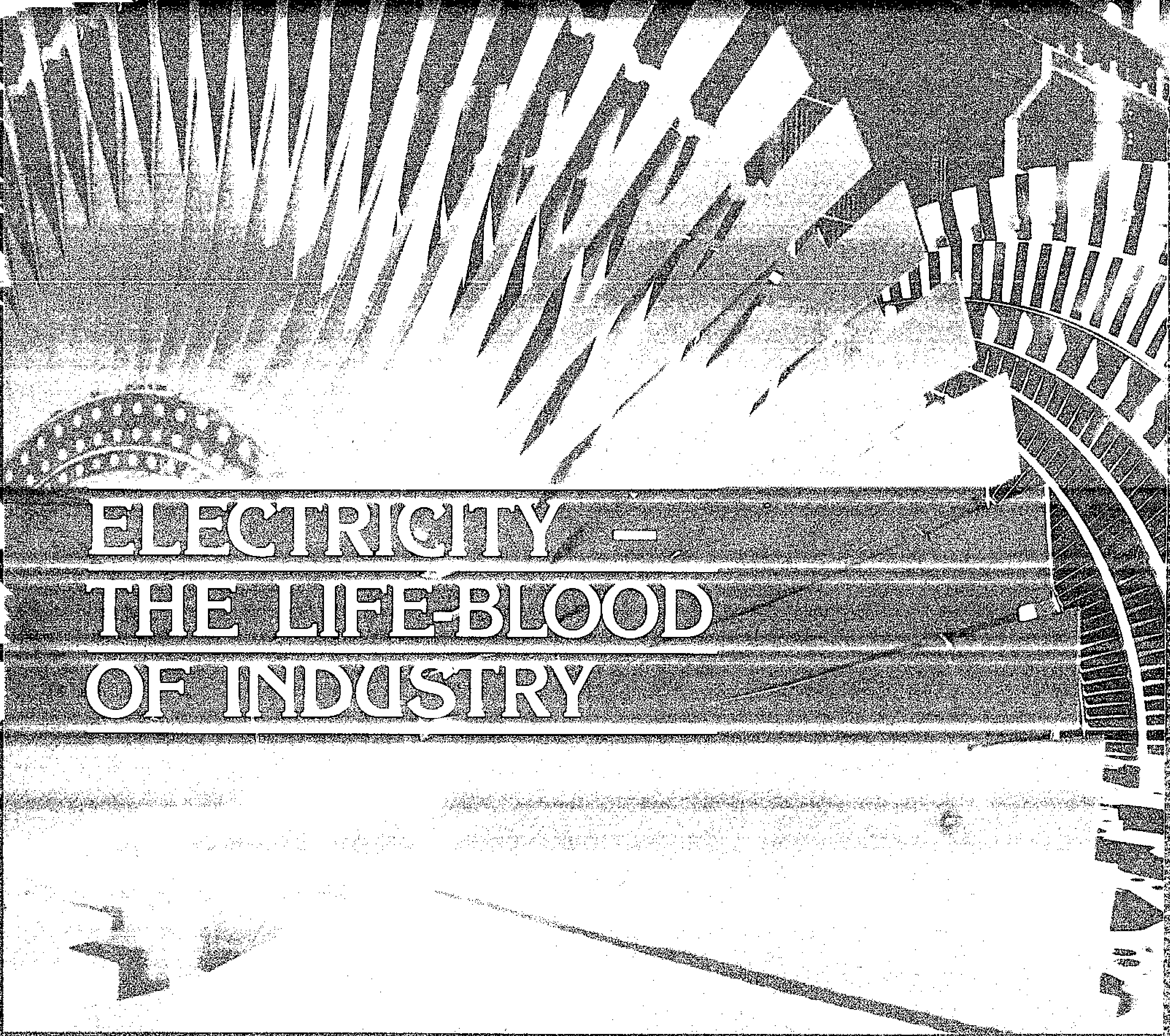
These actions have, however, performed a service. Only when the oil crises took place in the Seventies was the Western world forced to reconsider the value of fuels. This spawned the pessimistic findings of the Club of Rome which reminded the world of the finite nature of energy resources.

To some extent, SA has gained from the world's increased energy awareness. Exports of coal have risen dramatically and the economy has benefited. There is, however, a debit side to the picture. We are still more dependent than any other nation on coal and despite the continued threat of oil sanctions, as well as our increasing political isolation, we are only now catching the rhythm of the energy-awareness fever.

A draft White Paper laying out a comprehensive energy policy has been published and a final energy plan will be tabled in Parliament next year. Renewed emphasis has been placed on developing SA's nuclear potential, which is increasingly being seen as an alternative to coal. There is also the possibility of new synthetic fuel plants coming on-stream, although additional refineries to process crude oil are unlikely because at present capacity is under-utilised.

SA's major supplier of electricity, Escom, has undergone management restructuring and it is on the cards that the future will see more input from the private sector. Other positive developments are shaping up. Mossel Bay's gas fields should come on-stream by 1990, Sasol is booming, falling oil prices could ease the balance of payments and SA is forging ahead with nuclear technology. ■




ELECTRICITY — THE LIFE-BLOOD OF INDUSTRY

Burning issues

Historically, man has shown neither the interest nor the ability to conserve natural resources. Until recently, there has not even been sufficient awareness that the apparently infinite riches of the earth are, in fact, finite

Paradoxically, it was man's disregard for and ignorance of his environment that brought about the formation of many past civilisations with populations moving from continent to continent and kingdoms expanding according to their need for fresh resources.

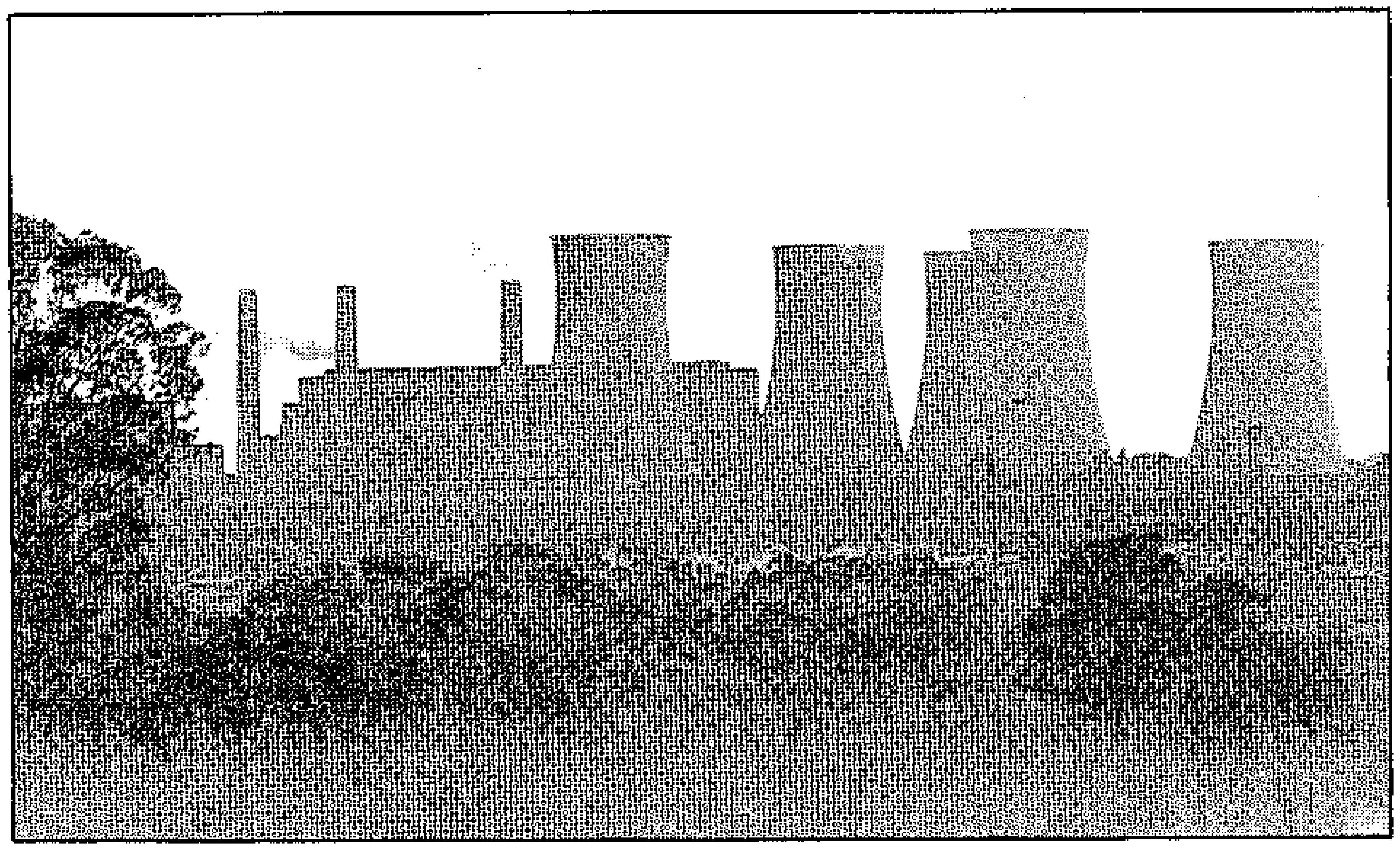
"The scarcity of one commodity," says economist Peter Hilsenrath, "does generally lead to a substitution by more abundant items. More importantly, in the long run, resource scarcity has been a major inducement for technological change."

Partly because of the oil crisis in the Seventies and the resultant gloomy predictions made by the Club of Rome 10 years ago, the search for alternative energy sources accelerated worldwide. With this came a more serious approach to energy-saving, conservation and efficiency. In addition, industrial economies have progressed rapidly in this area, with Japan, the US and West Germany, in particular, gearing their econo-

PERCENTAGE ANNUAL CHANGE IN WORLD PRIMARY ENERGY CONSUMPTION

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	% Compound Annual Growth 1973-1983
Coal		1,4	1,1	4,7	2,4	1,8	6,0	1,6	−0,2	2,2	2,4	2,3
Oil	7,9	−1,3	−1,3	6,2	3,2	3,2	1,4	−4,0	−3,3	−2,6	−1,1	Nil
Nat. Gas		2,1	−0,8	4,8	1,9	3,8	5,6	1,8	1,8	−0,3	0,9	2,2
Hydro		5,2	2,8	1,3	3,8	7,1	2,6	2,0	2,0	4,9	4,0	3,5
Nuclear		26,5	39,1	22,2	24,1	13,3	2,3	10,7	16,9	9,8	8,6	16,9
Total		**0,6**	**0,1**	**5,6**	**3,1**	**3,4**	**3,5**	**−0,6**	**−0,5**	**0,1**	**1,0**	**1,6**

Sources: BP Statistical Review of World Energy and Simpson, Frater, Stein & Strong.



mies less and less to industries dependent on raw materials.

While the need for a cheap and readily available oil substitute has brought about a dramatic upswing in the consumption of coal, the age of hi-tech and nuclear power has dawned, signalling a steady withdrawal from fossil-fuels for energy purposes.

However, SA has not followed the trends so conscientiously. Despite some major innovations — such as the Koeberg nuclear power station in the Cape — SA is still very much entrenched in the use of coal for energy and general industry purposes.

This is partly owing to the traditional reliance SA has placed on its mineral wealth and thus the inability of the manufacturing sector to make any significant moves into the hi-tech era. More directly, SA not only enjoys abundant reserves of coal, providing little incentive for concern over its depletion, but also, until recently, coal has been SA's only indigenous fossil fuel.

"There are few nations on the surface of the earth that are as dependent on coal as is SA," says Hilsenrath. Coal provides SA with over 80% of its primary energy requirements. Only China comes a close second in dependence. Western European countries and the US, however, use coal for not much more than a fifth of their energy needs.

Of total domestic consumption, Escom takes approximately 55%. Another 21% is used by Sasol for its oil-from-coal conversion while the rest is consumed by Iscor, other industries, transport and householders.

Coal's importance to SA has been underscored recently by its position as an export. In the last 10 years, coal has become SA's second most important commodity after gold, its second largest export and second greatest earner of foreign exchange. According to analysts Simpson, Frater, Stein and Strong: "In value terms, coal exports rose to R1 712 billion in 1984, representing 38,2% of the value of total non-gold mineral exports, compared to 26,4% in 1983. In 1984, local coal sales were worth R1 714 billion and total coal sales R3 462 billion compared to R2 559 billion in 1983."

Yet, despite the obviously essential nature of coal, "concern over exhaustible resources has had a tendency to oscillate between periods of crisis and neglect," says Hilsenrath.

Sasol 2 and 3, initiated in 1974 and 1979, were spawned during periods of crises, as was the Department of Mineral and Energy Affairs (DMEA) Petrick Commission of Inquiry into SA's coal reserves, whose report was published in 1975.

While other countries were stimulated into action by the wars in the Middle East, SA's position became even more crisis-ridden when, in 1979, oil sanctions were imposed by Iran.

At this point only did SA begin to realise the extent to which it does and must rely on coal, as well as the need to capitalise further on its potential as a viable alternative to oil. The Geological Survey's De Jager Report into SA's coal reserves was inititiated shortly after and published in 1983.

The 1975 Petrick Commission reported total in-situ mineable reserves of 81 274 billion tons. De Jager estimates, however, that SA has 115 530 billion tons of total in-situ mineable reserves, of which 58 404 billion tons are economically recoverable.

The reasons for the discrepancy are outlined by De Jager: "For both bituminous coal and anthracite the reserve figures of the Petrick Report were arrived at on the basis of *proved, indicated* and *inferred* categories, while the run-of-mine (recoverable reserves) were estimated on the proved and indicated divisions only." In the De Jager Report, "no inferred reserves were considered, but only proved and to a small extent indicated reserves, which were considered to be economically extractable by the mining technology of 1982."

SA's recoverable reserves are equivalent to about 11% of the world's total. According to the DMEA's 1984 report on minerals: "Most of the material is of bituminous thermal grade; only 2% is anthracitic and 1,6% is of metallurgical quality." Only about 10% of the total is of exportable quality and most is washed beforehand to achieve this quality.

Even De Jager's careful estimates satisfy neither industry nor government. "Statements about coal reserves must always be qualified," notes Davis Borkum Hare's 1984 report on Mining Research. For this reason comparisons between various reserve estimates can be misleading. "Furthermore, additional exploration of an area can substantially alter the reserve estimates made on less data. Mining methods continually improve, markets change and as a result reserves hitherto considered uneconomic become mineable." ■

WORLD COAL RESOURCES

Proved Recoverable Reserves of Hard Coal*°

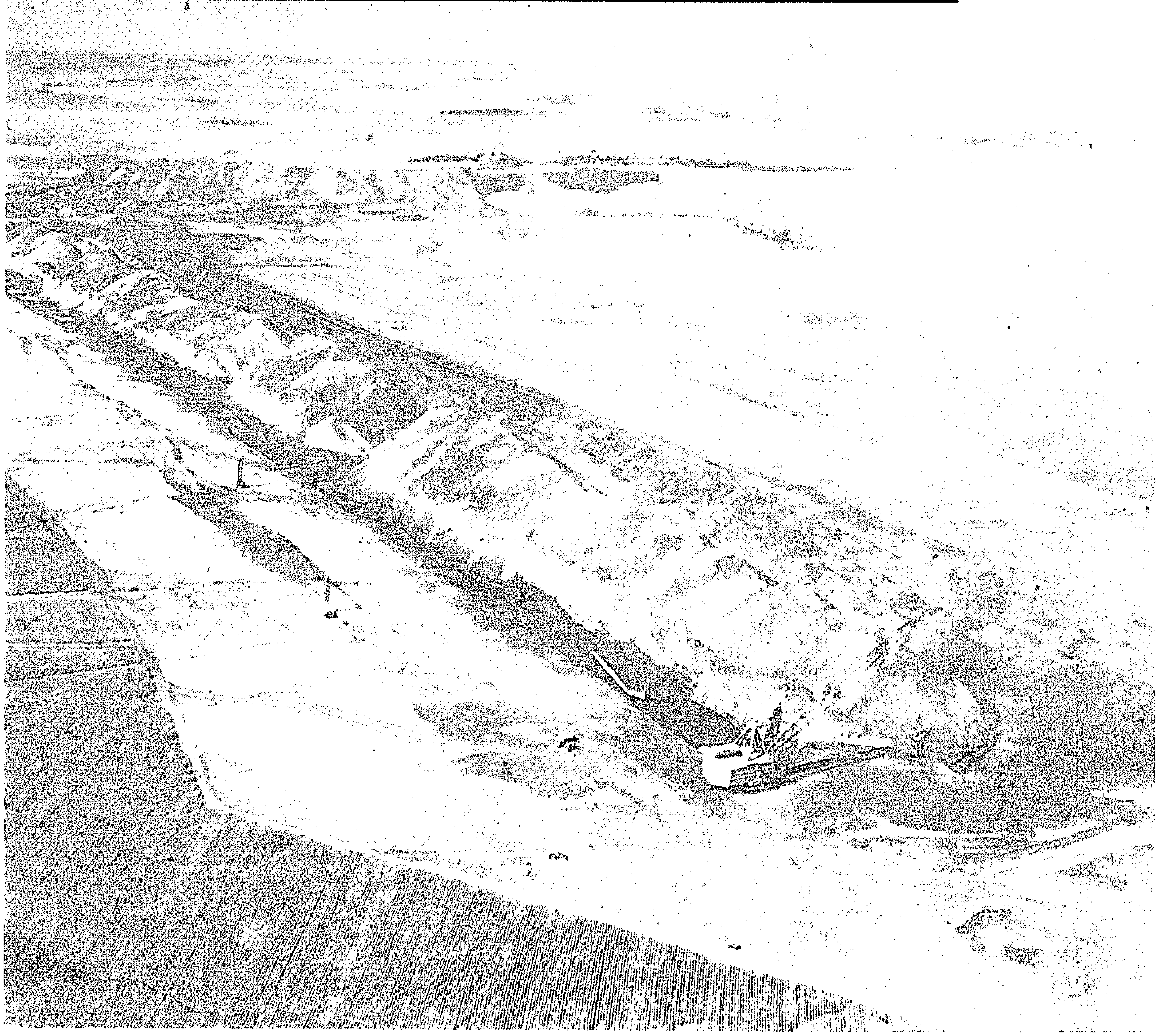
(Billions of tons)

		% of Total
China	116,7	20,4
USA	107,2	18,7
USSR	104,0	18,2
South Africa	58,4	10,2
UK	45,0	7,9
India	27,4	4,8
Poland	27,0	4,7
Australia	27,0	4,7
Germany FR	24,0	4,2
Colombia	5,5	0,9
Botswana	3,5	0,6
Others	27,0	4,7
Total	**572,7**	**100,0**

° In addition there are about 200 bn tons of lignite (coal equivalent tons) making total world reserves about 770 bn tons.

* The reserves that can be recovered under local economic and technological limits.

Source: Simpson, Frater, Stein & Strong



Optimum Colliery, one of the largest suppliers of coal to ESCOM and the export market.

Reserve judgment

When it comes to the thorny question of coal's place in current energy prognostications, it appears that most experts agree to disagree

Three major considerations important to any estimate of SA's coal reserves were outlined by the Coal Advisory Board in 1969. They are:

☐ How adequate are the resources?
☐ What can be done to conserve them? and
☐ What will the coal be used for?

The third consideration affects answers to the first two questions and is the most contentious.

There are those who argue, such as Simpson, Frater Stein and Strong (SFSS) analyst David Keefe, that world energy consumption is declining and will continue to do so. He also believes a world energy glut is looming, that oil prices are likely to fall and that all this will considerably weaken coal's importance — thus there is no need for conservation measures.

Quite rightly, Keefe also rests his argument on the unreliability of coal reserve estimates. Whenever these and other reserve estimates are revised, they are revised upwards not downwards, and the world may also hold significant undiscovered reserves. In addition, coal has an "anti-social factor." As international analysts Robertson Research point out: "It is difficult to mine, store and transport, is bulky and dirty and leaves significant residues."

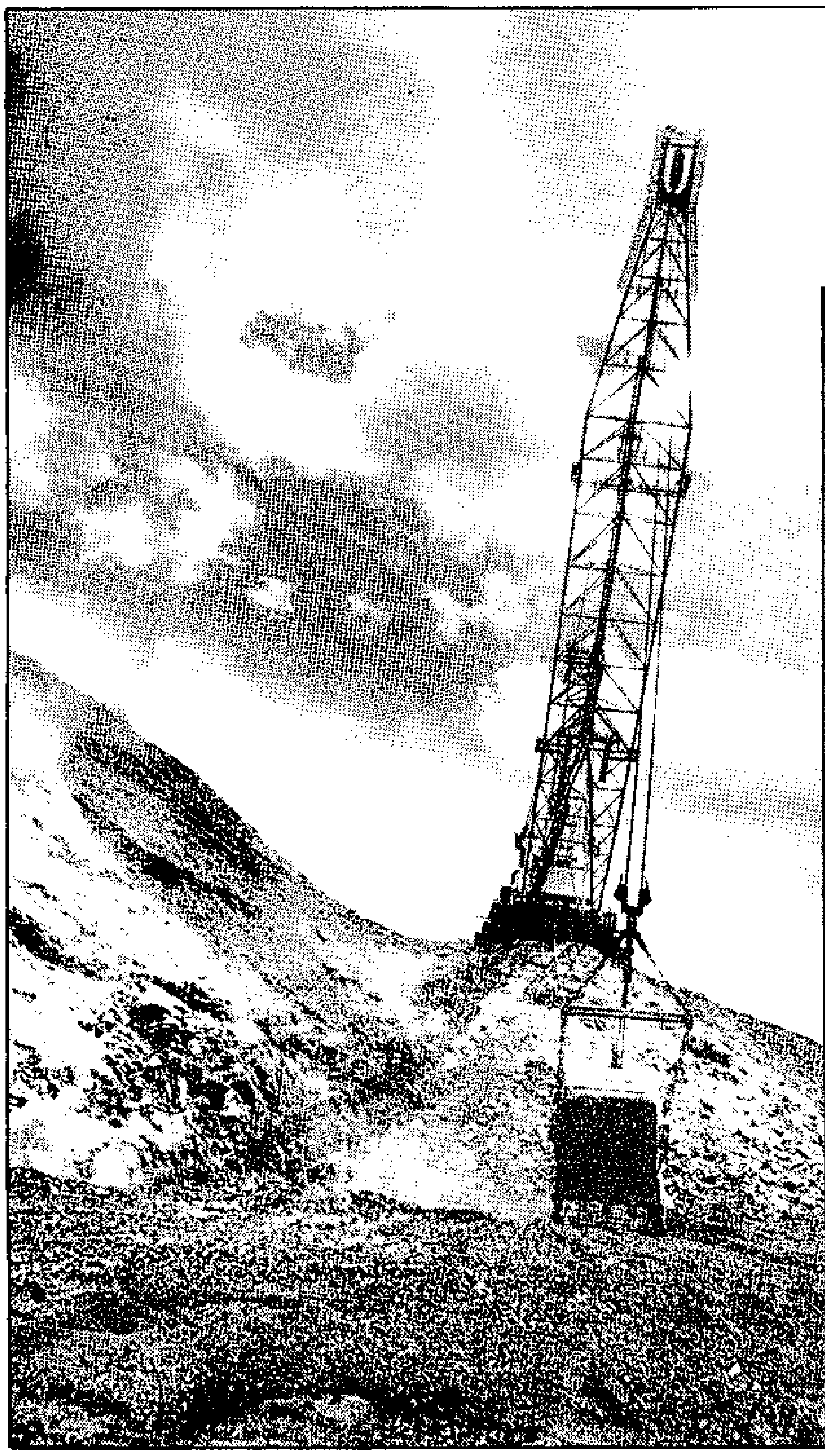
This "anti-social factor" is enhanced by steam coal (SA is the world's largest exporter of steam coal), which, when used in coal-fired plants, emits SO 2 and 3 as well as other environmental pollutants. One of the effects of these emissions is the destruction of natural vegetation through acid rain.

Says SFSS: "In West Germany, large forest tracts are now being endangered. The issue is becoming very heated in both political and environmental circles not only in West Germany, but throughout Western Europe. Although emissions can be greatly reduced by plant modifications, the procedure is costly and the issue has helped to entrench coal's image as a 'dirty' fuel in the mind of the general public."

Robertson Research concludes: "All forecasting of future coal demand should be based solely on the potential growth of electricity and heavy industry, and above all, the likely share that coal will obtain of that energy growth — both in the demand for electricity and for steel production . . . coal forecasters must realise what everyone else has recognised, namely that reserves of oil and gas are not likely to be exhausted for at least another 100 years and that coal will not make appreciable inroads into power requirements for most industrial and commercial organisations."

While Keefe foresees major changes around the turn of the century, he concedes present technology in many of the world's coal-fired power stations will probably continue for another 60 years. His emphasis is on the slump in demand and the gradual but sure replacement of coal as an energy fuel by uranium.

Keefe's view of coal as an energy source is generally held to be contentious. But Robertson Research appears to back his view, criticising coal forecasters for their "blind acceptance of



Amcoal's Boustred . . . still sure of growth

TOTAL WORLD RESERVES & RESOURCES OF HARD COAL

(Billions of tons)

		% of Total
USSR	2 584,0	38,16
China	1 442,7	21,31
USA	1 179,2	17,41
Australia	530,0	7,83
Germany FR	210,3	3,11
UK	190,0	2,81
India	119,2	1,76
South Africa	115,5	1,70
Poland	111,0	1,64
Botswana	103,5	1,53
Canada	95,0	1,40
Colombia	21,4	0,32
Czechoslovakia	8,2	0,12
Zimbabwe	6,5	0,09
Indonesia	4,8	0,07
Swaziland	4,8	0,07
Others	45,3	0,67
Total	**6 771,4**	**100,0**
+Lignite Reserves	**200,0**	
+Additional Lignite Resources	**3 900,0**	
Total World Coal and Coal Equivalents	**10 871,4**	

Source: Simpson Frater Stein and Strong

the statements made by prominent coal executives to the effect that supplies of oil and gas would be exhausted within the next 40 years."

In its review of major coal forecasts made in 1980 and 1981, Robertson found the increase in demand for coal, since publication of the forecasts, averaged only 40% of what was then predicted. SFSS concludes: "It would seem these coal forecasters have fallen into the same trap as their predecessors and have failed hopelessly to detect the fundamental and dramatic change ocurring in the world market."

TransNatal research director Gavin Turner agrees that changes to the world coal market are inevitable, while Amcoal chairman Graham Boustred stresses: "There may be a decline in coal consumption, but there can still be growth."

However, the main objection to Keefe's view is that it appears to take little cognisance of coal's strategic importance to SA itself, and of the development of coal for use in other industries — again, particularly in SA.

"In fact," says Wits economist Joubert Botha, "SA could be one of the first countries in the world to have invested relatively heavily in a technologically advanced manufacturing process aimed at making her less dependent on imported fuel."

Says the Department of Mineral and Energy Affairs (DMEA) report: "In the Seventies, oil accounted for some 22% of SA's energy needs; in 1984, this fell to about 14%, illustrating the role of synfuels derived from coal. The country has only limited possibilities of obtaining economically feasible offshore oil and natural gas, and very restricted opportunities for the generation of hydroelectric power."

SA's Sasol is probably the world leader in the production of liquid fuels from coal. Sasol's 1, 2 and 3 use feed from tied underground collieries, currently producing over 33mt/year. These complexes are expected to reach full production soon, significantly reducing SA's dependence on imported oil. "The possibility that additional facilities may be built in future cannot be ruled out," says the DMEA.

But apart from its energy content, coal is an invaluable feedstock for a wide range of chemical products other than synfuels — including explosives, plastics, fertilisers and pharmaceuticals.

"Without it," says economist Peter Hilsenrath, "SA would be far more vulnerable to international pressures and more prone to balance of payment difficulties. The use of imported energy, if obtainable, would lead to higher prices, reduced output and higher unemployment." The Chamber of Mines reports that 95 400 blacks were employed in coal mines during 1984. Coal's "strategic"

importance to SA raises many intractable questions. "There is the view that we should not engage in the export of coal at the present rate if we are to conserve our coal for future generations," says Botha. "It is a view held by many as the most sensible in the long run. Whether this is so depends largely upon unknown — and unknowable — future technological developments." ■

SELECTED ANNUAL AVERAGE GROWTH RATES IN ENERGY CONSUMPTION

Total World Energy Consumption		Total World Coal Consumption	
1965 — 1973	5,20%	1973 — 1983	2,3%
1973 — 1983	1,60%	1978 — 1983	2,4%
1978 — 1983	0,70%	1979 — 1983	1,5%
1979 — 1983	-0,05%		

Source: BP Statistical Review of World Energy and SFSS.

Not too bright

While reserves of low-grade coal are held to be adequate over the long term, "wasteful" mining methods are rapidly wiping out our export-quality reserves

South Africa's present mining methods are wasteful, charges Falcon Research Laboratories MD Rosemary Falcon. She says only 10% of SA's coal is "bright" or low-ash, high-calorific value coal. This is the coal needed for exports. It is so rapidly being mined out there is little chance any will be left in the ground by the year 2 000.

"We are going through a transition phase," says Falcon. "Now is the boom time for using up accessible, high-quality coals — but, in 20 years' time, all we will have left is coal which is far more difficult to mine, and thus far more expensive."

Although known reserve estimates are not strictly reliable, Falcon points out that it is unlikely any new major coalfield exists in SA. Of the currently known coalfields, the major mines are in the Witbank/Middelburg area, where coal is predominantly of a better quality. "What we are exporting is vital to certain processes," she says. "What is being left behind is relatively inert in terms of its reactive components."

Falcon stresses the importance of coal as the only source of fuel for carbon, its importance to the petro-chemical industry and to the ferro-alloys market, and its use in steel manufacturing.

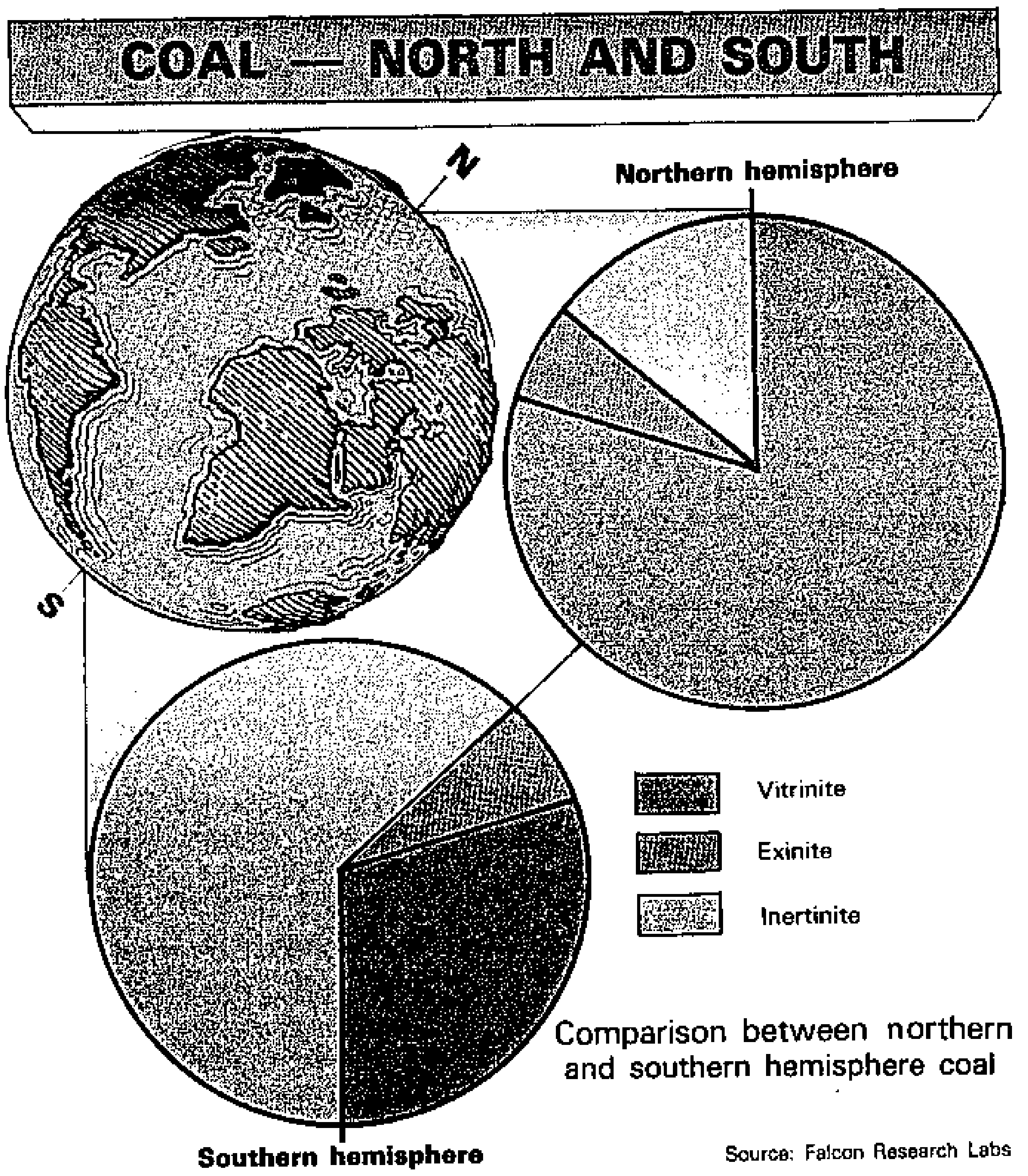
Mining houses have admitted problems in retaining the quality of coal for exports and it is not known what coal remains for any new long-term overseas contracts. "It is unlikely that, in 50 years' time, there will be any recourse to additional reserves," says Falcon.

She reckons two routes must be adopted to remedy this situation:

☐ "We should stop and re-evaluate coal; or

☐ Face the fact that the quality of coal left in the ground is going to worsen and encourage equipment manufacturers to design accordingly."

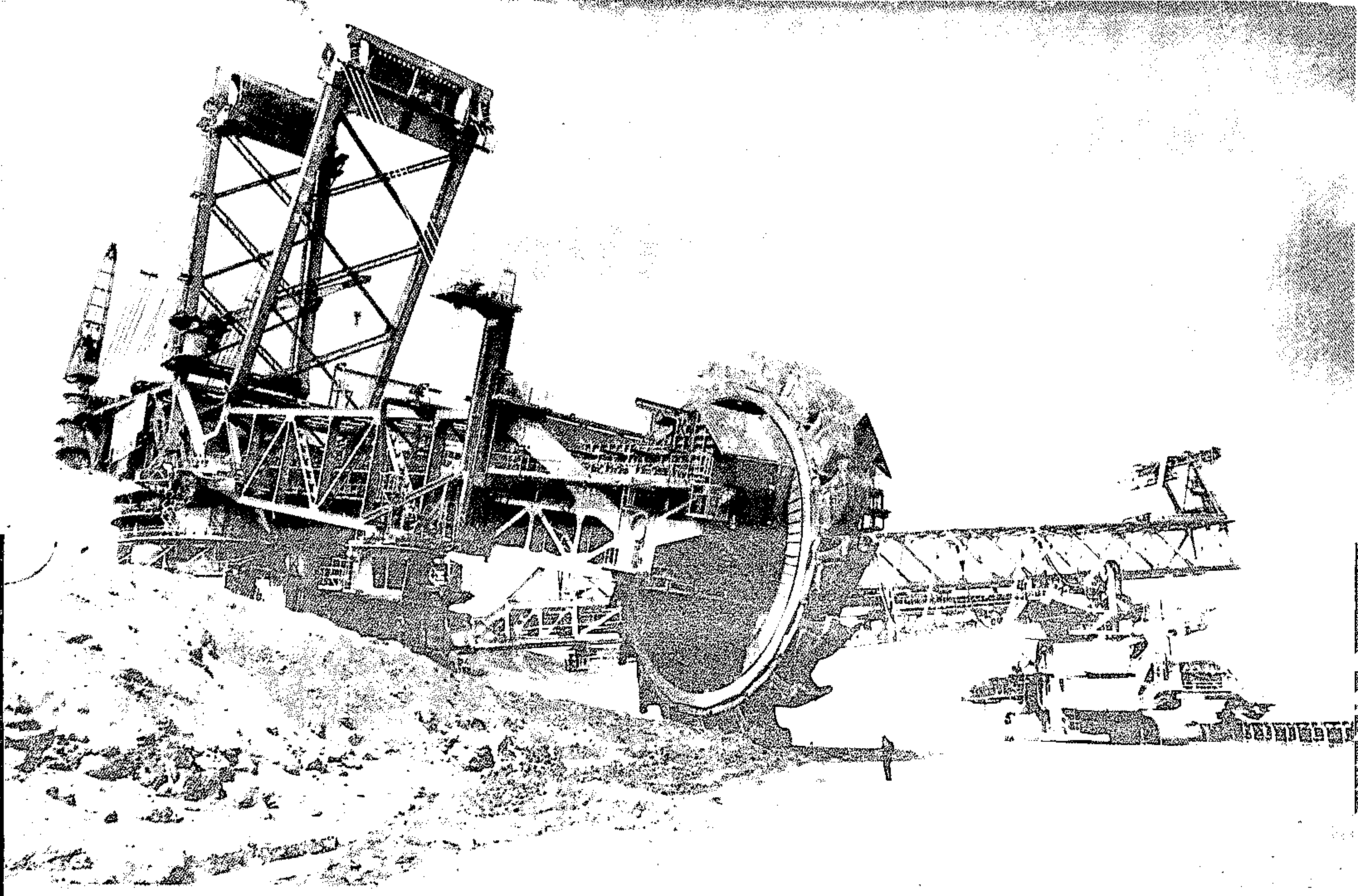
She says: "The present parameters used to evaluate coal are insufficient." Since 1980 six parameters have been used world-


COAL — NORTH AND SOUTH

Comparison between northern and southern hemisphere coal

Source: Falcon Research Labs


Falcon . . . waste not want not?



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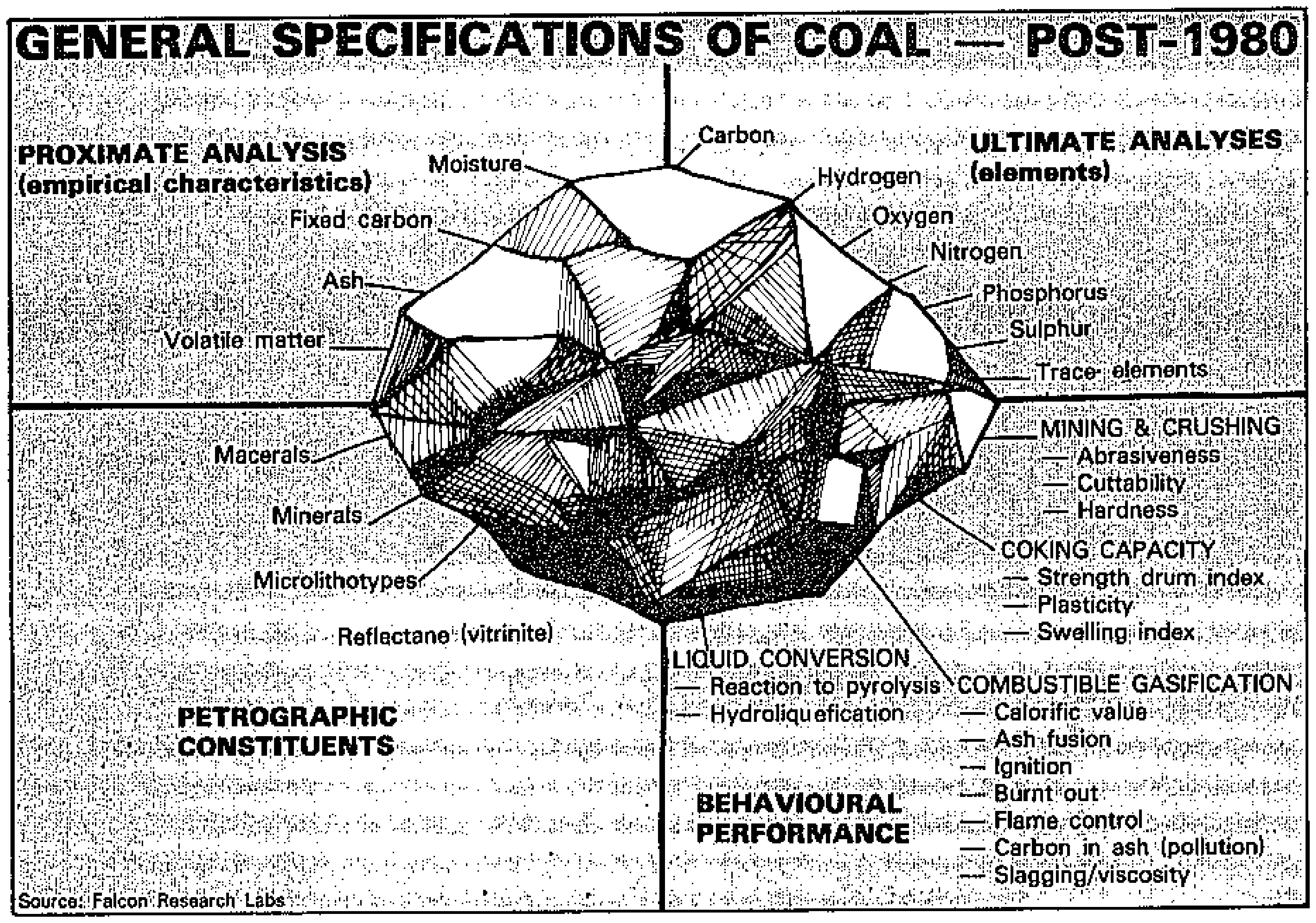


GENERAL SPECIFICATIONS OF COAL — POST-1980

Source: Falcon Research Labs

wide, split roughly into chemical and petrographic. The De Jager report used only the chemical or "behavioural" parameters, to indicate the availability of SA's various coal grades. Falcon dismisses these as being "too empirical when used alone."

An additional petrographic level of evaluation is needed to indicate the different regions and origins of a coal, Falcon argues, at the same time quantifying the coal-type and its maturity in greater detail.

This would lead to greater efficiency in the use and blending of coal "which is vital to the export market and to all special industries".

In Europe, many industries have already geared up to use lower grade coals. In SA however, although some industries have noticed coal is no longer of such reliably high quality, real adjustment has not yet taken place.

Falcon says industries have no incentive to adjust while there is no price differential between the better and poorer qualities of coal.

Appropriately priced

A price differential cannot be established until coal has been re-evaluated. "This is exceedingly important to the future of the mining houses," says Falcon.

"We have tons of low-grade coal which, if more appropriately priced, could become more attractive to industry locally and abroad, thereby conserving the higher grade coal for specific contracts."

More thorough research is required and more co-operation from the mining houses needed.

But above all, Falcon stresses: "SA should be much more selective in its utilisation of coal, and coal grades should be subjected to a carefully controlled pricing policy." ■

Cushioning the shocks

Dirk Neethling is Director General (Energy) in the Department of Mineral and Energy Affairs (DMEA). Here he discusses with the *FM* the government's energy policy and future involvement in the strategic management of coal.

DMEA's Neethling . . . hoping for a final solution

***FM*: In many advanced countries, the energy shocks of the Seventies prompted some very positive moves towards energy-efficiency and energy-saving. Coal has played a vital role in this process, replacing oil as a power generator in many instances and yet at the same time being used with more sensitivity. Improvements in these countries incorporated industrial adjustment as well as ordinary consumer awareness of the value of energy. Yet, in SA, the White Paper on Energy is only just heralding a positive strategy and indicating government concern. This is despite coal being SA's primary source of energy and SA being more vulnerable to sanctions than most other countries — a fact which is well publicised by government. Why is this?**

Neethling: Government has been very much aware of the need for an overall energy plan, and doubly aware of coal's importance to the country since the energy shocks. It has supported development of the domestic coal-based chemical and synfuels industry, making SA less dependent on oil. And, after government rationalisation of energy activities in 1980, the DMEA has been working on the formulation of a long-term energy strategy in which coal will obviously play a key role.

But SA boasts huge reserves of coal and the present strategy for optimal utilisation of coal is, I believe, on target. At the same time, the DMEA appreciates that the basis for decision-making needs to be continuously updated and expanded. That is why we are embarking on a complete re-evaluation of coal reserves taking into account envisaged future demand for particular grades.

It should be emphasised that this draft White Paper (WP) is really a discussion paper on energy strategy. It is not complete, and awaits further input from the public and private sectors before a final WP and the first national energy plan can be drafted for submission to the DMEA Minister and Cabinet.

The formulation and implementation of

energy strategy concerns everybody and, therefore, cannot occur in isolation. Consequently, it is regarded as essential to involve the public and private sectors to a greater extent than was previously the case.

What is the actual aim of government's WP with regard to coal?

We wish to ensure the optimum development and utilisation of coal — SA's most important energy source for the foreseeable future.

More than 95% of coal is used for energy-related purposes, and it is of fundamental importance that the determination of priorities for coal takes place against this background. National energy policies should, on the one hand, consider the non-renewable or finite nature of coal as an energy source, so that the development and orderly phasing in of other energy sources can be planned timeously. On the other hand, policies need to consider the particular value of coal as a feedstock for the production of synfuels and chemicals and as a reductant in the metallurgical industry.

You have mentioned that government plans to re-evaluate coal reserves. Some experts complain that past methods of evaluation are not entirely effective. What system is, or will be, used and do you consider it effective and up-to-date?

The present estimate of *in situ* exploitable reserves — 115 530 Mt, with 58 404 Mt economically recoverable — is seen as conservative since it does not include derived reserves. Other considerations to be taken into account when evaluating coal are what qualities of coal should be included in the estimates, is it mineable using today's technology, has it been sufficiently tested — and there are others.

The Geological Survey, attached to the DMEA, uses a computerised system for the evaluation of national coal reserves — the National Coal Data Base (NCDB). This has been used since 1980 to calculate *in situ* mineable and economically extractable reserves for individual coal fields or parts of coal fields from information obtained from prospecting boreholes and from the mining industry itself. At present, the NCDB has information on well over 11 000 of the 30 000 boreholes drilled in SA so far.

The DMEA is presently concerned with the development of a system which reliably determines the life of SA's coal reserves, including the availability of specific grades for specific future needs. Factors like present and anticipated underground recovery and the effect of environmental control measures and constraints need also to be taken into account.

However, no estimates can be completely correct and we need ballpark figures to work with.

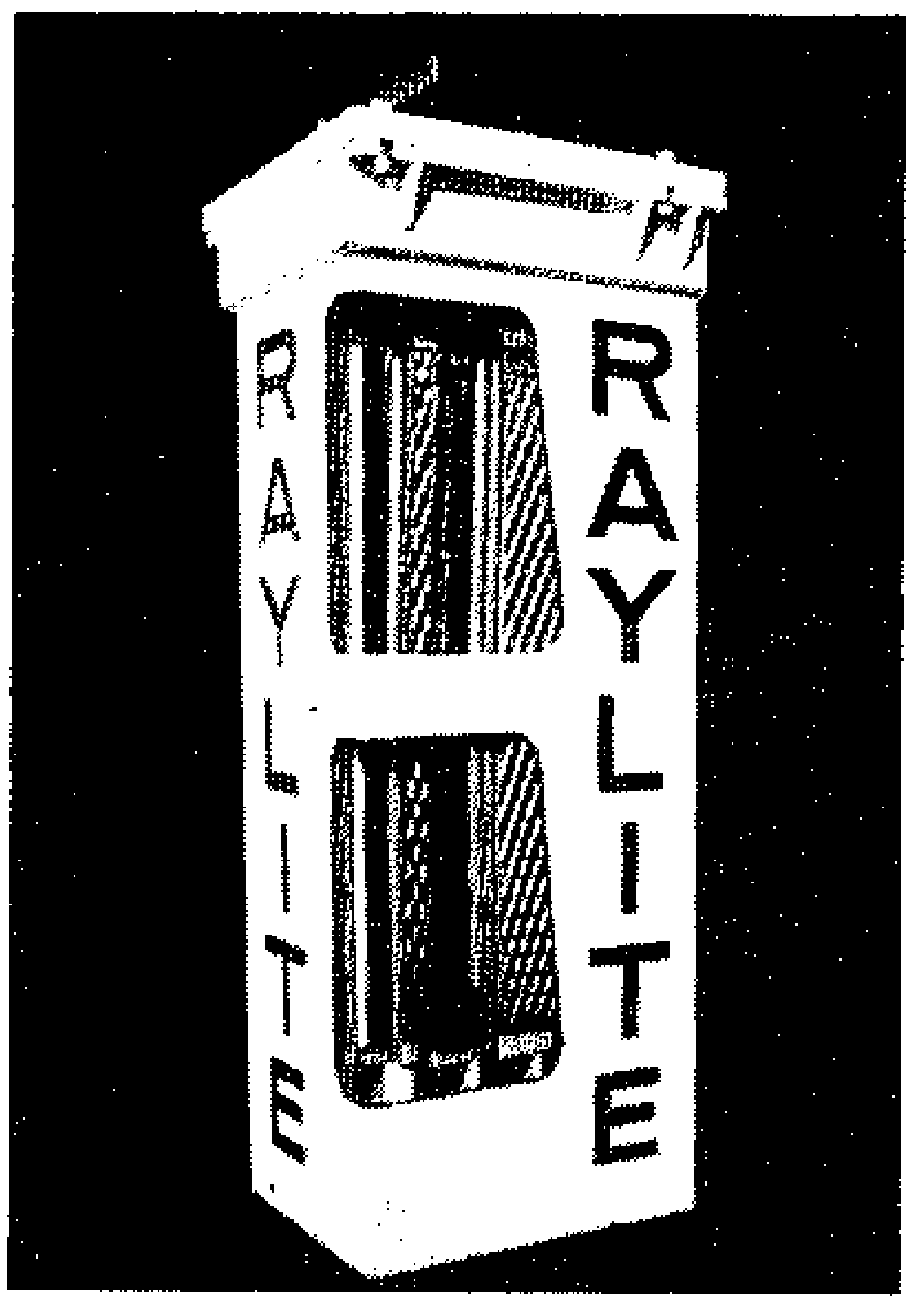
In order to ensure as much accuracy as possible, the DMEA plans to continuously assess reserves and future coal demand, at appropriate intervals.

An additional aid to keeping a watchful eye on the supply and demand situation may come from the Coal Management System, proposed in the draft WP. Private enterprise is expected to be closely involved with this system, providing, it is hoped, extra, but pertinent and realistic, information on the situation.

Does multi-product mining, which is already taking place, make available specific grades for specific needs? What are the advantages of multi-product mining?

SA has begun to develop the multi-product mining concept over the past five years. Yes, it does mean that different grades of saleable coal can be produced by the same colliery. This kind of operation at collieries linked to power stations provides an excellent opportunity for the optimum utilisation of coal by skimming off export quality coal which would otherwise have been burnt for power generation.

It could well lead to the price of coal for the generation of electricity being lower and



ESTIMATED COAL RESERVES OF SOUTHERN AFRICA, 1983

	Proven coal reserves (million tons)	
	In situ	Economically recoverable
Republic of South Africa	110 852	56 034
Bophuthatswana	1 788	894
Venda	1 500	750
KaNgwane	467	228
Lebowa	400	200
KwaZulu	257	173
KwaNdebele	250	125
Transkei	16	uncertain
Botswana	7 000	3 500
Swaziland	2 020	1 820
Zimbabwe	1 535	734
Mozambique	240	240

Source:
1. Survey of Energy Resources 1983. (World Energy Conference).
2. Summary of Mineral Resources of the TBVC Countries and The National States of South Africa (Geological Survey 1984-0076).

to consumer tariff increases being smaller.

Of government's latest Phase Four export allocations, 12,5 Mt/year have been allocated for the establishment of Escom-tied multi-product collieries. And government intends to further stimulate the multi-product mining concept by the awarding of appropriate export tonnage allocations in the future.

But in order to "maximise" the use of coal in industry, government must have the support of industry, including suppliers and consumers. According to a survey on energy concern, there is little interest from industry in energy utilisation, development or energy saving. How will government work closely with private enterprise, if there is, in some cases, limited knowledge or interest in the issues it is expected to tackle?

There are two almost-separate private sector groups we are particularly interested in involving in decision-making. The coal-mining sector itself and the coal-consuming industry.

A joint and co-ordinated effort is required, from both producer and consumer, to stimulate awareness of the various problems and to formulate the appropriate strategies.

Our aim, with the coal-mining industry, is to steer its development towards a greater recognition of the use of all coal grades and the guarding against possible over-exploitation of our limited higher grade coals.

Through appropriate research and development programmes, done in close association with producers and consumers, I believe this objective will be achieved.

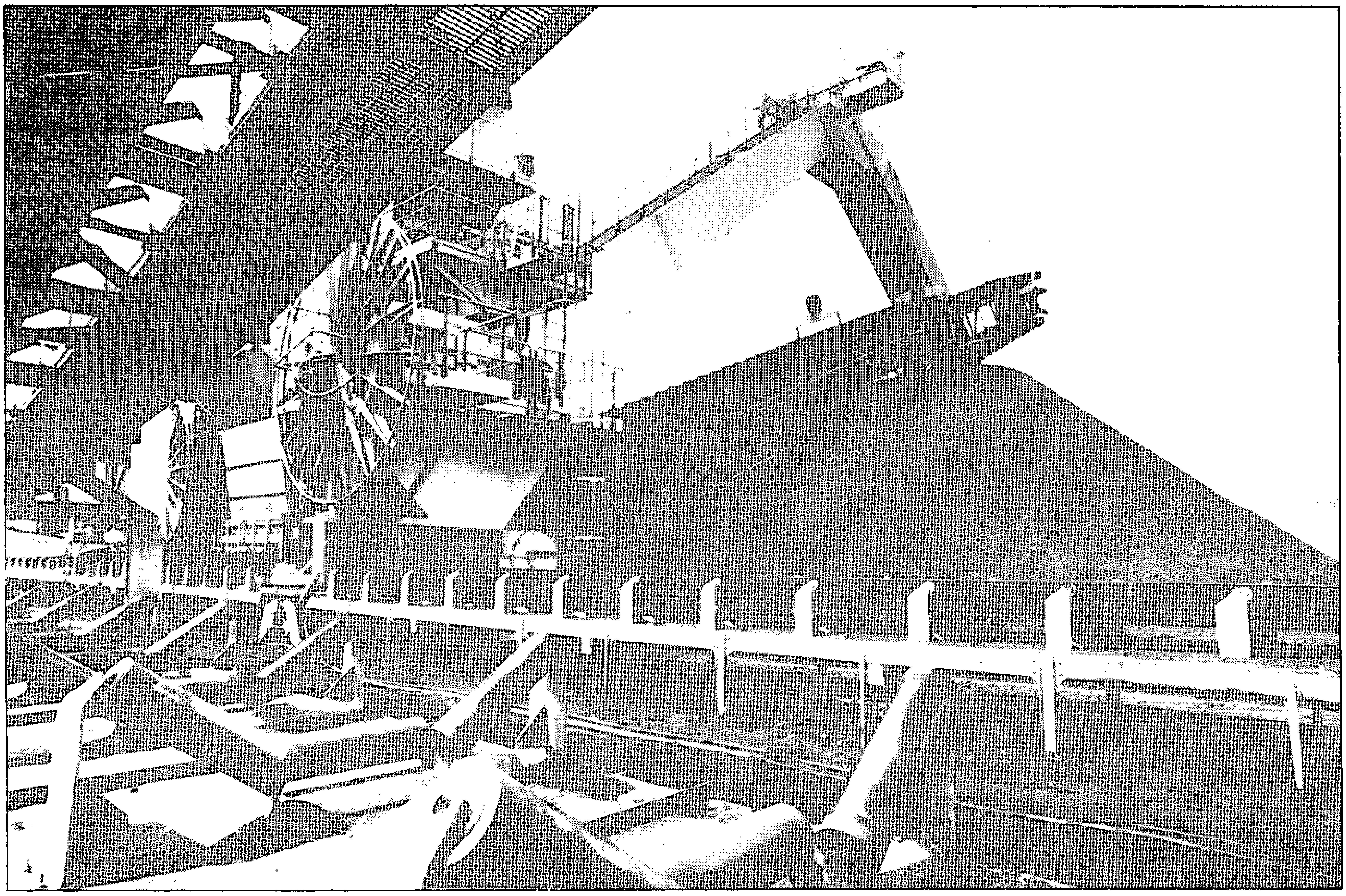
In its responsibility to shareholders, private enterprise must surely see a need for energy conservation or optimum utilisation of their resource assets. Through adequate representation on government's energy advisory councils and committees, in future this could be translated to, and accommodated in, national coal and energy strategies.

Government, over the past year particularly, has stressed coal's strategic importance. Yet, at the same time, government has accepted the recommendations made by the Competition Board — that the coal industry should be deregulated and government should be less involved.

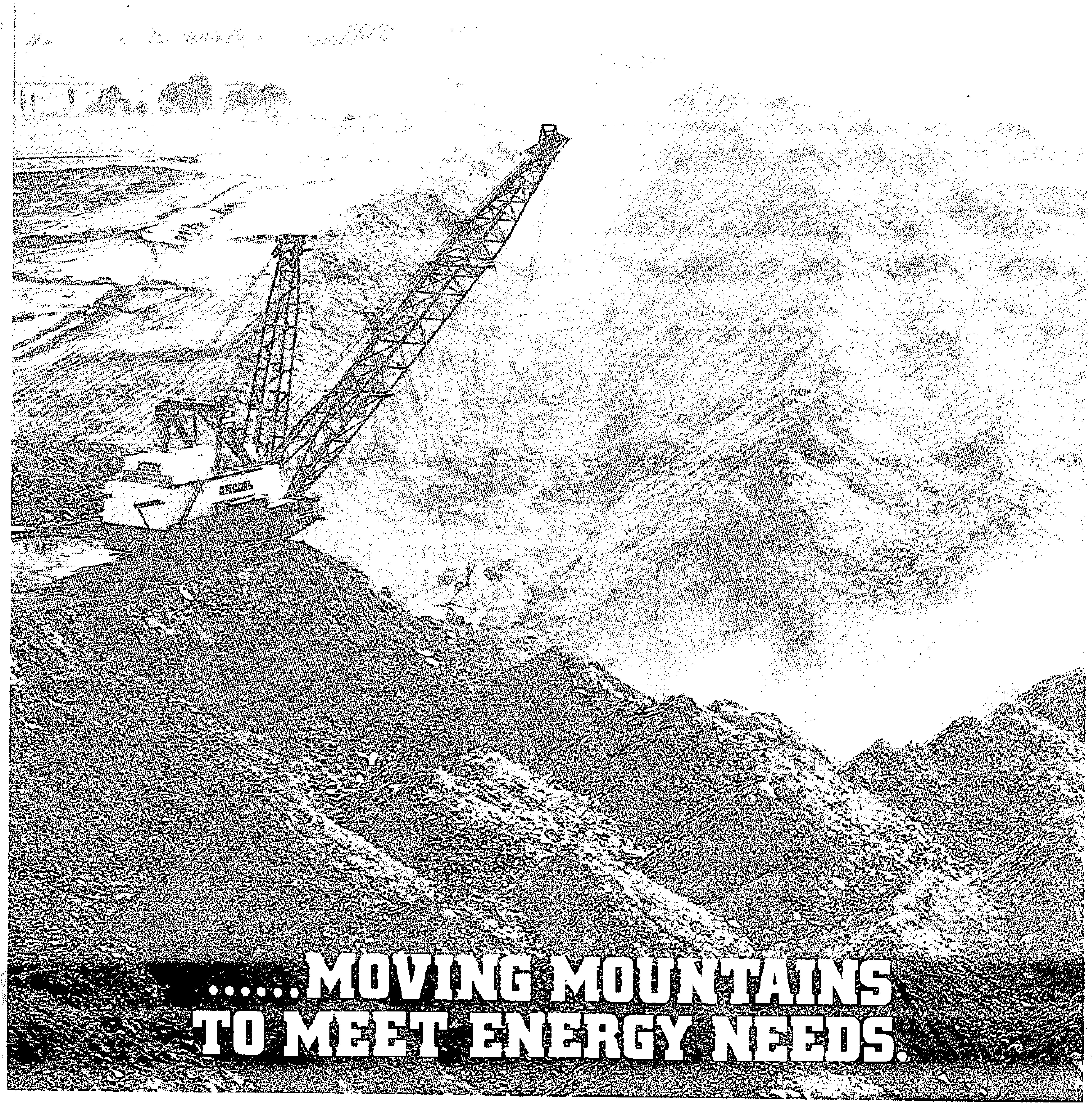
Industry has complained that the latest piece of legislation, the Coal Resources Act, is not a step forward but a step backwards. And it seems the WP on energy will further entrench government involvement.

If coal is of strategic importance, how can government disengage itself from the industry?

Firstly, let us deal with the draft WP and the draft coal plan appended. Far from fur-



AMCOAL



……MOVING MOUNTAINS
TO MEET ENERGY NEEDS.

Anglo American Coal Corporation Limited

ther entrenching government involvement in the domestic coal industry, it creates a forum for open discussion of government's involvement in the industry and recommends a more market-orientated system.

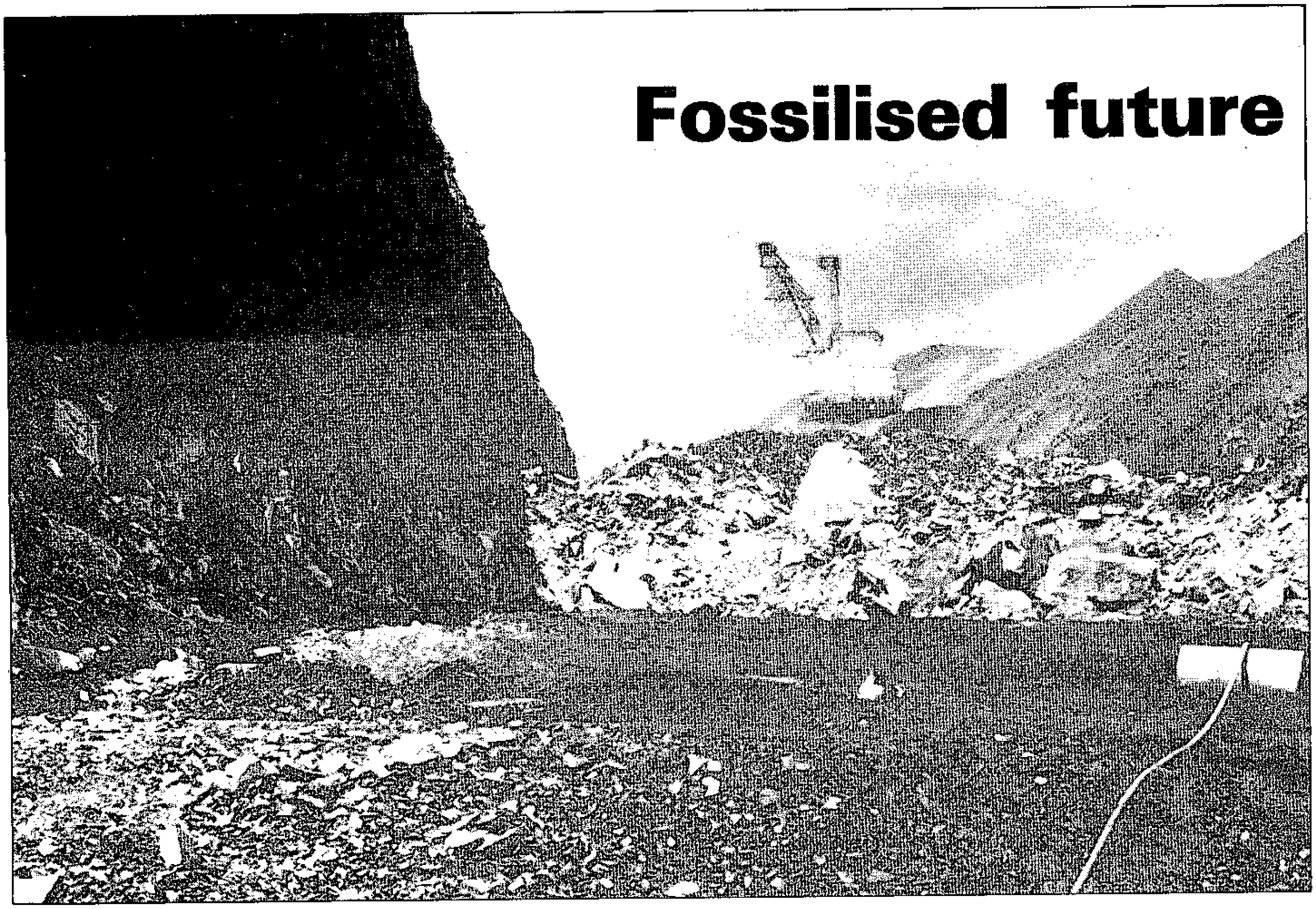
Indeed, the DMEA has taken steps to allow freer entry into the distribution market through a revised and more open rationalisation scheme (whereby coal dealers are allotted specific trading areas). When Cabinet accepted in principle the recommendations of the Competition Board, as far as inland coal distribution was concerned, it was stressed these would be implemented when feasible and at the appropriate time — at the discretion of the DMEA.

Minister Steyn has now requested the Coal Advisory Board (CAB), which came into being after promulgation of the Coal Resources Act, to advise him on the matter. The committee's members, which include large and small producers, distributors and consumers, are presently considering it, as well as the question of inland price control of coal.

The issue of price control and distribution of coal remains a sensitive one. All possible efforts should be made to ensure coal is available to all users and all sectors of the market all of the time, particularly the less lucrative bag market — particularly in winter.

However, we hope that, through the CAB, these matters can be addressed objectively. If more government deregulation and disengagement are called for, and this can be

Fossilised future



The age of nuclear power has dawned in SA, but coal will still be the primary energy source for the next two decades and provide most of our electricity for the next 60 years

Even when nuclear power takes off, it will be too expensive to immediately convert SA's coal-fired power stations, which will continue to provide a steady avenue for coal for perhaps the next 60 years.

However, the decline in energy consumption being experienced worldwide is also reflected in SA. Between 1973 and 1983, domestic coal sales grew at an average annual compound rate of 6,6%, with Escom electricity consumption growth averaging just over 7% a year.

Late last year, Escom announced a downward revision of 6,0%. Simpson, Frater Stein and Strong (SFSS) analyst David Keefe believes this represents "the first of many such downward revisions" foreshadowed by the late 1984 announcements of the deferral of Lekwe and the delaying of Majuba. Between now and the year 2000 he expects electricity consumption to drop to about 4% a year.

A growth of 3,7% a year in domestic coal achieved without disruption to the present market situation, then it is for both the private and the public sector to sit down and discuss and recommend accordingly.

It should be remembered that the distribution market referred to comprises only 7 Mt out of the total of 120 Mt of coal sold inland. Secondly, the temptation of deregulating simply for the sake of it needs to be guarded against. Maybe the proof of the pudding will be the present winter — which merchants have entered carrying only minimum stocks. (Government's rationalisation scheme requires merchants to carry adequate stock piles in case of emergencies.)

The Competition Board did not deal with coal exports at all. But the draft WP recommends the maintenance of a balanced export programme without endangering our own domestic future coal requirements. This, I believe, can only be achieved by maintaining the present export guidelines in the system of coal export allocation. The situation is appreciably dynamic. No doubt it and other matters will be discussed by the CAB in time to come.

There is no doubt that coal is a "strategic" energy commodity in the SA context. Although most commodities classified as "strategic" are ones which SA is import-dependent on, the reverse is of course true of coal. But, although we may have abundant reserves, coal is SA's only important fossil fuel. It is necessary to the satisfaction of future energy requirements. Alternatives in such abundance do not yet exist. ■

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sales is projected by Keefe for the years from 1985 to 1990, and 3,4% a year between 1990 and 2000 — showing a decline of almost 3%.

Rapid change in the growth of electricity consumption has also occurred in the US, which SFSS views as "the trendsetter." Between 1960 and 1974, US electricity consumption also grew by just over 7% a year. Between 1975 and 1984 the growth rate dropped to under 3%, and for the period 1980 to 1984 the growth rate was only 1,5%. In fact, between 1981 and 1983 Escom electricity consumption grew at only 2,8% a year.

"Overall, it would seem the outlook for the domestic coal market over the next five years is one of lower growth and greater uncertainty than has been the case over the past five to 10 years," says Keefe.

However, another Johannesburg analyst, John Whillier, points out that while electricity consumption is presently the key to a growth or decline in coal consumption, other uses for coal, particularly in the petrochemical industries, may expand.

Apart from its use as a synfuel, coal is used in SA for a wide range of chemical products. AECI's Modderfontein plant uses 3 000 t of coal daily, to aid in the manufacture of ammonia. Coalplex, which produces PVC plastics, uses coal as a raw material. Sentrachem's Karbochem synthetic rubber facility in Newcastle is now believed to be the largest coal-based synthetic rubber plant in the western world. Coalplex may also establish a facility for the production of activated carbon from coal, a material which is currently imported. In addition, Sasol subsidiary Gaskor produces household and industrial gas from coal.

"All these enterprises," says the Department of Mineral and Energy Affairs (DMEA) report on minerals, "will call for increasing quantities of coal feedstock."

A further impetus to the coal industry may come about with the development of the beneficiation of minerals. Increasingly, SA is becoming aware that it must join the Western world in producing and exporting finished products if it is to remain competitive and if it is to continue earning foreign exchange — and coal is essential to the development of the beneficiation process. ■

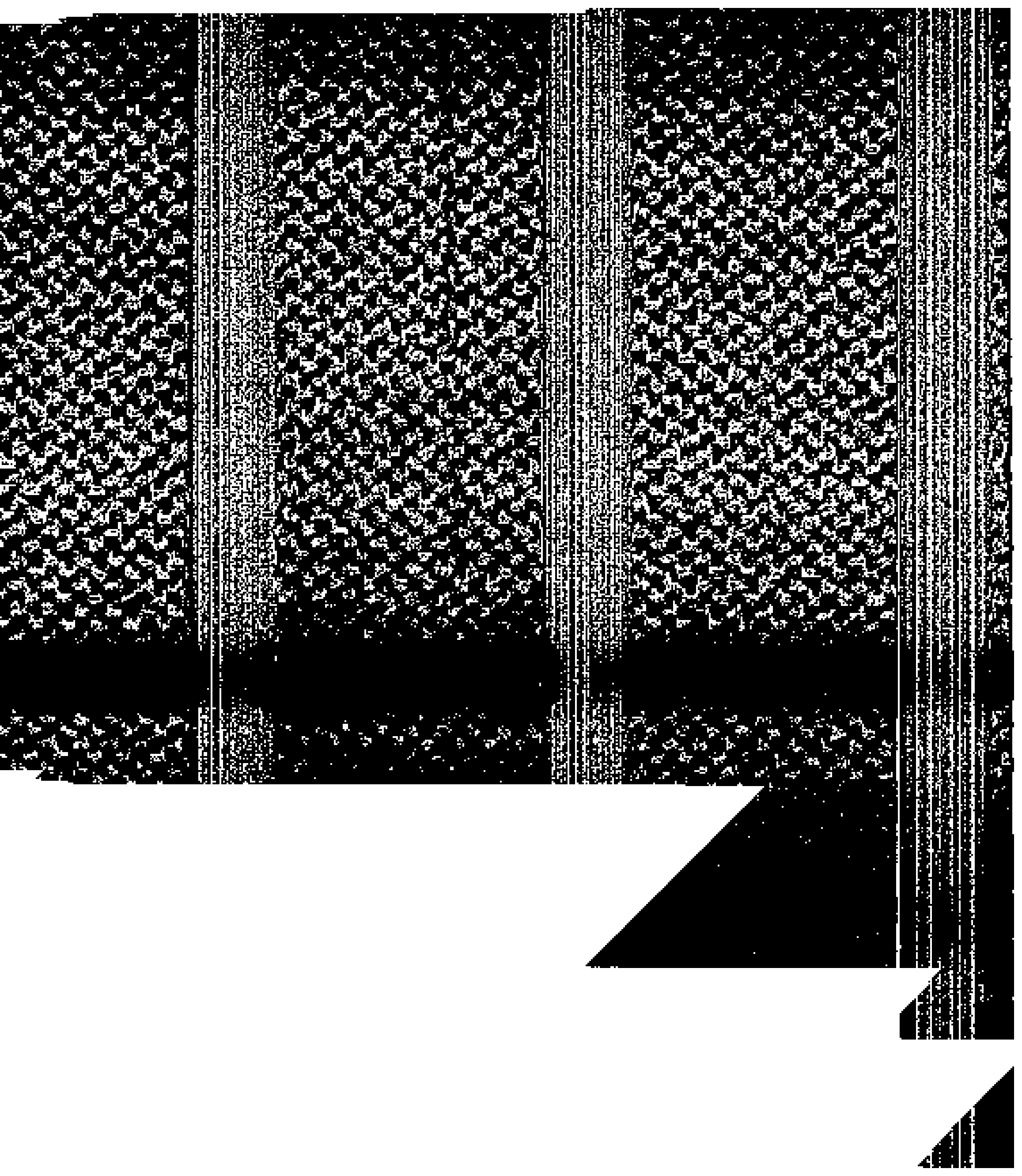
ACTUAL AND PROJECTED DOMESTIC DEMAND

(in millions of tons)

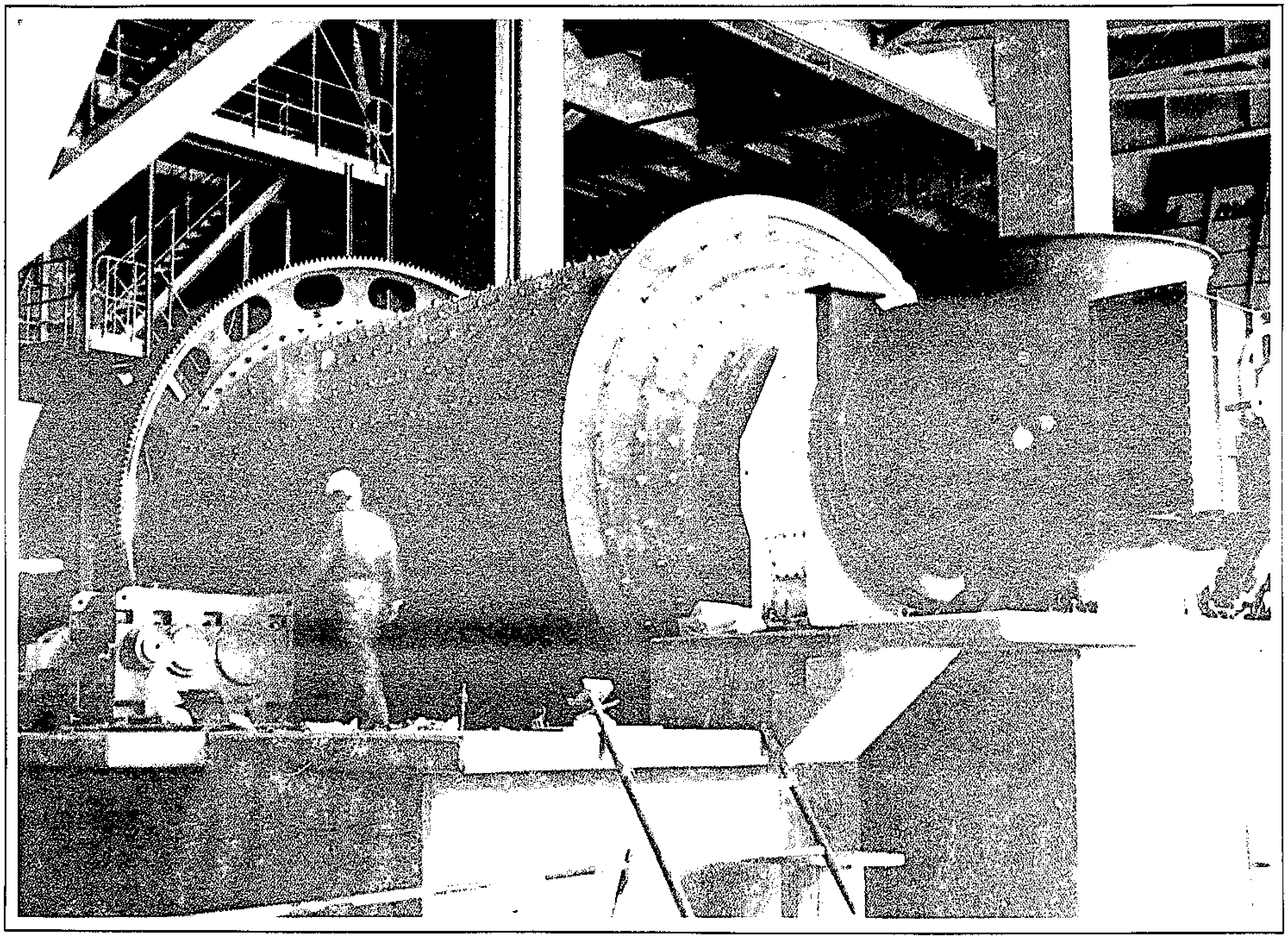
		ACTUAL			FORECAST	
Sector	**1983**	**1985**	**1990**	**An. Av. % growth rate 1985-1990**	**2000**	**An. Av. % growth rate 1990-2000**
Electricity	60,1	62,3	79,8	5,0%	130,0	5,0%
Synfuels & Chemicals	33,0	35,0	38,6	2,0%	39,0	0,1%
Industrial & Household	10,6	12,0	14,3	3,5%	20,1	3,5%
Metallurgical	7,0	8,0	9,1	2,5%	9,1	Nil
Transport	1,2	1,0	1,0	Nil	1,0	Nil
Mining	1,0	1,0	1,0	Nil	1,0	Nil
Total An. Av. growth rate 1983-2000: 3,25%	**112,9**	**119,5**	**143,8**	**3,7%**	**200,2**	**3,4%**

Source: Simpson, Frater, Stein and Strong.

SFSS' Keefe . . . growth looking uncertain



Pulverising and grinding – mills for every requirement



One of the 36 locally manufactured ball mills installed at the Tutuka power station. The mills are designed and supplied by Stein Industrie.

Pulverising and grinding the very difficult coals used for steam generation in South Africa demands mills that are efficient, reliable and need little maintenance.

Arnot, Tutuka, Matimba and Majuba power stations will all be equipped with mills from Stein Industrie. Of the 99 mills ordered, 15 are already operational.

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Hastening slowly

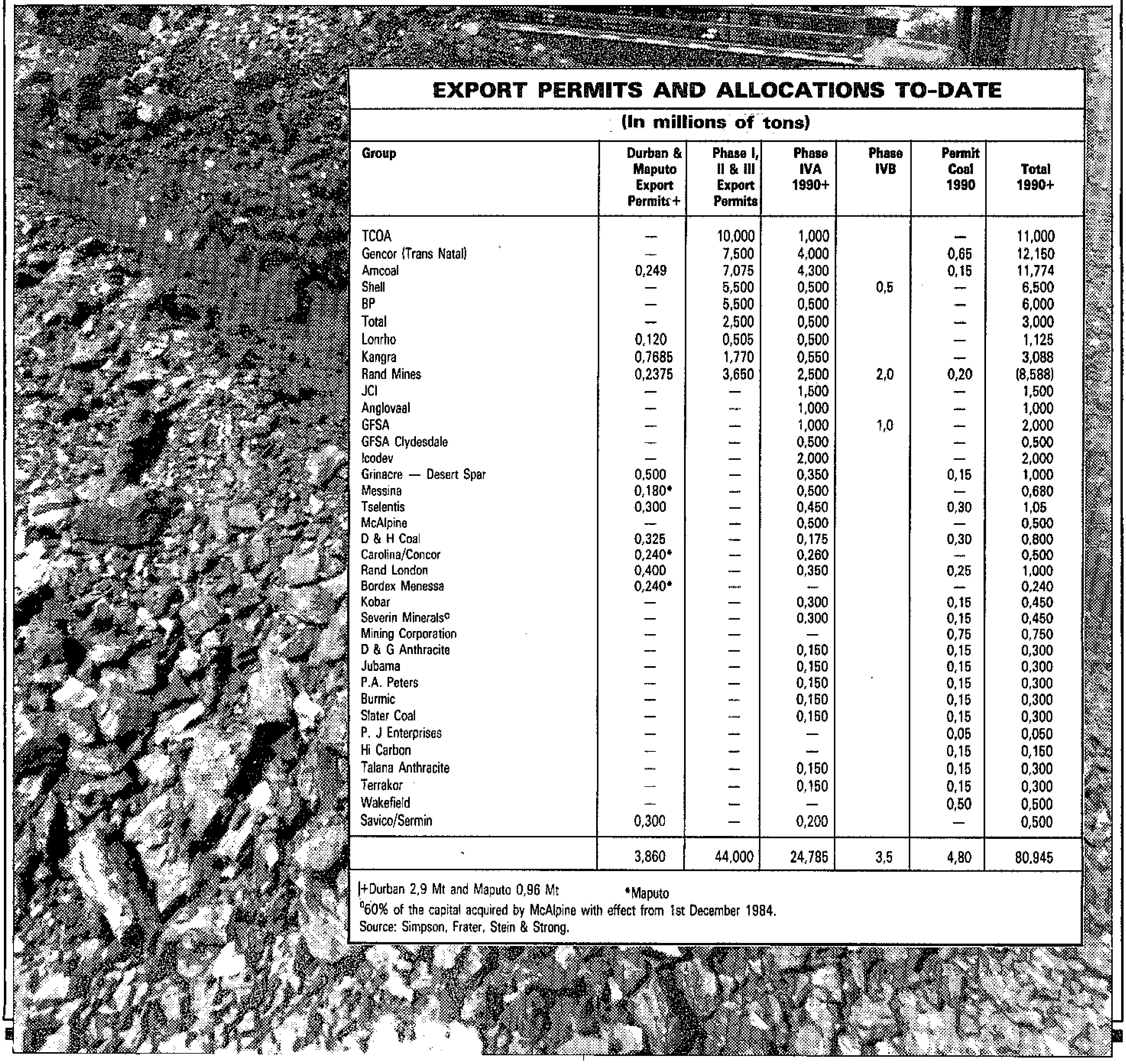
While the industry views the State's handling of the coalmines as meddlesome, there is every sign that government intends to become more — not less — involved

Although it accepted last year's Competition Board report recommending that government disengage itself and deregulate the coal industry, coal continues to be very much under the strong arm of the Department of Mineral and Energy Affairs (DMEA).

The State is involved in the entire spectrum of the coal cycle: from exploitation to beneficiation, from transportation to utilisation, from inland price control to export control, from research and development to care for and protection of the environment.

While the DMEA's position may be questionable, its involvement is still an undeniable fact of life. Consequently coal's status as an energy source is unavoidably bound up with government's view of it and this has changed over the past five years.

The DMEA is now concerned with developing a strategy which contains overall plan-



EXPORT PERMITS AND ALLOCATIONS TO-DATE

(In millions of tons)

Group	Durban & Maputo Export Permits+	Phase I, II & III Export Permits	Phase IVA 1990+	Phase IVB	Permit Coal 1990	Total 1990+
TCOA	—	10,000	1,000		—	11,000
Gencor (Trans Natal)	—	7,500	4,000		0,65	12,150
Amcoal	0,249	7,075	4,300		0,15	11,774
Shell	—	5,500	0,500	0,5	—	6,500
BP	—	5,500	0,500		—	6,000
Total	—	2,500	0,500		—	3,000
Lonrho	0,120	0,505	0,500		—	1,125
Kangra	0,7685	1,770	0,550		—	3,088
Rand Mines	0,2375	3,650	2,500	2,0	0,20	(8,588)
JCI	—	—	1,500		—	1,500
Anglovaal	—	—	1,000		—	1,000
GFSA	—	—	1,000	1,0	—	2,000
GFSA Clydesdale	—	—	0,500		—	0,500
Icodev	—	—	2,000		—	2,000
Grinacre — Desert Spar	0,500	—	0,350		0,15	1,000
Messina	0,180*	—	0,500		—	0,680
Tselentis	0,300	—	0,450		0,30	1,05
McAlpine	—	—	0,500		—	0,500
D & H Coal	0,325	—	0,175		0,30	0,800
Carolina/Concor	0,240*	—	0,260		—	0,500
Rand London	0,400	—	0,350		0,25	1,000
Bordex Menessa	0,240*	—	—		—	0,240
Kobar	—	—	0,300		0,15	0,450
Severin Minerals°	—	—	0,300		0,15	0,450
Mining Corporation	—	—	—		0,75	0,750
D & G Anthracite	—	—	0,150		0,15	0,300
Jubama	—	—	0,150		0,15	0,300
P.A. Peters	—	—	0,150		0,15	0,300
Burmic	—	—	0,150		0,15	0,300
Slater Coal	—	—	0,150		0,15	0,300
P. J Enterprises	—	—	—		0,05	0,050
Hi Carbon	—	—	—		0,15	0,150
Talana Anthracite	—	—	0,150		0,15	0,300
Terrakor	—	—	0,150		0,15	0,300
Wakefield	—	—	—		0,50	0,500
Savico/Sermin	0,300	—	0,200		—	0,500
	3,860	44,000	24,785	3,5	4,80	80,945

+Durban 2,9 Mt and Maputo 0,96 Mt *Maputo

°60% of the capital acquired by McAlpine with effect from 1st December 1984.

Source: Simpson, Frater, Stein & Strong.

ning and incentives for the optimum utilisation of coal.

Perhaps, one of the most important areas for any government strategy on coal is export policy, which affects the extent to which and where coal is mined. It also provides a good indication of the government's attitude.

Coal exports were placed under government control in 1973, following the first world energy crisis. In 1981, owing to De Jager's upward revision of national coal reserves, government virtually doubled the export ceiling by approving an additional 32 Mt to the present maximum of 80m tons a year over a 30-year period.

The majority of this is expected to go through Richards Bay coal terminal's phase four expansion plan. The plan has been divided into two: the Brownfields phase, for which infrastructure is available, will take exports up to 73 Mt by the late Eighties, and the Greenfields phase, a more expensive venture expected to facilitate a further 7 Mt a year.

These latest export allocations show more particular concern by government with optimum use of reserves. They have taken account of the danger of sterilisation to the Witbank-Middelburg area's coal reserves and of the increasing air pollution and environmental problems there. Witbank-Middelburg holds many of the Escom power stations and Escom-tied collieries, as well as others involved in exports.

To temper the area's mining activity, further coal mining has been attempted through government-granted export quotas in the eastern Transvaal, Carolina and Natal, says DMEA director general Dirk Neethling. In prompting this move, he says other factors were also at play. While alternative reserves of coal lie in the Waterberg and OFS, these areas do not provide the necessary infrastructure to make them economically recoverable and coal in the OFS is not expected to be of a very high quality.

In addition, the stimulation of mining in specific areas relates much more closely than before to government's decentralisation and regional development strategies — a factor which contributes to the use of lower grade coals, as well as providing labour and development opportunities.

"The method of allocation," says Neethling, "heralded a serious attempt of not opting only for short-term gain in foreign exchange. Instead, it is a co-ordinated effort at utilising the coal export programme to achieve not only longer-term coal-energy objectives, but also to accommodate national and regional development priorities." This involved tying a phase-four export allocation to a particular mine or coal property.

Neethling says government's other guidelines include contribution to inland coal supply, optimisation of reserves at existing collieries, utilisation of existing infrastructure and, of course, promotion of export trade.

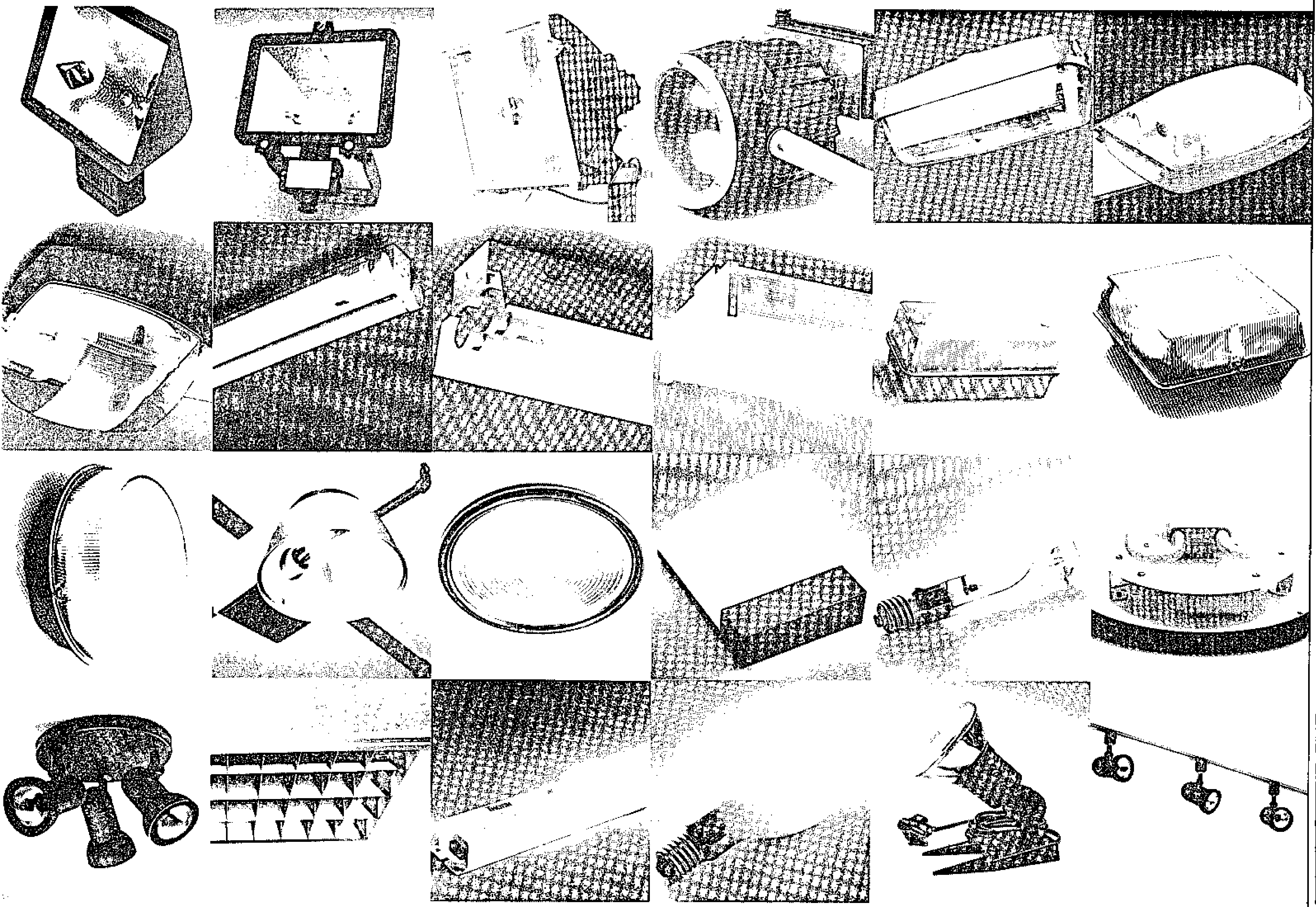
With these factors to consider at the time, Neethling says it was impossible to grant quotas to the hundred or more applications — totalling more than 200 Mt — received from industry.

The export allocations also include a new category of coal — "permit" or "waste" coal. "This represents an attempt to export discards, middlings and high-ash anthracite, indeed promoting the utilisation of any coal or coal-derived products which are unsaleable on the local market," says Neethling.

A further development, arising from government's coal export policy, is the encouragement of "multi-product mining" which enables a colliery to make far greater use of its coal types. This is particularly used for Escom collieries. Escom burns very low-grade coal, but many of the tied collieries produce excess high-quality coal which can now be creamed off for export.

Excess coal produced from multi-product mines was not included in De Jager's coal reserve estimates, which leads to difficulty in assuming or relying on present expected life

WHICH, WATT, WHERE?



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projections for coal.

However, the DMEA is aware that the methods used by De Jager to estimate SA's coal reserves have shortcomings, particularly with regard to its methods of coal evaluation. It is currently working on the re-evaluation of coal reserves and coal types and their expected life potential. Once this has been completed it could lead to a revision of the reserve estimates, a re-structuring of the coal grades and, perhaps, the introduction of greater price differentials.

In fact, Neethling adds, greater price differentials are important to bringing demand into line with availability while at the same time encouraging the use of lower grades of coal.

The DMEA's control over and interest in coal was further entrenched this year when the Coal Resources Act was introduced. The Act has far-reaching powers, for the first time affecting every aspect of coal mining, production and distribution. It is considered by industry to be a step backwards, away from government disengagement. However, more pertinently perhaps, it signals increasing concern by government with the role of coal in SA.

More recently, the introduction of the DMEA's draft White Paper on energy policy has translated that concern into the foundation for an energy plan. The plan provides for a thorough review of coal's importance to SA, against the backdrop of nuclear power.

Government affirms that by the turn of the century uranium reserves will probably be nursed as tenderly as coal is now. Industry fears this means coal will not escape its present mollycoddling until that time and government, confirms Neethling, is loath or unable to assuage that fear. ■

A hot rival

The oil scares of the Seventies prompted industry to look for an alternative fuel that was readily available, less politically sensitive, and cheaper. Coal fits the bill and worldwide consumption is increasing — but a rival looms on the horizon

Coal's elevated position on the energy scene could be somewhat temporary. Nations are still defining their attitudes — political, environmental and financial — towards uranium, whose reserves rival coal and provide a clean fuel that is easy to transport and should, eventually, be relatively cheap to use.

In addition, reserves of oil and gas are continually being revised upwards. While this may have effected a short-term relaxation in energy consumption, the long-term trend is towards a decline, more energy efficiency and conservation and a slow, but sure, phasing-in of nuclear power.

However, keeping consumption afloat are the quite radical changes that have occurred in the world market. The US's economic recovery has influenced similar recoveries worldwide with the result that more advanced economies, such as the US itself and parts of Europe, have tended to show a decline in coal consumption.

At the same time, the developing economies in the Far East, in Israel, Spain, Italy, Portugal, Greece and Turkey have increased their coal consumption. One notable exception to this rule is Japan — an advanced economy which has increased coal consumption dramatically from 57,9 Mt in 1979 to about 86,5 Mt in 1984.

Simultaneous adjustments have occurred on the supply side. In 1975, SA was the second largest exporter of coal, with only a 1,6% share of the total market. In 1984, its position changed to fourth with 12,9% of the total market. Australia, which was the third largest exporter in 1974, is now the world's coal-export leader, followed by the US and then Poland. In fact, this year, SA will probably become the world's third largest exporter, topping Poland's exports marginally.

But, according to the latest energy report of analysts Simpson Frater Stein and Strong (SFSS), competition is likely to become much fiercer as demand dwindles. The report states: "Between 1979 and 1983 total world coal trade grew at 3,2% a year. However, as a result of recent trends . . . we foresee total growth of only 1,1% a year between 1984 and 1990. Between 1990 and 1995 we forecast a slightly higher growth rate of 1,9% a year and expect a further increase to 3,0% a year in the period 1995 to 2000."

SFSS's projections are considerably lower than most other forecasters, such as the EEC, the IEA, Chase Manhatten and, in particular, the definitive World Coal Study (Wocol). Wocol projected an annual growth of 5%-8% until the year 2000. Yet, these figures are now considered optimistic by most coal executives and analysts alike.

"In our view, these forecasters have not yet fully appreciated the effects which energy conservation, structural changes in industry, slower world growth and the overall deflationary international environment are having, and are likely to continue to have, on primary energy consumption, including coal consumption," says SFSS analyst David Keefe.

SFSS's gloomy outook does not stop there. According to its projections of 400 Mt for total import demand by the year 2000, export capacity, especially for the US, SA, Australia and Canada, will be substantially higher. Based on current planned mine developments, export capacity, it says, could be

TOTAL WORLD HARD COAL

	ACTUAL					EST	FORECAST		
	1979	1980	1981	1982	1983	1984	1990	1995	2000
EXPORTERS									
US	59,9	83,2	102,1	96,4	70,4	72,0	58,0	62,0	67,0
Australia	40,4	42,8	51,0	49,8	59,6	74,0	80,0	82,0	90,0
S Africa	23,4	29,2	29,2	27,5	27,1	38,0	52,0	57,0	75,0
USSR	23,9	25,6	22,0	21,7	21,5	18,0	17,0	15,0	14,0
Poland	41,3	31,3	15,0	28,3	35,2	42,1	34,0	32,0	30,0
Canada	13,9	15,3	15,6	16,0	17,1	22,5	32,0	46,0	55,0
Germany (FR)	15,3	11,7	12,8	9,6	9,5	10,0	Included in "others"		
Others	10,7	19,0	24,2	19,4	19,1	19,4	42,0[°]	51,0[°]	71,0[°]
Total	**228,8**	**258,1**	**271,9**	**268,7**	**259,5**	**295,5**	**315,0**	**345,0**	**400,0**
of which seaborne	N/A	N/A	N/A	N/A	198,3	220,0			
IMPORTERS									
EEC	78,0	91,7	90,5	87,4	75,6	83,0	85,0	90,0	99,0
Japan	57,9	68,6	78,3	78,3	74,7	86,5	85,5	86,5	94,0
E Europe	32,5	33,7	32,5	30,1	33,8	36,2	39,0	42,5	47,5
W Europe (Exc EEC)	19,5	19,8	23,1	23,0	22,2	25,0	27,0	30,0	36,0
North America	19,5	17,2	17,5	17,5	16,6	16,5	15,0	10,0	8,0
Latin America	6,3	6,5	6,0	6,2	6,3	8,3	15,0	21,0	27,5
Others	15,1	20,6	24,0	26,2	30,3	40,0	48,5	63,0	88,0
Total	**228,8**	**258,1**	**271,9**	**268,7**	**259,5**	**295,5**	**315,0**	**345,0**	**400,0**
SA Market Share of Total Exports	12,0%	11,3%	10,7%	10,2%	10,4%	12,9%	16,5%	16,5%	18,8%

[°] Including Germany (FR)

Source: Simpson, Frater, Stein & Strong

THE WORLD OF COAL

Predicted trend in the capacities of coal-fired power stations based on maximum nett capacity in megawatts (MW)

	Electricity Generating Capacity (MW)						
	1982	1983	1984	1985	1986	1987	1988
Belgium	4 070	3 977	3 873	4 073	4 073	4 248	4 248
Denmark	5 563	5 762	5 774	6 101	5 988	5 971	5 876
Germany	28 973	29 553	29 973	33 173	33 733	33 823	33 573
France	12 382	12 982	14 022	12 243	11 072	11 072	11 072
Greece	—	—	—	—	—	46	46
Ireland	15	15	15	297	579	861	861
Italy	4 937	5 466	5 768	6 070	6 371	6 399	7 799
Luxembourg	60	60	60	60	60	60	60
Netherlands	4 144	4 144	4 144	4 368	5 029	5 545	5 299
UK	38 793	37 074	36 420	36 648	36 966	37 190	37 130
EEC	98 937	99 013	100 049	103 032	103 870	105 215	106 964
Changes during the year	—	+76	+1 036	+2 983	+838	+1 345	+749

Source: Official Journal of the European Communities

as high as 700 Mt. This figure tallies with original forecasts.

SFSS notes that Colombia, China, Indonesia, North Korea and several others have ambitious plans to develop their coal resources for export.

However, as far as SA is concerned, SFSS projects an export ceiling of 75 Mt for the year 2000, from 1985's estimated 38 Mt, as opposed to the 80 Mt allocated by government, and planned for by the Richards Bay Coal Terminal (RBCT). It seems that SA's coal executives, in this respect, are right: so long as the exchange rate does not change too radically, SA can expect to increase export sales and its market share.

Coal exports from SA have increased more than 11 times since 1975. This has occurred in a short period of time despite SA coals, though lower in sulphur content, being on average inferior in quality to coal from competitors.

How has this been achieved? DMEA chief director Dirk Neethling answers: "The answer is simply one of reliability of supply and good prices. This was brought about by the excellent and efficient performance of the privately-owned SA mining industry, a superior rail infrastructure, and by the construction of one of the world's most modern bulk coal loading terminals at Richards Bay. In addition, SA could boast a relatively stable labour force."

Do these advantages still hold and, more importantly, will they still be effective advantages?

That SA's mining industry is still "efficient" and watchful is borne out by the industry's leaders: Amcoal and TransNatal. Both have stressed the importance of marketing, keeping the market stable, being wary of new opportunities, and realistic planning.

WORLD COAL CONSUMPTION

(Including lignite and brown coal)

(In millions of tons of coal equivalent)

	1981	1982	1983	% Change 1982/1983	% of Total World 1983
China	591,3	618,3	654,0	+5,8	20,8
USA	609,5	591,9	600,5	+1,5	19,1
USSR	505,2	517,5	537,0	+3,8	17,1
West Germany	122,1	119,1	120,8	+1,4	3,8
South Africa	97,9	108,9	112,6	+3,4	3,6
Japan	100,7	105,2	111,6	+6,1	3,5
United Kingdom	104,4	98,0	98,4	+0,4	3,1
Canada	34,4	41,0	42,5	+3,7	1,4
France	37,7	42,9	36,5	−14,9	1,2
Others	801,3	828,0	831,8	+0,5	26,4
Total	**3 004,5**	**3 070,8**	**3 145,7**	**+2,4**	**100,0**

Sources: BP Statistical Review of World Energy, SA Minerals Bureau and Simpson, Frater, Stein & Strong.

Says TransNatal planning manager Gavin Turner: "Our demand forecasts are based on direct feedback on expansion plans, from customers all over the world, and not on long-term projections." He adds: "These forecasts are continually updated."

SA's transport facilities are also likely to keep up with demand, too much so, according to SFSS. Nevertheless, under the watchful eye of Amcoal and RBCT chairman Graham Boustred it is unlikely that SA will have any problems meeting demand.

The labour question is more complex, being related to SA's overall political problems. But, again, the mining houses seem confident that union problems, similar to those experienced by the US, Australia, Poland and the UK, are not likely to occur.

So where are the areas of expected growth? SA is centrally situated between the western and eastern markets. This geographical position has allowed SA to operate as a "swing supplier" and it is a position which SA exporters have used to its full potential.

In the west, until recently, France was SA's largest single customer. However, France has steadily been replacing coal with nuclear power, and, owing to France's excellent standards of efficiency and low level of accidents in nuclear power stations, it is probable that France will continue to cut its imports of coal. Between 1980 and 1984, French coal demand halved.

Belgium is expected to follow the French trend for nuclear power, says analysts Davis Borkum and Hare's (DBH) latest report on mining. It has also cut its power consumption by 4% over the last few years, and, unless there is a major upswing in economic activity, "Belgium offers little growth potential in the short-term," says DBH.

Denmark, which earlier this year cut off all supplies of SA coal for political reasons, was to be an area of major growth. It is committed to coal-fired power generation and is likely to increase its imports, but SA will not benefit.

However, SA has been quick to spot replacement markets, particularly in growth areas such as West Germany. Although West Germany produces its own coal, imported coal, because of its lower cost, is considered anti-inflationary. West Germany's production costs, says DBH, are the highest in the EEC.

Historically, Italy has boasted the lowest power consumption in the EEC, but it is now committed to increasing its power generation using coal-fired stations as its main energy source. It has no coal reserves of its own and so imports its total coal requirements. "It is likely that SA will not only maintain, but even increase, its market share," says DBH.

As outlined earlier, other nations in Europe are increasing their coal imports as their economic recoveries get under way, and SA already has a share in this market.

The major area of growth is expected in East Asia. DBH predicts the area's coal imports to increase from 1984's 38 Mt to 55 Mt in 1990. Traditionally, Australia has been the major supplier to the Far East, but SA has attained significant market share.

In 1984, SA was supplying about a third of Japan's steam coal. Japan is the largest single importer of coal in the world, with forecasted imports for 1985 totalling some 82 Mt, says DBH. "While the Japanese economic bandwagon keeps rolling, there will be an ever-increasing demand for electric power, with SA in line to derive further benefits from increased exports."

SA is also a major supplier of steam coal to the Republic of China, which DBH expects to increase imports in 1990 by 80% — from 5 Mt in 1984 to about 9 Mt in 1990. "SA is well placed to increase its market penetration," says DBH. Other areas of growth in the

WORLD COAL EXPORTS 1975 VS 1984

	1975		1984		Percentage Change 1975/1984
	tonnage (mill. tons)	% of total	tonnage (mill. tons)	% of total	
USA	60	31,1	72,0	24,4	+20,0
Poland	38	19,7	42,1	14,2	+10,8
Australia	30	15,5	74,0	25,0	+146,7
USSR	26	13,5	18,0	6,1	−30,8
West Germany	15	7,8	10,0	3,4	−33,3
Canada	12	6,2	22,0	7,4	+83,3
S. Africa	3	1,6	38,0	12,9	+1166,7
Others	9	4,6	19,4	6,6	+115,6
Total	**193**	**100,0**	**295,5**	**100,0**	**+53,1**

Source: Simpson, Frater, Stein & Strong

Far East are Hong Kong and South Korea, which SA already supplies.

As far as SA's competitors are concerned, the most dangerous threat will come from Colombia — the latest entrant to the coal export scene. The US, although the world's largest producer of coal, is not competitive while the dollar remains strong. At present it is selling steam coal some six to 10 US$/t above SA prices. It also has suffered numerous transport and port problems, achieving a reputation for unreliability.

Australia is SA's most competent adversary on the world market, with similarly experienced and tough mining houses, as well as higher quality coal. However, SA has had a competitive edge in the form of pricing — Australian steam coal prices have been about two to five US$/t above SA's — and Australia's natural stamping ground is Japan and the Pacific Basin. While a determined effort is being made by Australia to penetrate the European market, SA is also concentrating on breaking into Australia's territory in the Far East and both are achieving some success.

DBH does not reckon Poland will regain its former position in the world market. Its coal industry has suffered major setbacks due to union problems and inadequate coal-loading port facilities.

However, Colombia is dedicated to exploiting coal, its major natural resource, and passing the benefit on to its people. It is well-endowed with considerable and varied reserves and, within about two years' time, should have adequate transport facilities available. DBH expects Colombia's main marketing efforts to be concentrated in the US — which SA barely supplies at the moment — and Europe. So far, it has been able to take advantage of the political hostility aimed at SA by Denmark, and has become Denmark's major supplier.

Although, SA coal exporters are confident that their marketing expertise will stand them in good stead, it should be remembered that coal importers like to vary their supply sources to ensure reliability and availability. DBH concludes: "Colombia will make rather more than a ripple, as far as the US domestic suppliers — Australia and SA — are concerned, but its major impact on the world market appears to be some three years down the line."

"With so many factors at play," adds DBH, "recessionary influences, environmental controls, slow rate of development in Third World countries, on-going oil exploration, the increasing popularity and availability of natural gas, to mention a few, it is daunting indeed to try and predict the future."

Another group of analysts, Ed Herne Rudolph (EHR), take a view similar in cautiousness to SFSS's. "Despite the fact that world coal prices remain at a relatively low level, there is no escaping the fact that the steam coal market is likely to be well-supplied until at least the end of the decade.

"It is perhaps unfortunate, but the continued rapid expansion of the industry is not purely confined to countries which have both the reserves and the cost advantages warranting development. Rather, it seems coal deposits are being opened up, or operated, for reasons quite unrelated to the profit motive — such as the creation of employment and the making or saving of foreign exchange.

"In addition, all countries find appeal in the idea of having some degree of energy independence. It is for these reasons there is the nagging suspicion that the coal industry could become the "copper" of the energy markets, with surplus capacities worldwide keeping prices only just high enough for the average exporter to survive."

However, EHR concludes with a note of optimism for SA exporters: "Fortunately, SA remains far more than the average exporter, and it is for this reason that we retain every confidence in the future of the local coal industry." ■

Pricing policy

Along with labour and fuel costs, the price of electricity is pivotal to the competitiveness of SA industry. Escom has been criticised on this score for being far from cost-effective

Liquid fuel and labour costs determine the final selling price of our finished products. So too does the cost of another major production factor — electricity supply operations organised under the umbrella of Escom because of economies of scale.

Escom has come under fire because of the widely held belief that it is not cost-effective and its tariffs have been criticised because of:

☐ The rate at which they have escalated over the years, and;

☐ The differing costs for average consumers in different geographical areas.

The De Villiers Commission investigated both criticisms and recommended changes to Escom's pricing policy in order to reduce the present inequalities and cost disadvantages.

Escom tariffs increased at an annual rate of 19,3% between 1974 and 1982. This is far higher than the inflation rate and, some critics would say, has in fact contributed to inflation.

Three factors can be taken into account in determining tariffs, according to the Electricity Act, which governs Escom's operations:

☐ The costs of generation, distribution, maintenance and administration — in other words, the current costs of operating an energy supply system;

☐ Interest costs, redemption of loans and all other forms of capital-related costs. These represent all the capital costs involved in the establishment of currently operating plant and machinery; and

☐ Specific and controlled contributions to the Capital Development Fund and the Reserve Fund. These are capital costs related to the establishment of future plant and machinery.

One of the basic debates over Escom tariffs revolves around this last factor. To what extent should present electricity consumers subsidise future electricity consumers by contributing to these two funds?

One argument is that present consumers should contribute to further capital development in the interests of more efficient long-term financing, and also because, for historical reasons, past consumers have subsidised present capital investment in power stations.

This is all very well in theory, but the major drawback is that electricity costs inevitably rise as a result. In addition, very few other countries, besides the UK and France, practise this kind of policy — known as long-run marginal pricing — which would make SA's exports that much more uncompetitive on world markets were this policy to continue in SA.

Up until now, electricity consumers in SA have been paying for future needs through that part of the tariffs which is contributed to the two capital funds. In 1973, the portion of tariffs diverted to the Capital Development Fund was 5,6%. By 1979, this figure had increased to 32,5%, and was only slightly lower, at 29,1%, in 1982.

There is evidence that increased capital funding needs contribute greatly in turn to increased tariffs.

A joint submission to the commission by the AHI, Assocom, FCI and Seifsa argues that "an increase in the growth rate (of Escom's generating capacity) has the greatest impact on the tariff."

The example given was that a doubling of the growth rate in capacity from 2,5% would double the tariff. A further increase in capacity to 7,5% would increase the tariff one and a half times.

But why does Escom find it necessary to provide so much for future needs? The answer lies partly in the "cheap energy" policy of past decades. This was introduced to stimulate industry and exports, an objective which it certainly achieved. But at the same time, it stimulated electricity demand and encouraged the development of energy-intensive industries.

And greater power demand means more power stations.

The dilemma which SA faces is therefore that long-term marginal or higher prices are needed to ensure electricity saving, but higher prices will harm energy-intensive industries to such an extent that it will be unacceptable in the short term.

One of the major reasons for needing extra capacity is that additional generating capacity is required to cope with peaks in power demand such as occur in winter. After having catered for these peaks, the extra plant does not necessarily operate in times of consumer slack. This under-utilisation of plant is extremely expensive and, according to some commentators, is one of the major causes of escalations in power prices.

In order to solve this aspect of the pricing dilemma, the commission recommends certain policies to bring about a more even demand for power, and thus reduce the need for plant to cope with peak demand only.

More specifically, the commission argues that:

☐ The fact that Escom supplies to a small number of large consumers puts it in an ideal position to persuade them to manage their load on the grid more effectively;

☐ Lower consumption during winter and higher consumption at night and during weekends should be encouraged, to the benefit of both Escom and consumers;

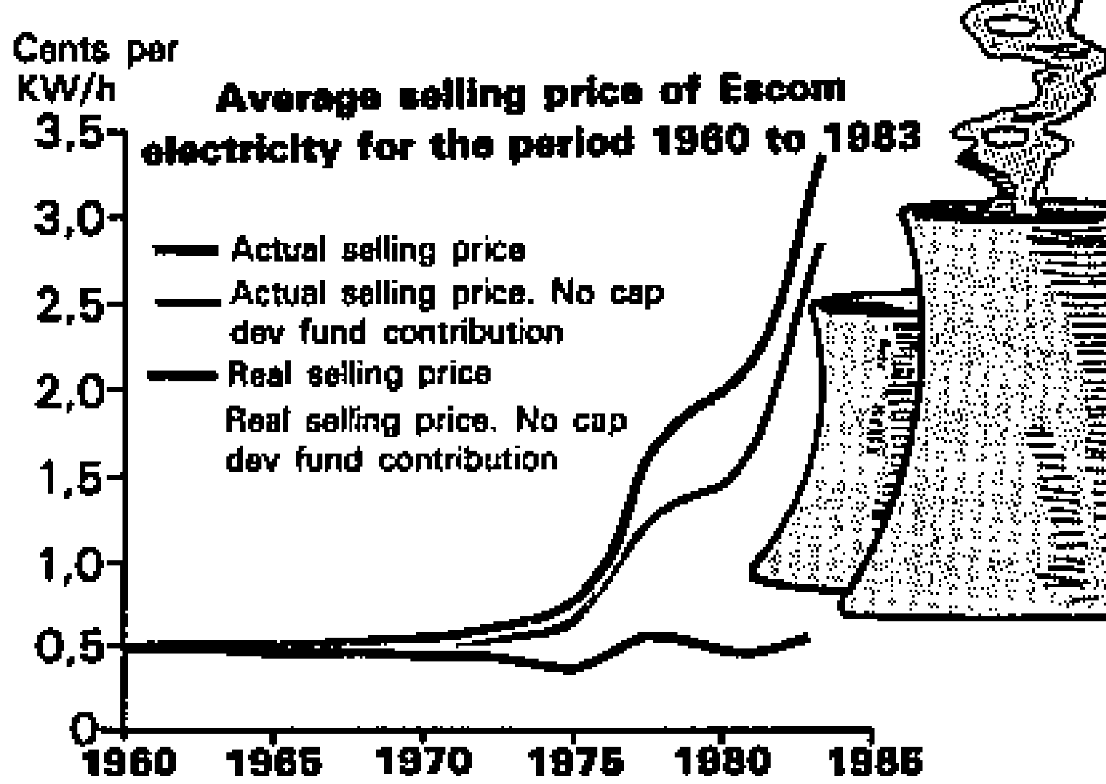
☐ A system of switching-off of domestic geysers during peak periods should be considered, as should the introduction of special tariffs for irrigation by night; and

☐ Escom should abandon its policy of abundant cheap electricity if this encourages wastefulness.

As regards the differing costs to different geographical areas, the commission found that the difficulty lay with the Electricity Act itself.

Escom consists of a number of different undertakings which cover various parts of the country. In terms of the Act, each of these undertakings is required to balance its

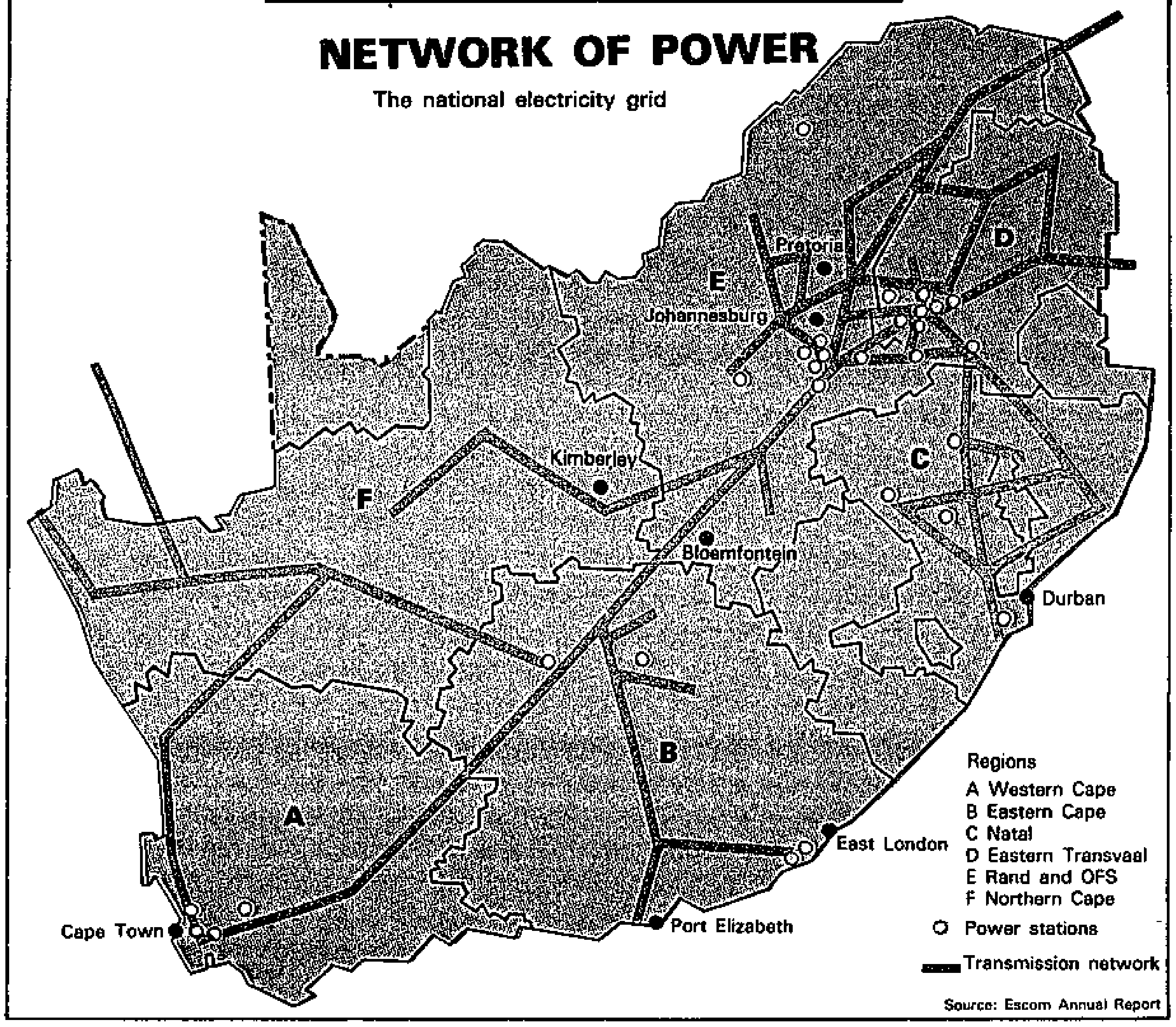
PAYING FOR POWER



Source: De Villiers Commission

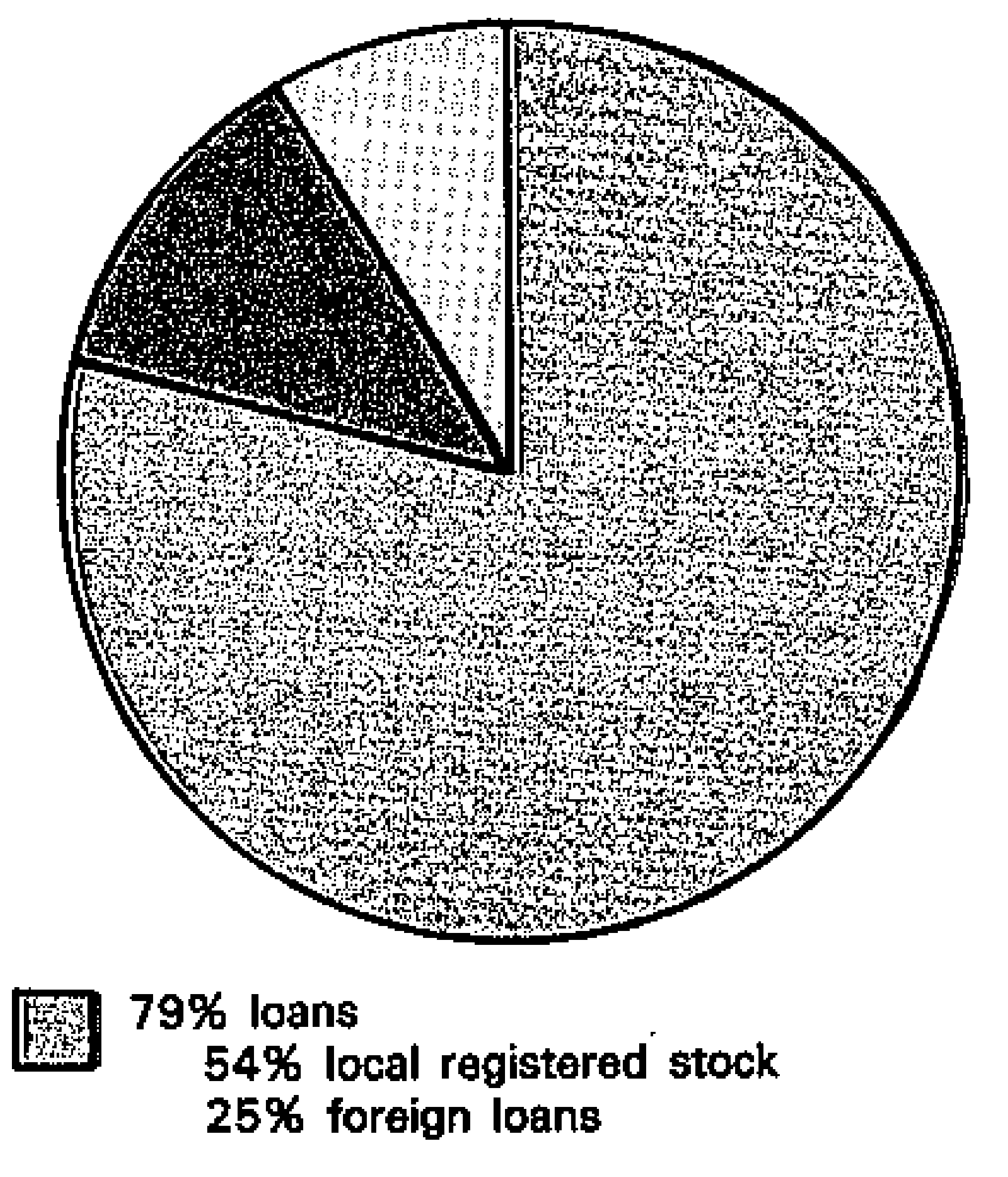
NETWORK OF POWER

The national electricity grid

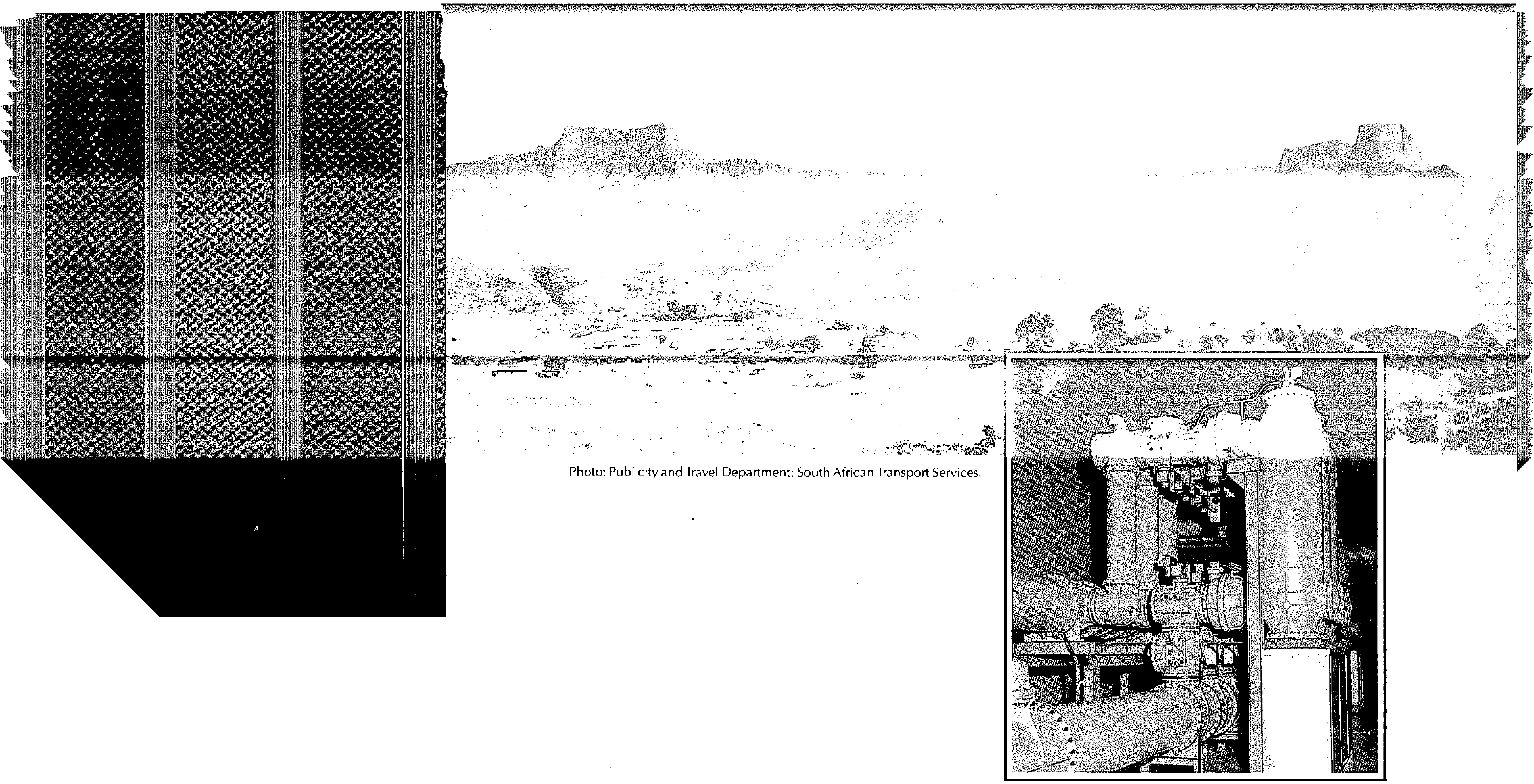


Source: Escom Annual Report

DEBT MIX



Source: Escom Annual Report



books to ensure that no cross-subsidisation of one group of consumers by another takes place. Because of differences in the demand for and supply of power in the different areas, unit costs differ, and hence consumers pay different prices for the same electricity.

For instance, the average consumer in East London pays 47% more for his electricity than the average consumer in Witbank. There are similar differences between consumers on the Rand and in the western Cape.

The commission found that these differing costs and prices are largely the result of the Act's stipulations regarding book balancing, and which prevent lower unit costs in one area being passed on to another undertaking.

Since all undertakings are now linked to the national grid, the commission recommends that all distinctions between the various undertakings be formally abolished for the purposes of the Act, and that while consumers should still pay according to the costs of supply to them, price differentials should be reduced.

So what is the net effect likely to be? If efforts to conserve energy prove successful, there may be reduced demand for future capital financing, and less upward pressure on tariffs. At the same time, however, expansion of economic growth requires investment in new power stations, and some form of provision for future capital investment.

It is likely that tariffs will continue to rise. The rate at which they rise will depend to a large extent on whether demand for power responds to higher prices, or whether the past spiral of increased power demand leading to increased capacity needs continues. If the latter occurs, tariffs will continue their present heady rate of acceleration. ■

Balancing feat

SA is formulating its first grand energy plan. This has been a long time in the making, but government hopes it will go a long way towards reconciling conflicting interests

The Department of Mineral and Energy affairs recently made public a draft White Paper on future energy policy which identifies and describes priorities and provides the broad framework within which discussion can take place. It has been circulated for comment from both private and public sectors.

A draft of the Energy Plan will be drawn up by the Energy Branch of the Department of Mineral and Energy Affairs and will be put to the Energy Policy committee before the end of the year, and it is hoped the Energy Plan will be tabled in Parliament next year. World usage of primary energy — all forms of commercially traded fuels — was estimated to be the equivalent of 7,2m tons of oil in 1984. Total world energy usage has almost doubled in the last 20 years.

There has, however, been a shift in con-

ELEVEN-POINT PLAN

A draft White Paper on Energy Policy in South Africa has been published which sets out the main guidelines for the future.

The 11 points set out in the plan are critical pointers to the complex series of problems facing our energy planners and managers.

The draft White Paper's points are designed to:

☐ Conserve energy by the optimum generation, distribution and utilisation of energy and to reduce energy consumption without adversely affecting gross domestic product;

☐ Ensure the optimum development and utilisation of coal, SA's most important energy source for the foreseeable future;

☐ Ensure optimum utilisation of uranium, which is one of SA's most important future sources of energy;

☐ Evaluate SA's crude oil and natural gas potential and to develop this to achieve the highest realistic degree of self-sufficiency in liquid fuels;

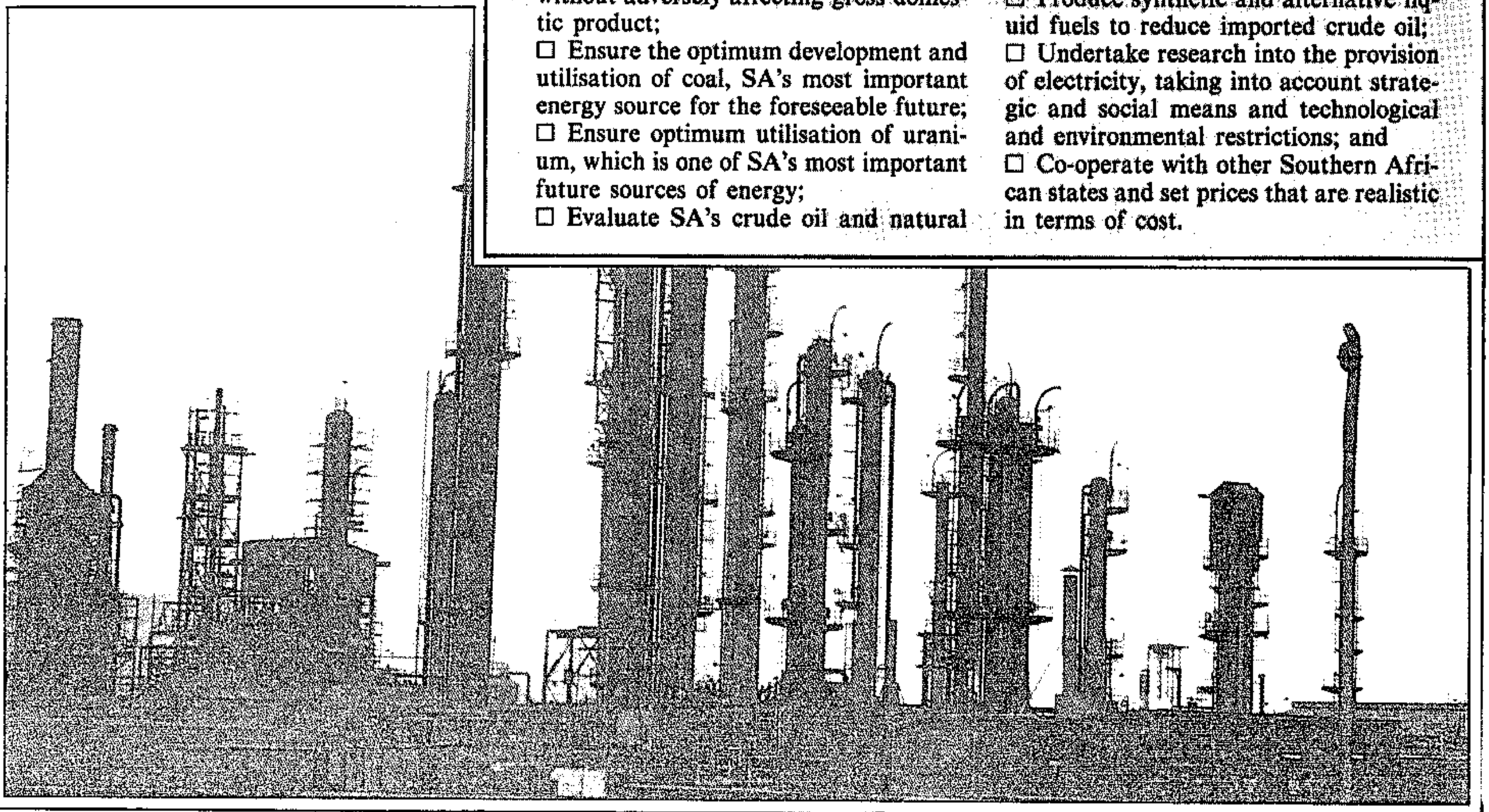
☐ Develop renewable sources to produce electricity, to promote judicious exploitation and to create sufficient electricity supply to meet the need;

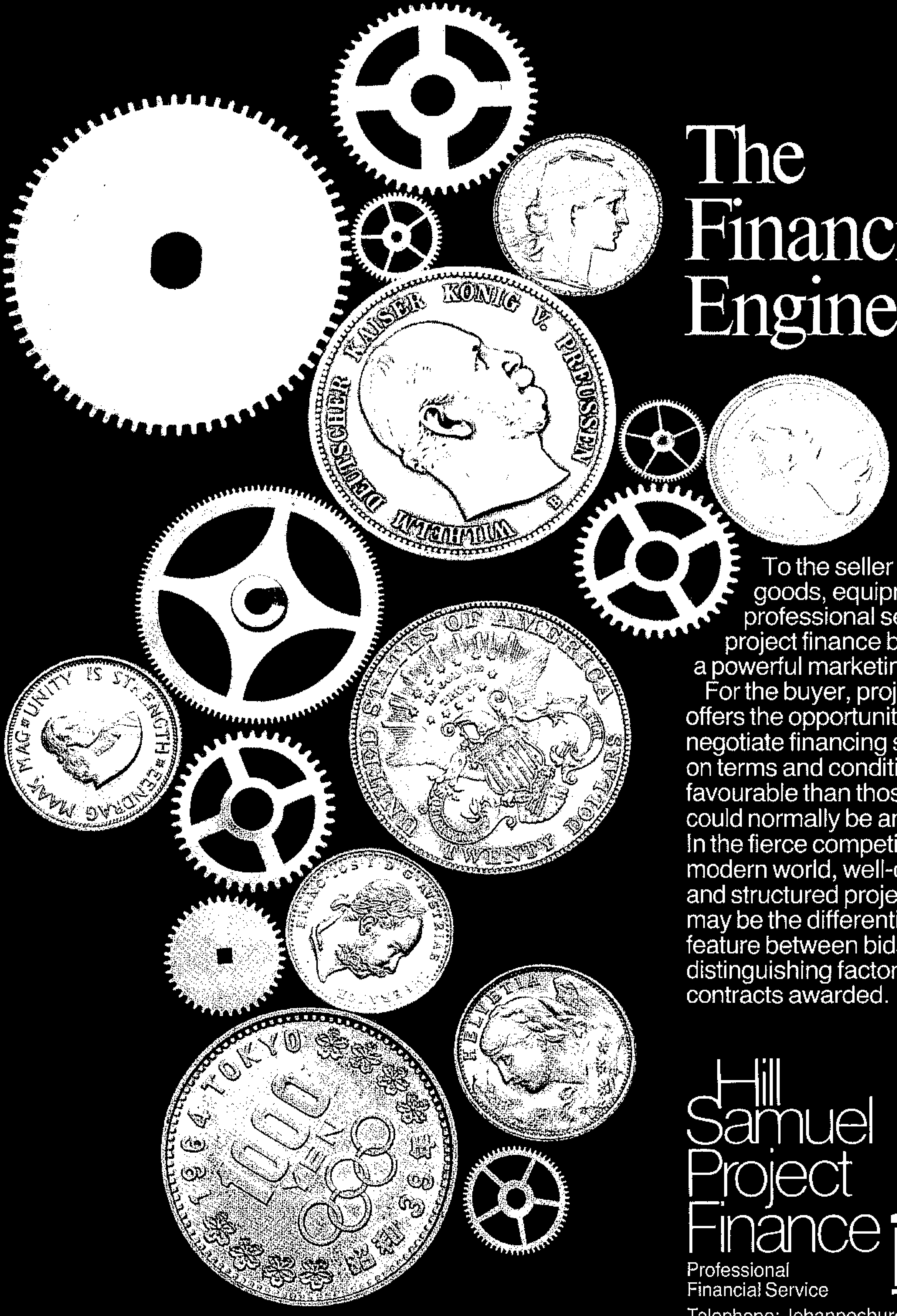
☐ Examine the processing of crude oil, reorganise the fuel distribution network, maintain a price structure that is efficient, economic and strategic, and control exports and imports to ensure domestic supply;

☐ Produce synthetic and alternative liquid fuels to reduce imported crude oil;

☐ Undertake research into the provision of electricity, taking into account strategic and social means and technological and environmental restrictions; and

☐ Co-operate with other Southern African states and set prices that are realistic in terms of cost.




DEUTSCHER KAISER KONIG V. PREUSSEN
WILHELM
UNITED STATES OF AMERICA
TWENTY DOLLARS
UNITY IS STRENGTH
HELVETIA
TOKYO 1964

sumption patterns away from oil in the years since the second oil crisis. The peak in the contribution of oil to total energy supply was reached in 1973 at a level of more than 47%. Oil consumption then began to decline and by 1984 had dropped to 39,5% — a level last seen in the mid-Sixties.

The gap between growing energy demands and lower oil consumption has been filled by other energy sources such as coal, nuclear energy and, in some cases, more innovative sources such as solar power.

Against this background of changed circumstances, and the obvious need to reduce dependence on non-renewable and imported sources of energy, SA's energy policy has been overhauled. The new plan aims not only at adapting to changed international circumstances — including the possibility of sanctions and boycotts — but also to gear energy policy more closely to changes within SA.

The draft White Paper looks at SA's energy policy from 11 different angles. Another section dealing with contingency planning has not been made public. These separate plans will be co-ordinated into a comprehensive overall energy plan.

The Paper, then, deals with 12 individual energy plans. These may be broadly categorised into three groups: Primary energy sources; secondary energy sources; and policy recommendations for research and development, regional co-operation and energy conservation.

Since the energy crunch of the Seventies, great strides have been made throughout the world to conserve energy and make plants more efficient. Conserving energy is a vital part of any comprehensive energy plan. The government aims to conserve energy, both in the way it is consumed and by producing other "secondary" forms of energy. A delicate balance will have to be struck between measures to conserve energy, on the one hand, and the need for increasing supplies of energy to fuel economic growth and raise living standards, on the other.

A number of benefits are expected to flow from efforts to conserve energy, among them:

☐ Less pressure on the balance of payments because less fuel will be imported;

☐ Pressure on the economy's pool of savings caused by the high capital costs of power plants will ease; and

☐ Non-renewable fuel sources will be conserved and there will be less environmental damage if energy is produced more efficiently.

The Paper recommends a number of measures to conserve energy. These include:

☐ A national conservation drive;

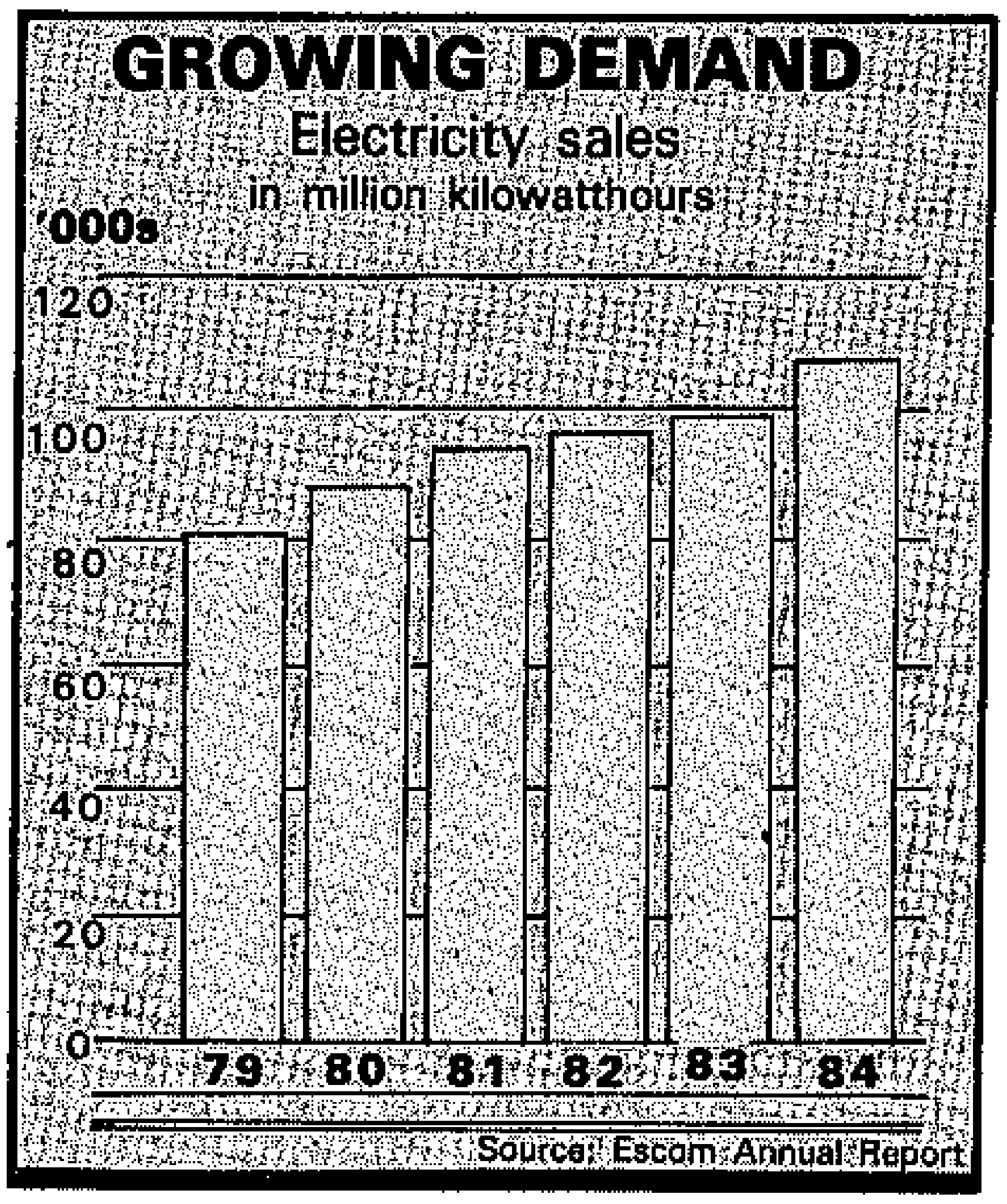
☐ Reduction in electricity consumption; and

☐ Replacing by "moral suasion" regulations aimed at conserving petrol to make the general public more energy conscious.

More than 85% of SA's primary energy needs are met by coal, and more than 95% of this country's coal is used to generate energy. The supplies of coal are not endless, however, and the draft Paper recommends that known reserves should be sought out and known, but unproven, coal fields be scrutinised. It recommends greater use of coal to generate energy and more efficient conversion of coal into secondary fuels such as electricity and synthetic petrol.

The draft hints that the government might withdraw from the coal market, except for strategic matters, but if recent events are anything to go by, this could prove a thorny problem. The export of coal should be co-ordinated with tax measures to stimulate use of coal reserves and favourable railway tariffs that would make SA coal more competitive on international markets, the report says.

SA currently holds 14% of world uranium reserves — the third largest after Australia and the US. Most uranium in this country is a by-product of gold production and 85% of it is exported.



The draft White Paper recommends that uranium reserves be evaluated, especially the dependence of uranium production on the gold mining industry. The next century will be an age of large-scale nuclear energy in SA and the report says the fuel enrichment process should be further developed in this country not only for domestic use, but also for export of uranium in a value added form.

Since 1965, Soekor has undertaken an extensive search for exploitable oil and gas reserves. These efforts have borne some fruit and four offshore gas fields have been discovered — one near the mouth of the Orange River in SWA/Namibia; one near Plettenberg Bay; and two off Mossel Bay. Plans are underway to examine the potential for converting this natural gas into liquid fuels.

The draft White Paper recommends that the Mossel Bay fields should be brought into production by 1990, if feasibility studies prove positive. The search for off-shore gas and oil fields should be continued. Plans should also be made for more Sasol-type synthetic fuel plants to take advantage of these gas and oil fields. The commission also recommends SA take part in negotiations leading to increased involvement in the development of gas and oil reserves in other southern African countries.

Renewable energy sources are important, even more so in the Third World where wood is widely used for warmth and cooking. Wood, together with other renewable energy sources such as hydro-electricity, solar and wind energy, at present supply about 8% of SA's primary energy needs.

The Paper is pessimistic, however, on how much these sources can contribute to the generation of energy. Increased deforestation, limited supplies of water, low average annual wind and the high capital costs involved are expected to limit the amount renewable energy sources will contribute to meet SA's total needs.

Nevertheless, the draft White Paper recommends these sources be used more efficiently and that priority should be given to applying more appropriate, renewable energy policies in rural areas. The sunflower oil project will press ahead, presumably as a back-up should critical shortages of fuel occur. Southern Africa's hydro-electrical potential should be developed through negotiation, particularly with irrigation needs in mind. It seems that although the government wants to leave the development of this technology to the outside world, developments should, nonetheless, be monitored.

Although alternative energy technology has to date found little application on a large scale, its contribution should grow. The development of heat-pumps, electric vehicles, and the use of hydrogen for long-distance air transport are possibilities, even if distant ones.

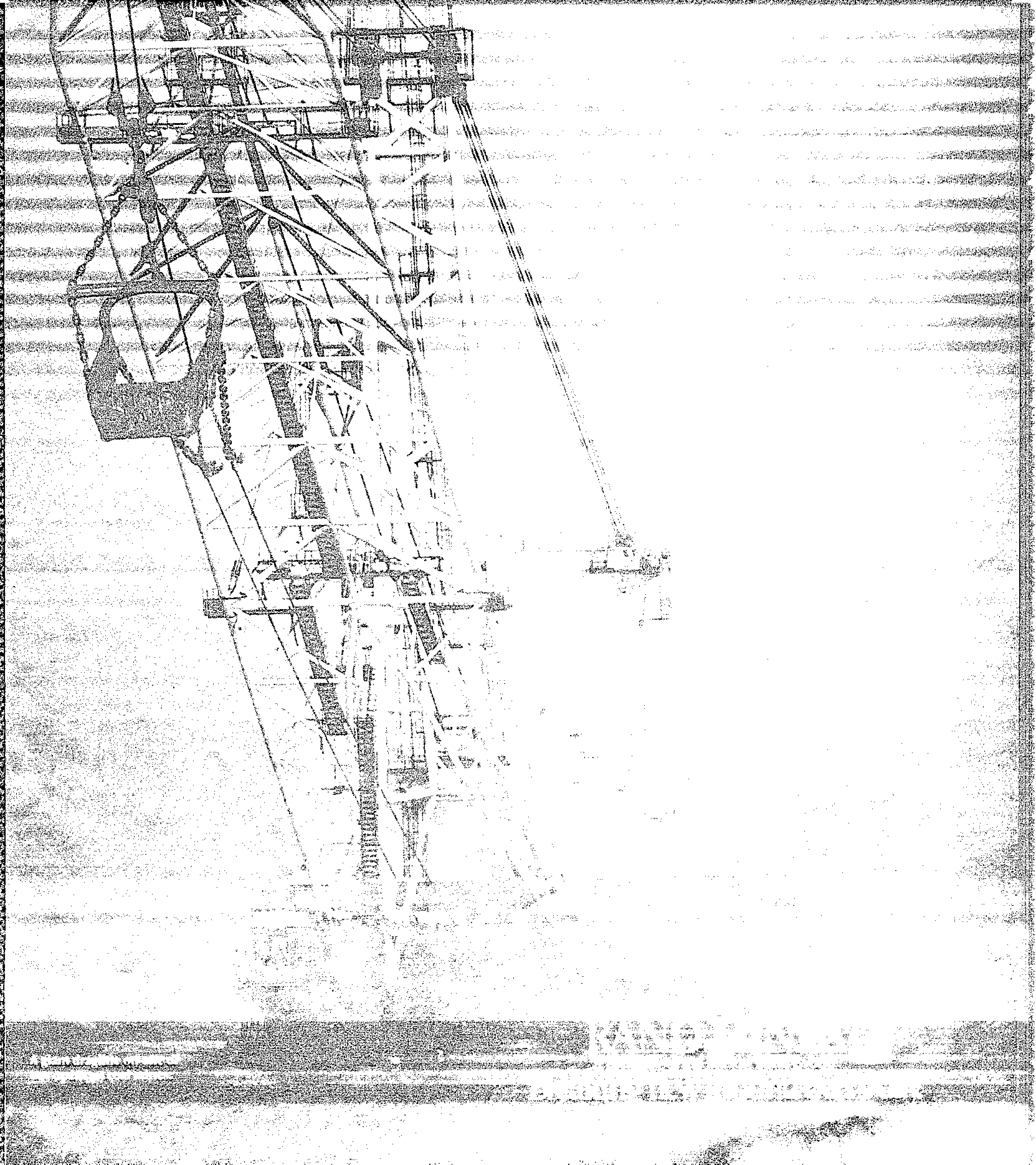
The Paper reaffirms decisions already taken by government on the generation of electricity in general, and Escom in particular. It endorses the recommendations of the De Villiers Commission of Inquiry into Escom, and in particular, the restructuring of the management (see page 34).

SA has four refineries which process crude oil into products needed by the economy. The petroleum industry is heavily regulated, especially in the areas of pricing, distribution and import and export controls.

The White Paper recommends a halt be put to new refineries because capacity is under-utilised at present and probably will be in the future. However, new synthetic fuel projects should be brought on-stream in line with demand. Also, the Filling Station Rationalisation Plan, which limits the number of distribution outlets, should be renegotiated for a further period when it expires at the end of 1985.

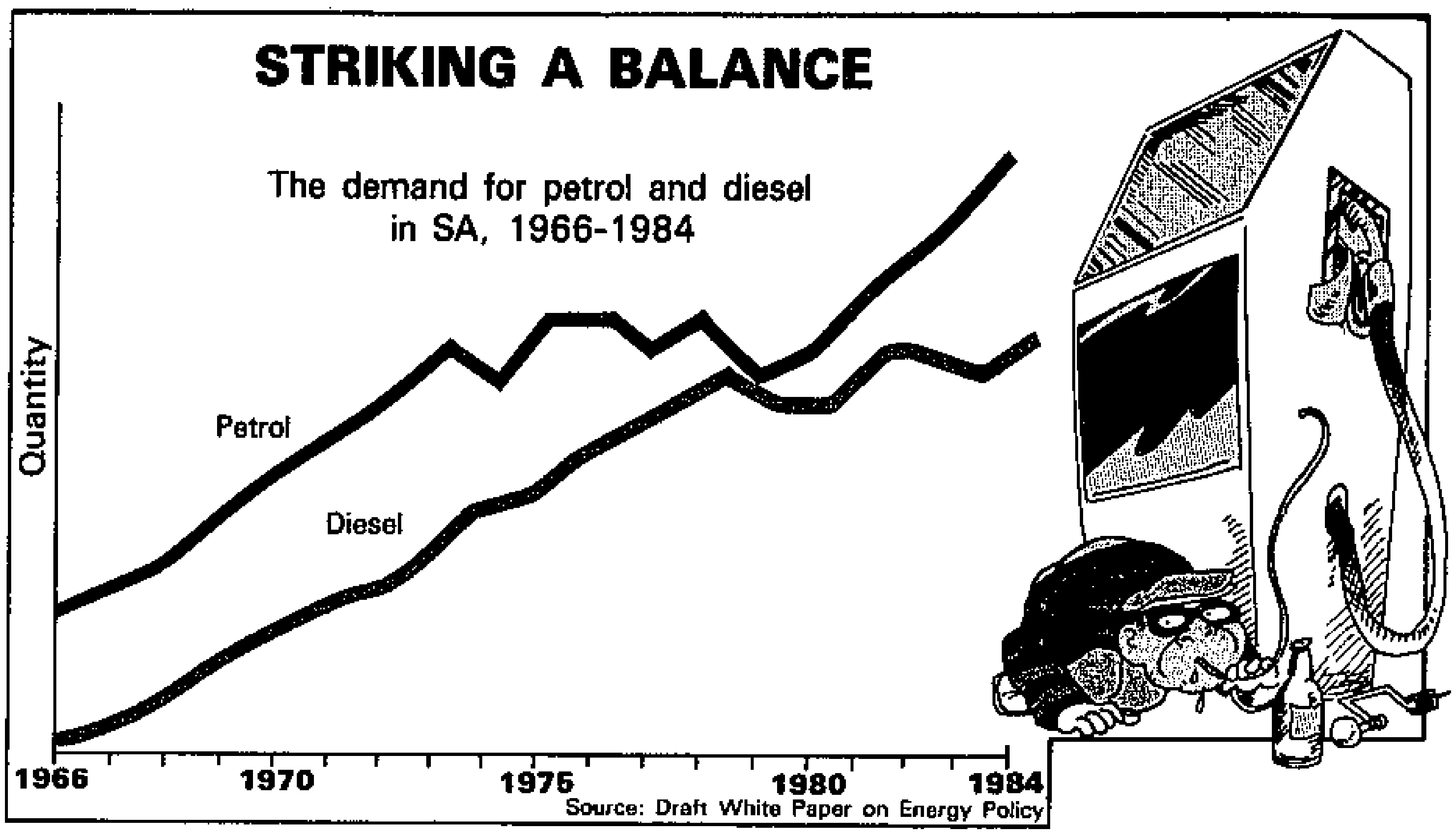
The Paper does not recommend the phasing out of price control, but says it should be retained. Possibly, it has the shaky exchange rate and the ever-present threat of boycotts

Record coal production.
All in a month's work for Rand Mines.



in mind. Perhaps this is why it recommends that control over fuel exports should also be retained.

The secrecy that has shrouded so much of SA's oil procurement might be lifted slightly through changes to laws governing the publication of information on fuel. These, says the Report, should be amended to maintain security but also keep the public and research community informed.


STRIKING A BALANCE

The demand for petrol and diesel in SA, 1966-1984

Source: Draft White Paper on Energy Policy

The three Sasol plants are currently at full production and provide an important means of reducing balance of payments pressures generated by crude oil imports. There is, however, an imbalance between the supply and demand of diesel fuels. Demand for diesel has risen in past years while the Sasol plants produce mainly petrol.

The draft Paper recommends that research on other synthetic fuel projects, such as distilling oil from natural gas, be completed this year to enable SA to achieve the level of fuel self-sufficiency aimed for by 1990. To encourage this, incentives should be offered for the production of synthetic fuels.

The petrol-diesel demand ratio should be shifted towards petrol through the use of levies and duties, and by gradually abolishing the selective rebates on diesel. SA technology in synthetic fuel should be marketed overseas.

A National Programme for Energy Research has been established to co-ordinate the research and development needs of the Energy Plan and priority will be given to coal, energy in transport, and alternative technology, especially for rural communities and R & D systems and models.

The lower Zambesi valley in Mozambique has the potential to generate large amounts of hydro-electricity. Cahora Bassa alone could generate 3 000 MW of power. However, this project remains bogged down in political and military issues and seldom supplies any power to SA's national grid. The report suggests an interstate oil committee could be formed to organise matters of mutual interest. This could benefit SA, which imports more electricity from Mozambique than it exports to all its neighbours put together.

The Paper recommends that a southern African electricity network be established, that interstate agreements be adapted to allow electricity to flow freely between states and that energy projects in southern Africa should be funded by both the Development Bank of Southern Africa and foreign finance. ■

New-look Escom

Escom has undergone a shake-out and the old top-level structure has been replaced by two-tier management with more emphasis on profitability and private sector input

Guidelines for the new-look Escom were set out by the De Villiers Commission of Inquiry, which tabled its report late last year. It was the report's recommendations that led to the new two-tier management being established in May this year.

Ultimately, the report's recommendations will change the way Escom operates and the Electricity Act will have to be amended further and possibly even rewritten in 1987 as a result. The Act was amended earlier this year when the new structure was brought into operation.

Announcing the move in Parliament earlier this year, the Minister of Mineral and Energy Affairs, Danie Steyn, said management would be restructured into an overall control and planning division, the Electricity Council, and an executive division, the Management Board.

The Electricity Council would be responsible for policy formulation, strategic planning and overall control while the Management Board would run Escom's day-to-day activities in line with guidelines set down by the council, he said.

In a move widely seen as an attempt to restore confidence in Escom, John Maree, executive chairman of Barlow Rand, was appointed chairman of the Electricity Council in May. And in a departure from Escom's traditionally more autocratic style, the private sector was given strong representation on the council. It is now felt Escom, as a result, will be organised more along business lines.

Essentially, the task of the council and Management Board is to implement the recommendations of the De Villiers Commission. Hopefully the new dispensation will mean less interference from the government

THE SHORT CIRCUIT

The De Villiers Commission of Inquiry into the Supply of Electricity makes six major recommendations for a more efficient supply of electricity and improved management of demand.

The recommendations urge:

☐ A two-tier management structure consisting of the board of control of Escom and a management board;

☐ Escom should lead the drive to conserve energy and electricity while preventing large price hikes. It should also reduce the burden of capital costs on the economy for energy generation;

☐ Increased standardisation of power stations, together with better tendering systems should lower costs. Also, certain environmental standards should be re-examined to reduce costs;

☐ Forecasting and plant construction methods should be improved to ensure the correct power generating capacity is provided;

☐ A more sound financial policy should be followed in place of the present one of zero profit; and

☐ Distinctions of Escom's undertakings into geographic regions should be discarded.

in Escom's affairs.

Priority will be given to changing the present tariff structure, but this will affect large consumers of energy rather than the man-in-the-street. A new tariff structure should be in operation from January 1986. One of the commission's recommendations — that Escom be run at a profit — could put upward pressure on tariffs.

"Escom has had the reputation of not being cost effective and past 'profits' have really only been retained earnings," says Dries Loots, acting legal manager of Escom.

The De Villiers Commission's recommendation that a certain level of assets be maintained against debts could also push tariffs higher, but only in the short term. Some feel the consumer will probably bear the brunt as these ratios are brought into line with the commission's recommendations.

"This, of course, means Escom must keep its costs down and it is here the Electricity Council will have a large role to play," says Loots.

The council will have to focus on controllable costs. There are, however, costs over which Escom has little control, such as interest costs, inflation, security and indirect taxation, and these will keep the pressure on.

In recent years, Escom has been hard hit by rocketing costs, the weak rand, punitive interest rates, the increases in gst and higher import duties. Because Escom does not have access to share capital — all capital expenditure is provided by loans — it is particularly vulnerable to fluctuations in financial markets and the business cycle.

Escom's interest costs will probably exceed operational costs in 1985. Last year, its interest bill rose above R1 billion for the first time. Perhaps more alarming is that the cost of power stations has risen faster than the rate of inflation — a power station which cost R1,4 billion in 1980 now costs R3,42 billion.

"Productivity improvements can only marginally offset such cost increases. The equivalent annual capital charge for such a station would now be R580m as opposed to R130m in 1980," says former Escom chairman, Jan Smith, in the 1984 annual review.

Internal financing of Escom's capital development, which has come under criticism from consumers who believe they pay more for their electricity than it cost to produce, is declining steadily.

"Internal financing generated by the capital development fund has declined steadily since 1980. In 1984 it represented 28,5% of capital expenditure compared to a high of

MARGIN BETWEEN AVERAGE ANNUAL GROWTH RATES OF ELECTRICITY CONSUMPTION AND THE ECONOMY

SOUTH AFRICA

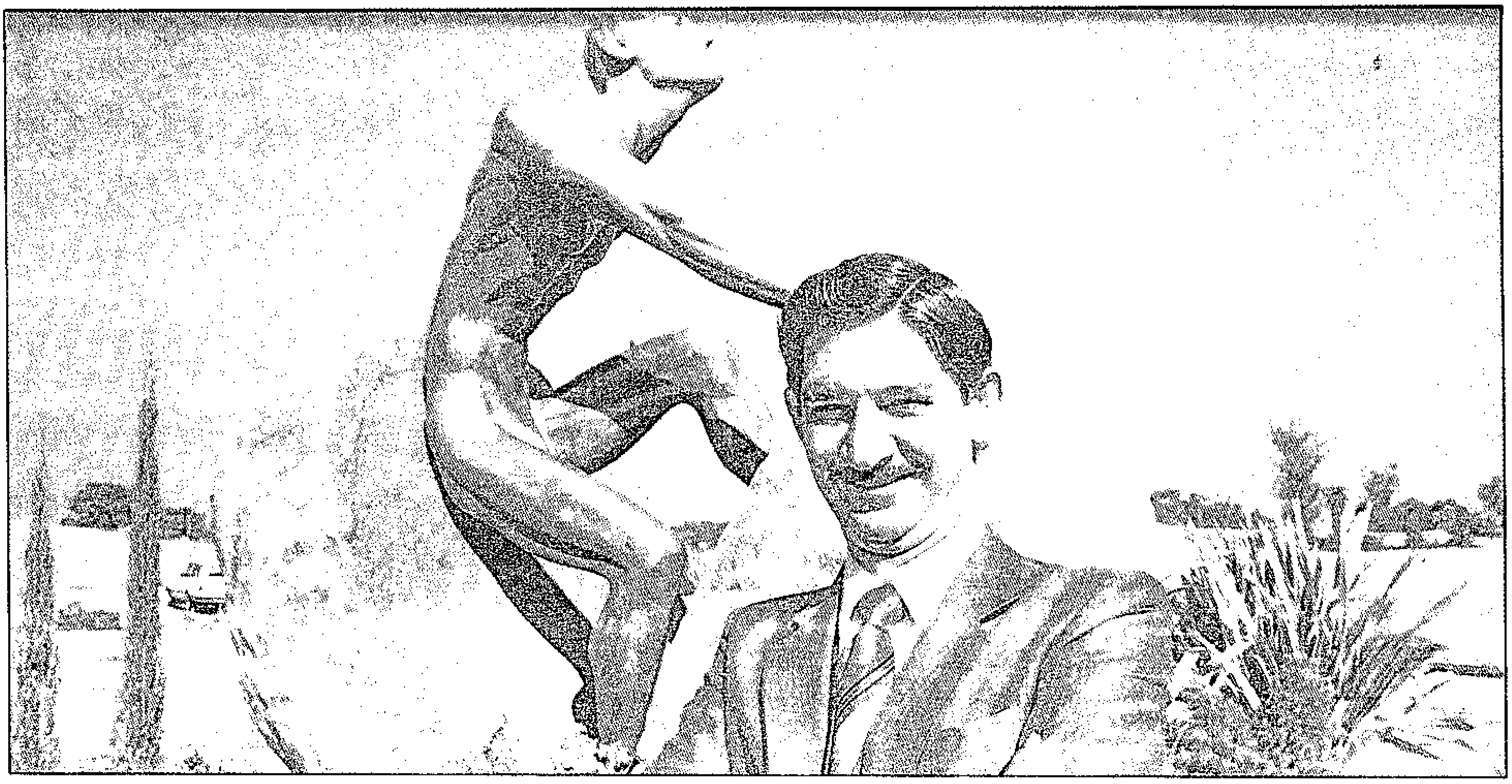
Period	Average annual growth rates			Margin between the average annual growth rate of electricity consumption and the economy
	Of the gross domestic product[★]	Of total primary energy consumption	Of electricity consumption in the Republic	
	%	%	%	%
1964-1971	5,6	4,4	8,13	2,53
1967-1974	4,6	5,1	8,54	3,96
1974-1982	3,2	4,0	6,64	3,44

AUSTRALIA

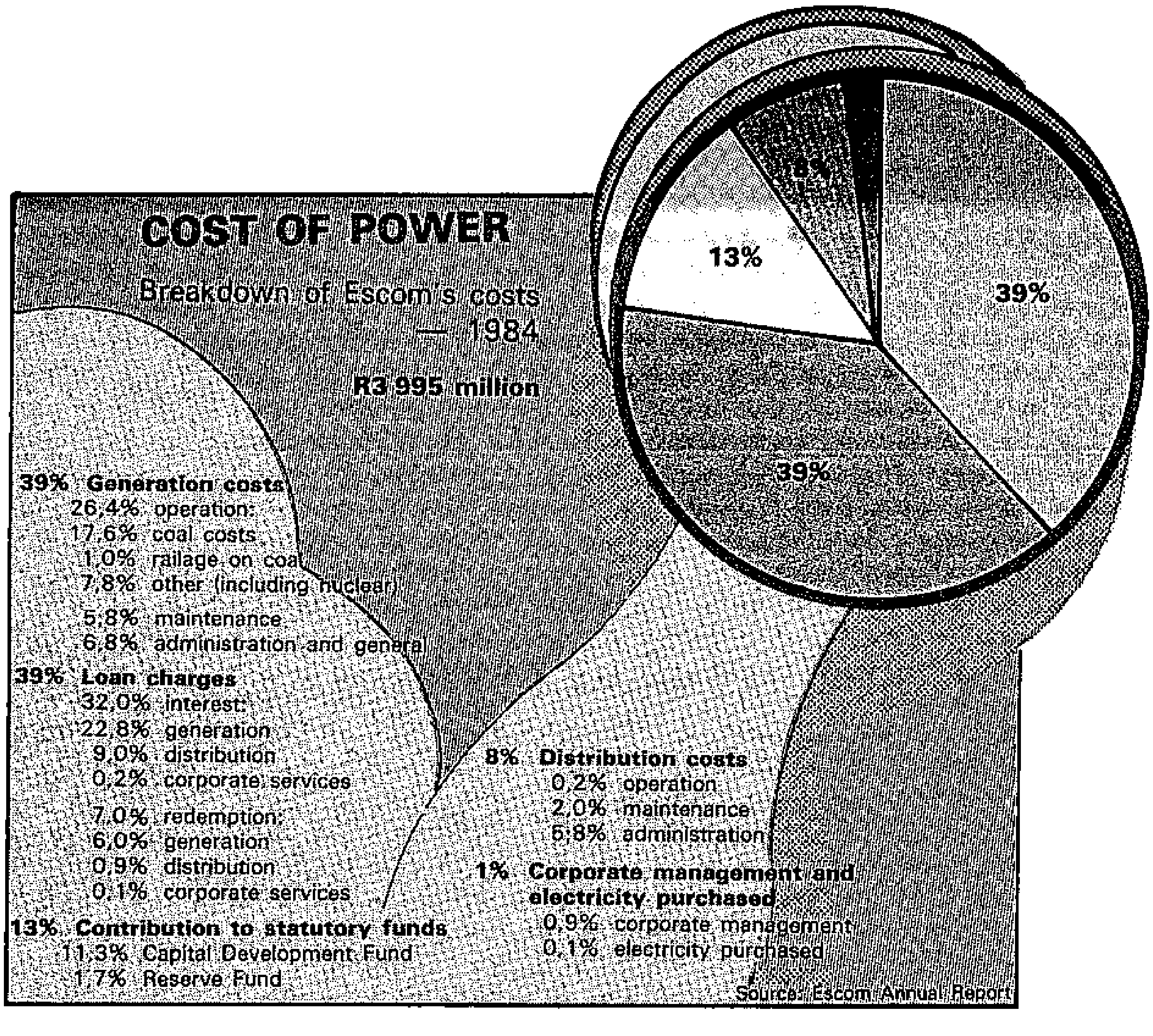
Period	Average annual growth rates			Margin between the average annual growth rate of electricity consumption and the economy
	Of the gross domestic product[★]	Of total primary energy consumption	Of electricity consumption in the Republic	
	%	%	%	%
1960-1969	5,4	5,1	9,0	3,6
1970-1973	4,4	5,7	6,0	1,6
1974-1981	2,5	2,9	5,7	2,2

[★] Before the oil crisis in 1973 the average annual growth rate of the gross domestic product in South Africa was about 0,2% higher than that in Australia, but the difference for the period 1974-1981 increased to 0,7%.

Source: De Villiers Commission



Escom's Loots . . . keeping costs down



Source: Escom Annual Report

41,3% in 1980," says Smith.

Escom has lowered its capital expansion from a long-term annual average growth of 7% to 6%.

Escom's forecasts of electricity demand have come under fire in the past. Says Loots: "Escom has to guess, and it cannot be anything more than a calculated one at that, what the demand for electricty will be in 15 years' time."

Econometric models are used to arrive at answers which are critical to costs because of the long lead time from the planning of a power station to its completion.

"It can take up to eight years before the first set runs and power stations with six sets could take 14 years before they are fully operational," says Loots.

Escom has a five-, 10- and 15-year forecast. Generally the five-year forecast is fairly close to the mark, although differences can occur because of business cycles.

The 15-year forecast is an average, and it is on the basis of this long-term forecast that the generation of electricity is planned.

"We feel the risk of being wrong should not be carried by Escom alone," says Loots.

And once a new power station has been started, very little can be done to stop it. Loots says Escom faces this problem at the moment. Economic growth has slowed, forcing Escom to lower its estimates of average growth in demand from 7% to 6%. In certain instances whole power stations have been postponed.

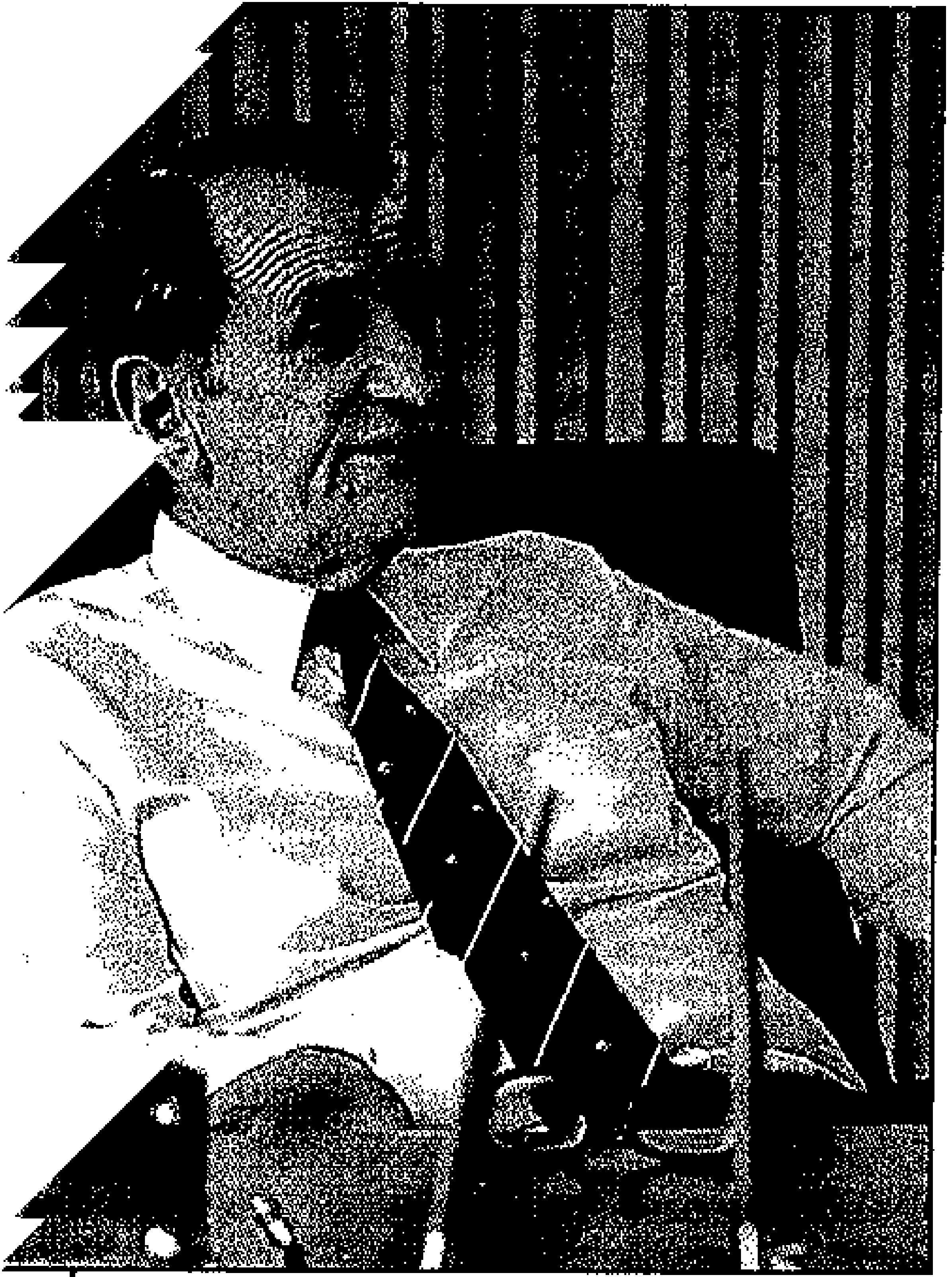
Last year the demand for electricity once again grew by 8%, but this was from a low base. So far this year growth has been roughly 5% to 6%, says Loots.

It is too early to tell whether the new Escom will work better than the old. Changes to an organisation the size of Escom will not be made overnight.

The council only recently had its first meeting. Its detailed agenda and method of operation are still sensitive issues. Broad policy issues have to be settled and smaller administrative details ironed out.

Although the Electricity Council will hopefully give consumers a bigger say in the affairs of Escom, it has nothing to do with privatisation. Privatisation is an issue that the council will consider, but then, they have more pressing problems at the moment. ■

Politics of practice


MEA's Alberts ... more businesslike

Louw Alberts is the Director-General of Mineral and Energy Affairs and chairman of the Energy Policy Committee which compiled the draft White Paper on energy directions

***FM*: What is the status of the recently released draft White Paper on Energy Policy?**

Alberts: It is only a draft and will hopefully elicit comment from both the private and public sector. These will possibly be included when it is redrafted by the Energy Policy Committee sometime before the end of 1985. The final energy plan will hopefully be tabled in Parliament next year.

Why has government decided to formulate an overall energy policy?

We want to be able to meet this country's need for energy, whatever it may be. We have to look at our own resources and to use them optimally. It is up to government to help the private sector exploit energy sources and implement limited regulation where necessary. Government also has a responsibility to import at the best possible price resources that are not freely available and in balance with our own indigenous production.

Are there plans to get input from the private sector in the formulation of this policy?

Yes, definitely. The Energy Policy Committee has representation from the private sector. Above that, we are inviting all the input we can get from the private sector in response to the draft White Paper.

The draft White Paper does not focus on the demand for and price of energy in the future. Is there a reason for this?

A policy paper does not predict prices. The policy itself should be that prices should be kept as low as possible within the constraints of technical and monetary requirements. For example, the price of electricity in 10 years' time will be determined by many factors

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Standard features in the Cressida 2.8i, for example, include real leather seats, 6 cylinder electronic fuel injection performance, digital instrumentation, air conditioning, electrically operated windows and exterior door mirrors, centralised remote door locking, power steering, 4-speed lock-up overdrive automatic transmission, all-round fully independent suspension, custom alloy wheels and more. All this, plus fuel economy of 8,2ℓ/100 km at 100 km/h (CAR Magazine test report, August '84), for only R23 935.

Feature after feature, from the Cressida 2.8i, GLi-6 and GLE, to Corolla Sprinter, GLX and Avante GLE, you'll find Toyota builds in exceptional value-for-money. And even the economy models have lots of nice little convenience features, like remote fuel-flap and boot-lid releases.

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Depending on your personal tax bracket, a Cressida 2.8i could save you 31% on perks tax against a car costing R40 000. This would mean around R4 977 more in your back pocket after 5 years. And against cars costing R30 000 to R35 000, the Cressida 2.8i would save you just on 23%.

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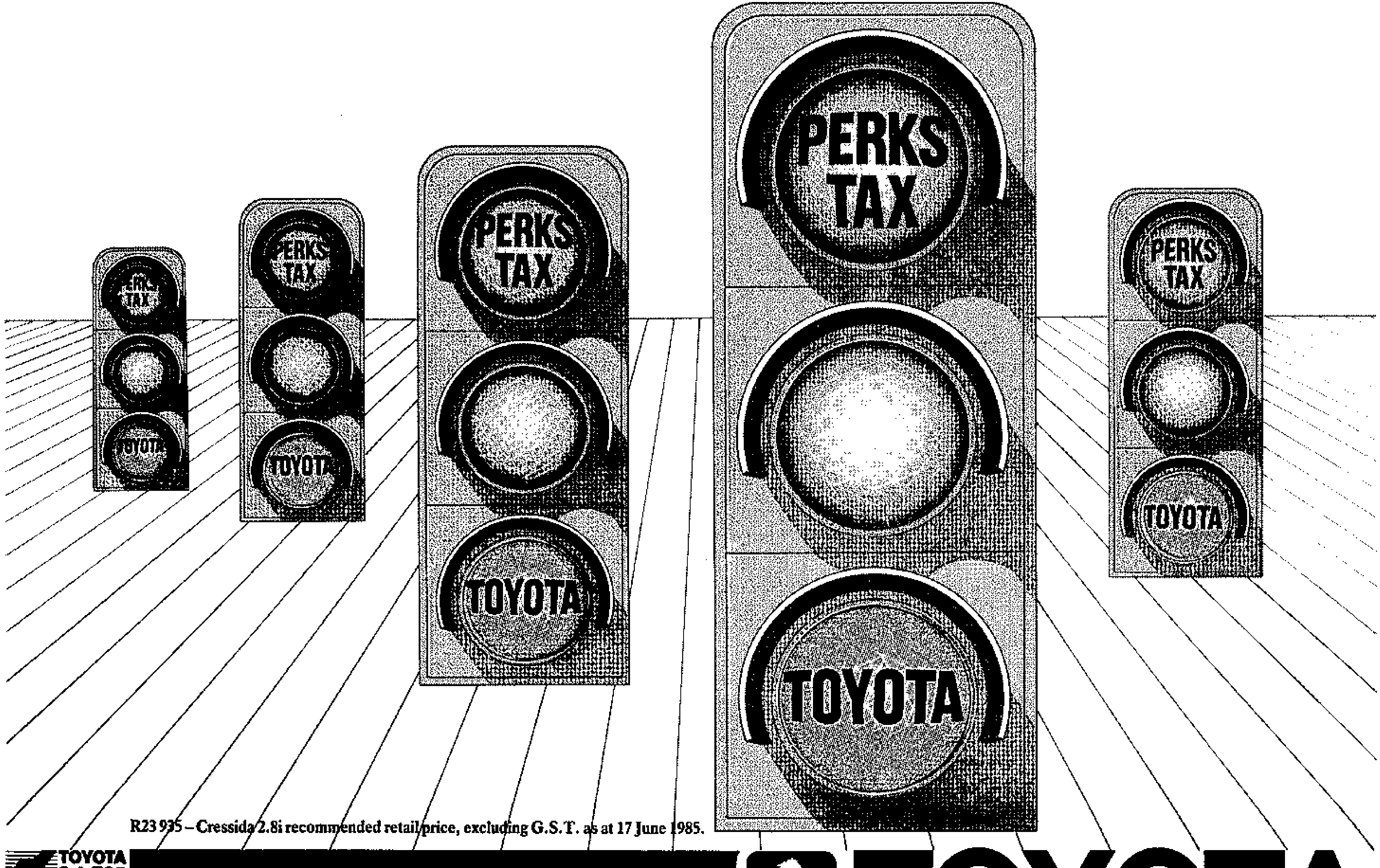

R23 935 – Cressida 2.8i recommended retail price, excluding G.S.T. as at 17 June 1985.

TOYOTA S.A. TOP SELLER '80/'81/'82/'83/'84

Everything keeps going right

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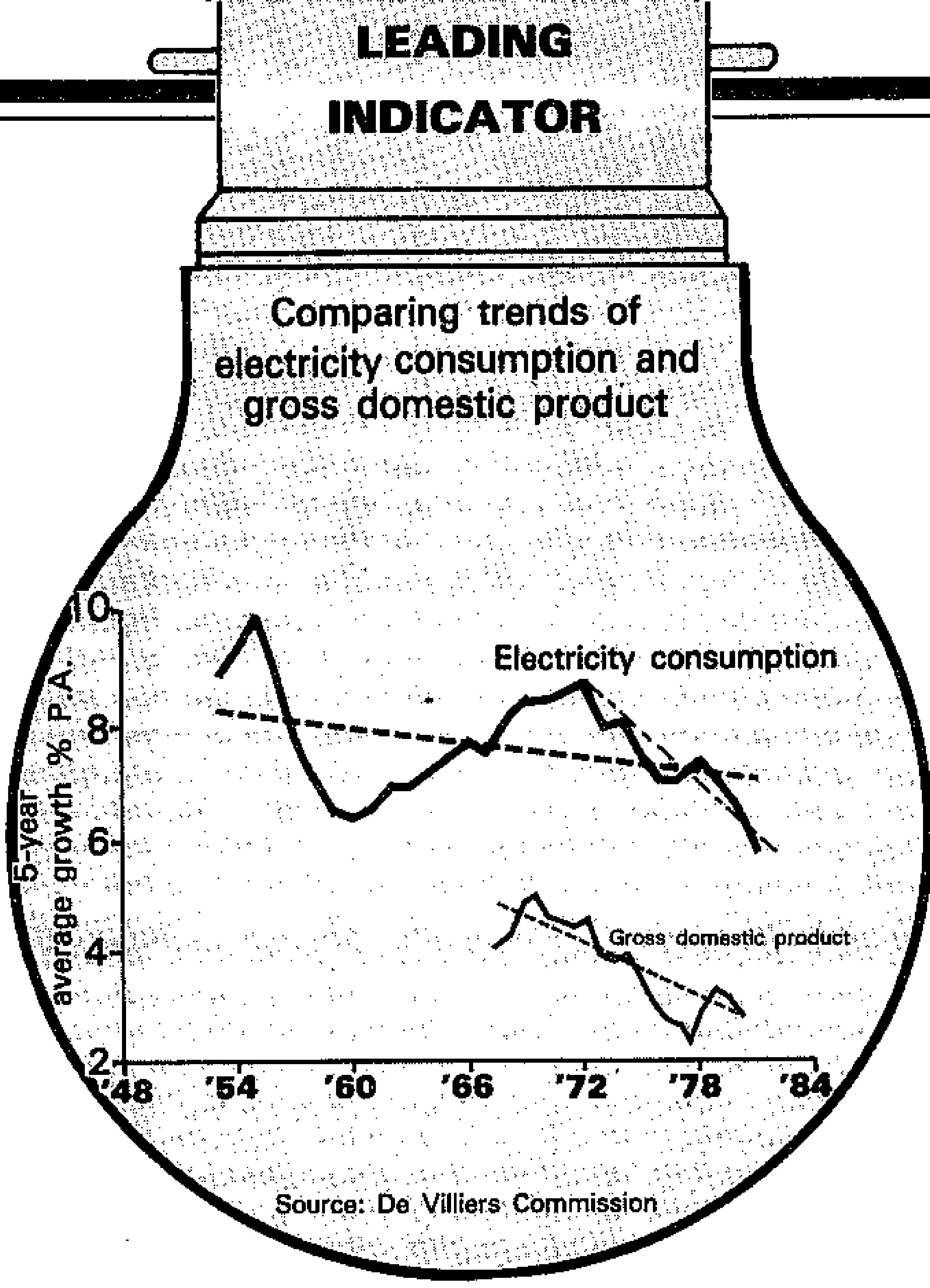
T6863/e LS-FCB



Comparing trends of electricity consumption and gross domestic product

Source: De Villiers Commission

which cannot be easily predicted. Also, the cost of landed crude petroleum is beyond our control and therefore difficult to forecast.

Some people in the private sector have suggested that because the government has kept the price of electricity artificially low, there have been infrequent but large and damaging rises in tariffs. Do you agree?

I think that is a fair comment. The Escom Act stated specifically that electricity should be produced without profit being generated. But that was changed late last year and a small additional margin will now be built in to cater for the ups and downs. However, prices have been reasonably market-related — electricity has not been subsidised. The low price has also partly been due to cheap coal. But it is true that in the past we have not built in sufficient fat and this will have to be done in future. Perhaps, we should have been more businesslike and not run at zero profit for so many years.

What is the reason for drawing the private sector into the management structure of Escom?

In the past Escom has brought a lot of criticism on itself. Much has been unjustified. In fact, Escom has been a highly successful utility. However, because of the criticism, and also to achieve a more realistic pricing structure, it was decided the policy body, the Electricity Council, should have representations from all sectors. Obviously, any increases made in electricity tariffs will be criticised. This is an honest attempt by government to bring the private sector into the development of policy. The public will have a say in what is happening and often unwarranted, uninformed criticism will hopefully stop.

What do you mean by policy development?

I mean, for example, whether tariffs should be increased and at what intervals. We also have to look at the way tariffs are structured — different consumers pay different prices — and perhaps this has to be reorganised. We have to find ways to cater for peak demand.

Predicting energy demand is particularly difficult and small differencs in actual and predicted demand can mean enormous costs. What is the solution?

Demand grew by roughly 4% in 1983. Last year it was double that. Because demand is highly dependent on the economy and trade in energy-intensive commodities, such as metals, predictions are extremely difficult. Recently, the US toned down its predictions appreciably. The solution is firstly to assume an average growth factor for the next five years, then, through conservation, reduce this demand toward the end of the five years by possibly 1%. Also, the five-year plan is continually updated.

However, there is one problem. Power stations are not erected in one year — the lead time from inception is at least 10 years. You may, for example, be short in your planning. Part of the solution is to have a number of power stations simultaneously under construction and at various stages of completion. As the country's growth rate goes either up or down, completion of these stations can be speeded up or retarded. This will allow you to approximate demand. Again this is not as simple as it sounds. Retarding or accelerating the completion of a power station can be very expensive.

What is your personal role in the formulation of energy policy?

I am chairman of the Energy Policy Committee. My job is to extract as much intelligent comment from the Committee as possible. Also, in the Department of Mineral and Energy Affairs we have a division called the Energy Branch. This division looks after the day-to-day components of our energy activities. It is my job to make things as easy as possible for this division by providing facilities and encouragement. I do not work with energy. Rather I work with people who are working with energy. With my own particular background in research I intend structuring energy research with a view to application.

Does your background in nuclear energy and research and your appointment to the Energy Policy Committee show the importance attached to nuclear energy in the future?

Right now coal is our most important resource for producing electricity. With Koeberg on-stream nuclear energy will be our second most important source of energy. Our coal supplies are not unlimited and towards the end of this century, which is not far away from a planning point of view, nuclear energy will play an increasing role. The planning, however, is long-term and decisions have to be taken with extreme care. From the beginning of the next century, our uranium resources will be regarded with as much tenderness as our coal resources have been in the past.

What are the political implications of energy usage and the generation of power in southern Africa?

Energy is not conscious of colour. It is something everyone requires. However, because a large amount of a country's financial resources can be taken up by energy requirerments, it can affect other sectors of the economy and social and national needs. This means we must be as conservative as possible. Even if we do continue to have sufficient petroleum and petrol, buying these saps our balance of payments and we need to conserve our financial resources for other needs, such as education. There are also indirect political effects.

Having the right form of energy available in sufficient quantity means the economy will be aided and so will the creation of jobs. On the one hand we must not waste money procuring sources of energy, but on the other we must make sure we have sufficient energy to ensure industrial activity is not held back.

How vulnerable is SA to international pressure through energy resources and what areas are most affected?

The only area where we are affected is in oil procurement. At the moment that is going reasonably well. We are never free from the threat, however. ■

Generating more interest

Dr R A P Fockema is a member of the Energy Policy Committee and managing director of Gypsum Industries. He has been chairman of the Federated Chamber of Industry's energy subcommittee for a number of years

***FM:* Is industry satisfied with the recommendations made by the De Villiers Commission of Inquiry into the supply of electricity in South Africa?**

Fockema: The South African Federated Chamber of Industries (FCI) was very pleased with the recommendations made by the De Villiers Commission, as this incorporated most of the points raised in the joint submission submitted to the commission in a combined document from the FCI, Afrikaanse Handelsinstituut (AHI), Assocom and Seifsa.

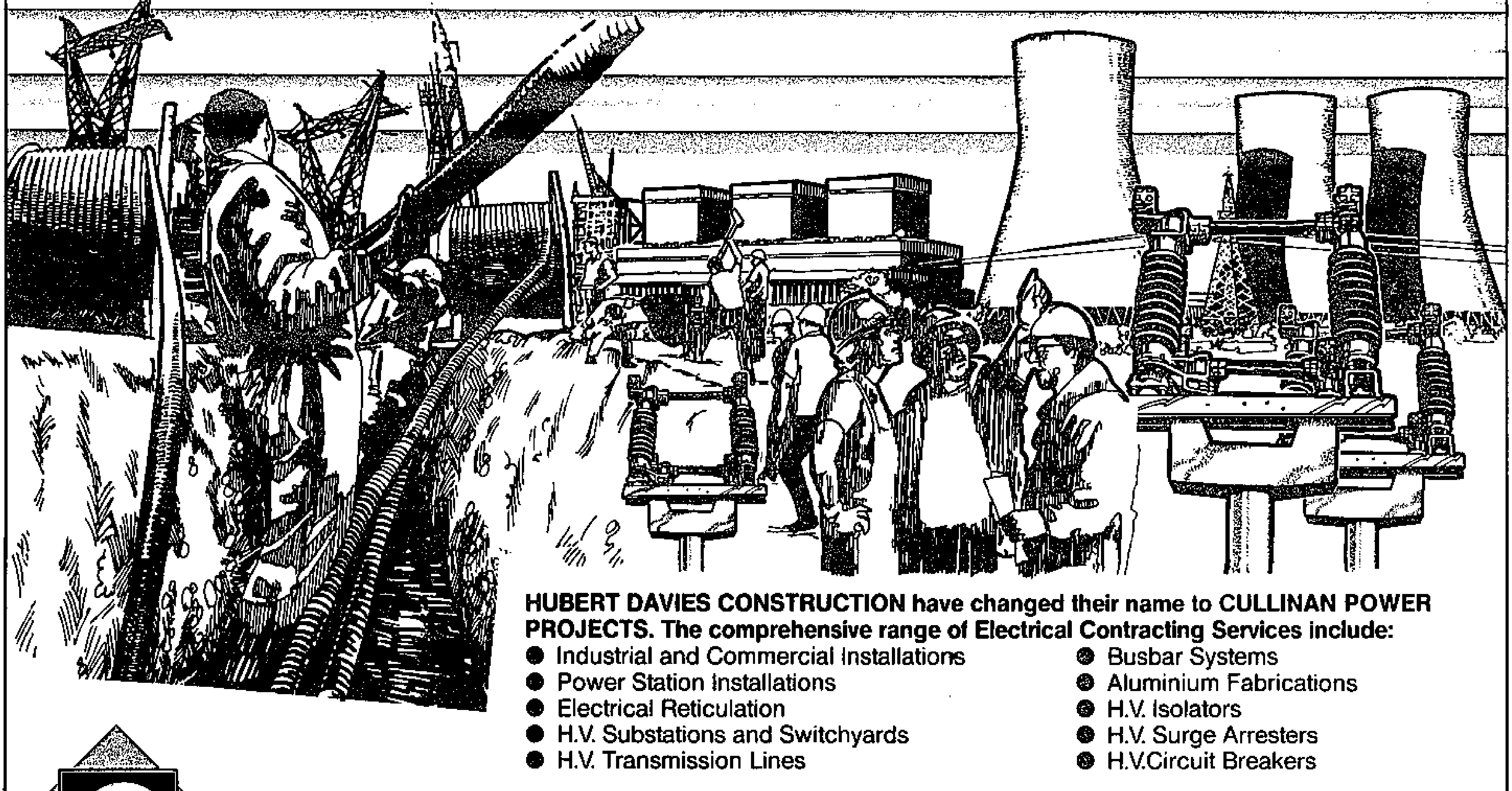
Do you feel that the price of energy in South Africa is reasonable and what do you expect for the future?

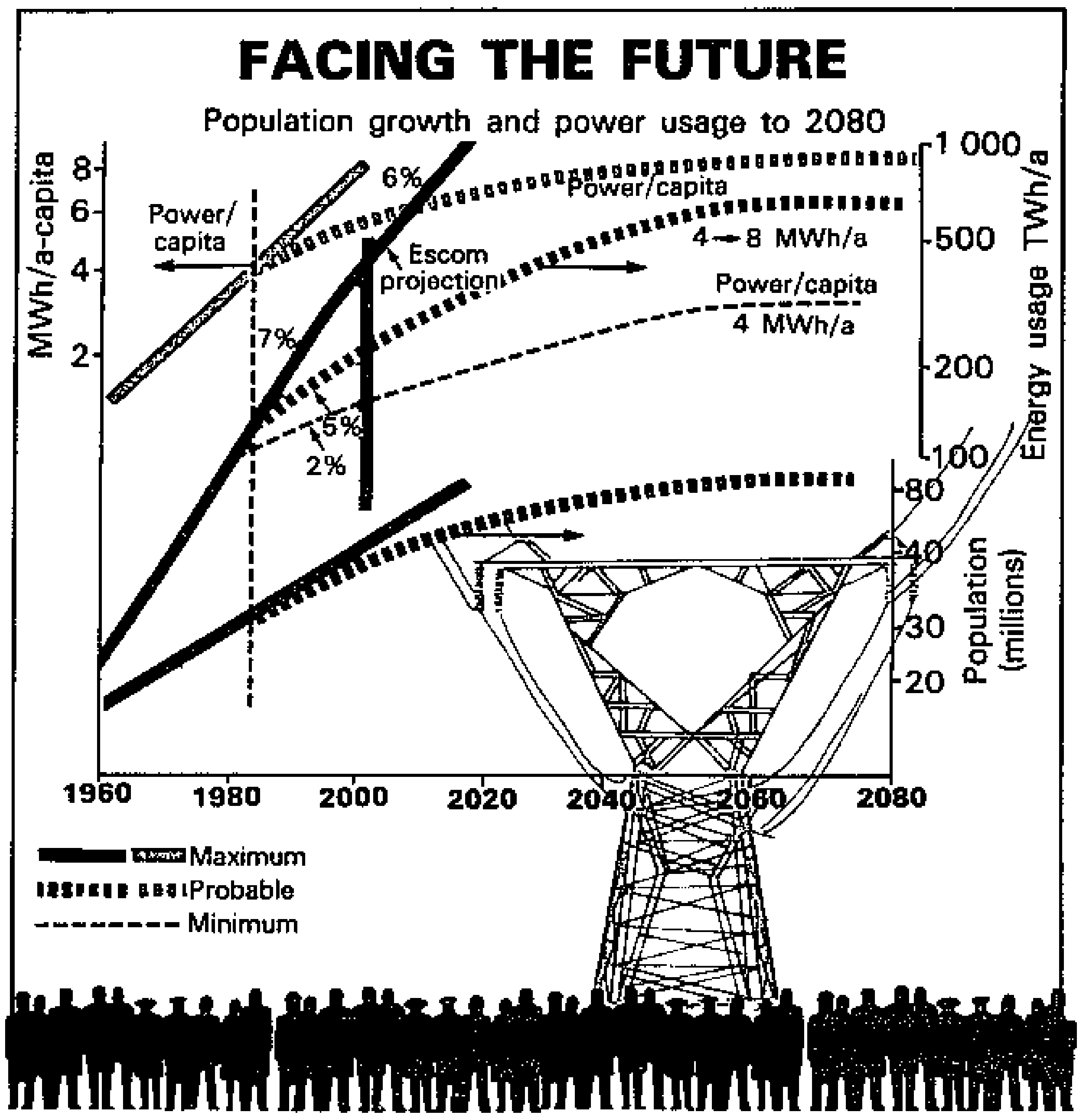
South Africa has been very fortunate in that it never suffered from the impact of the severe increases in the price of oil that affected most of the Western economies during the early and late Seventies. South Africa is, for approximately 80% or more, reliant on energy derived directly or indirectly from coal, which has traditionally been cheap. The low price of coal inevitably caused, to some extent, the mining-out of the better grade and cheaper to mine layers in the coal fields, resulting in some cases in a sterilisation of the less economic layers as well as wastage through the discarding of low-grade, high-ash coal. Obviously this cannot continue and already price adjustments, with the object of encouraging better and more comprehensive exploitation of the coal fields, have been implemented. These prices, of necessity, will continue to rise and thus we will be faced with a steady increase in the price of energy drived from coal.

FCI's Fockema . . . room for improvement

Do you feel that South African industry is conscious of the role energy plays in the manufacturing process?

Some South African industries are aware of the importance of energy in their manufacturing process, particularly the larger organisations which actually take the trouble to appoint specialists to advise and manage the energy usage. They work according to energy budgets and regard energy as a commodity not to be wasted, However, in many cases there is still room for improvement in the handling and usage of energy in industries which have yet to become aware of how much money they can save if proper conservation techniques are applied. This particularly involves electricity and heat. This not only applies to the manufacturing process





FACING THE FUTURE

Population growth and power usage to 2080

through introducing proper insulation against losses and the recirculating of energy, but also in the design of buildings so that they do not require excessive usage of energy for heating or cooling. There are consultants who can advise on the best methods to conserve and use energy. Proper equipment, techniques or designs to utilise and conserve energy, often will show a high return on capital spent on this. Many of our industrialists must be encouraged to introduce an energy budget and do regular energy audits. We are used to doing this when controlling our finances and it is also beginning to apply in managing the cost of labour, but unfortunately it is still lagging in the case of energy.

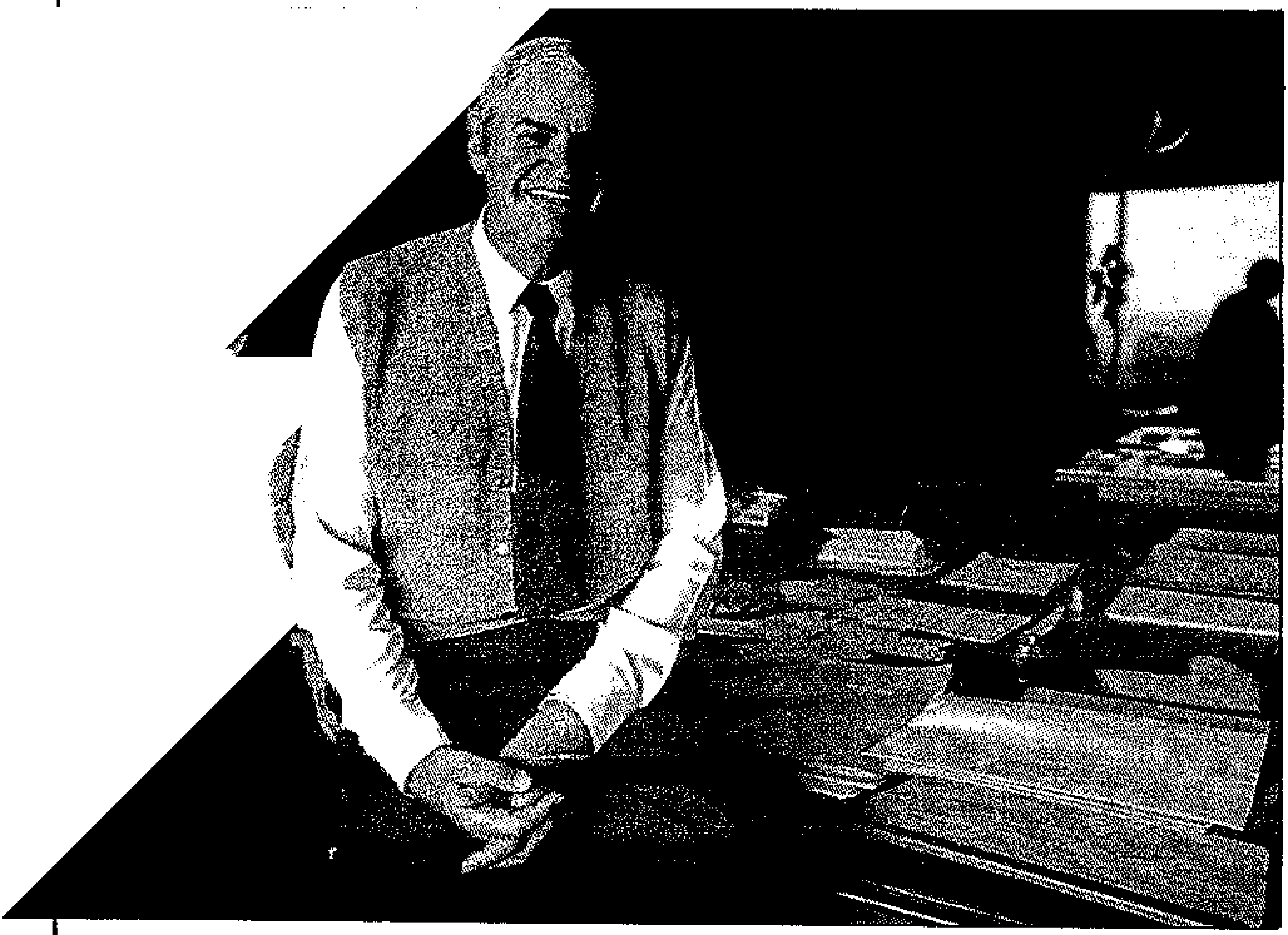
Do you expect substantial increases in the price of energy?

We can expect increases in the price of coal. The price of electricity derived from coal will thus also increase, and not only as result of inflation, but also owing to the escalating cost of installing the necessary equipment for the generation and transmission of electric power. Hence, conservation can play a very big role in keeping price increases within reasonable limits. This is also emphasised in the recently issued Draft White Paper on an Energy Policy for South Africa.

Are you satisfied that the private sector is playing a role in the formulation of an energy policy for South Africa and also in the actual supply of energy?

As a result of strong representations some four to five years ago, the government did allow private sector representations on the Energy Policy Committee, which advises the Minister of Mineral and Energy Affairs. Unfortunately, owing to the sensitive and often confidential nature of the subject dealt with, the private sector representatives cannot report back on energy matters dealt with until these have been officially released. In the rather unusual circumstances affecting South Africa, this inevitably limits the ability of the wider private sector to become involved in these matters. There is now a tendency to involve the private sector more and more in the fields of energy and energy related matters, that is, private sector participation in the affairs of Escom and individuals from the private sector appointed to the Coal Advisory Board, as well as the issuing of a Draft White Paper on Energy for comment by the private sector, and so on. This trend must be welcomed and it is hoped that it will continue and be as comprehensive as possible. ■

Diffusion of power



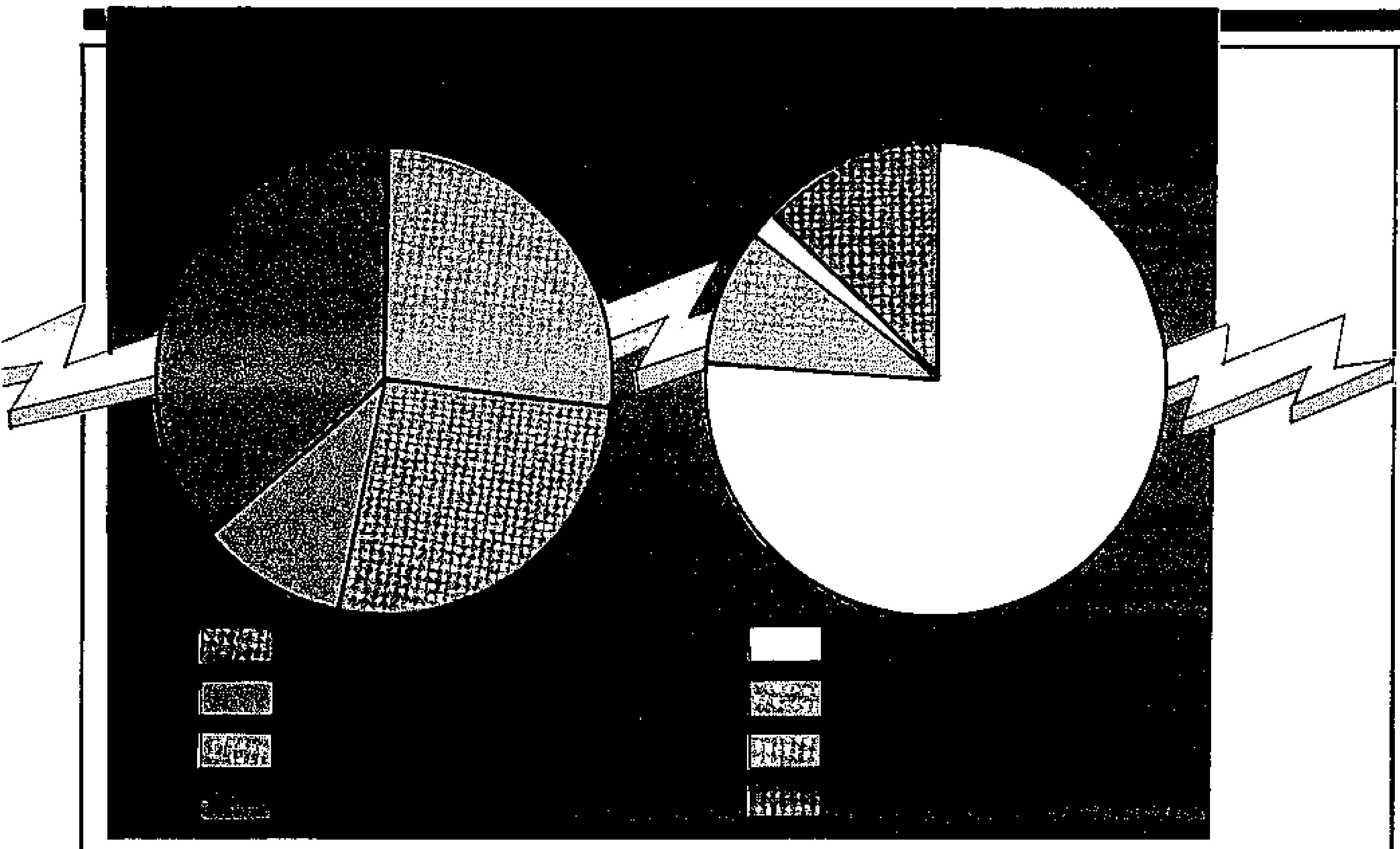
Escom's Maree ... in the electric chair

John Maree is executive chairman of Barlow Rand. He has recently been appointed chairman of Escom's Electricity Council

***FM*: Why has Escom's management been restructured? Would you explain the two-tier system of management?**

Maree: Firstly, the restructuring of Escom's management was done to give greater representation to interested parties and to consumers and, secondly, to strengthen the management and control structure of Escom. In fact, in both the new Electricity Council and the recently appointed Escom Management Board we have two very strong teams with a large amount of skill, knowledge and experience. From my point of view I am delighted with the make-up of both the council and the management board and have no doubt that this restructuring will enable management to fulfil its functions more effectively.

Two-tier management may be a relatively unfamiliar concept for South Africa. It is a structure which is commonly utilised in countries such as Germany where they have a supervisory board and a management board. In fact, in practice most of our South



African companies work that way as well. Bigger companies have a board of directors consisting of both executives and outside directors and an executive committee which runs the day-to-day affairs of the company.

Could you give a timetable for the implementation of the recommendations of the De Villiers Commission?

We are working on it. A lot has already been done and I am sure that over the next year you will see all the recommendations of the De Villiers Commission of Inquiry become reality. This includes a new electricity tariff structure which will be introduced next year.

How will your managment style differ from past management styles at Escom?

My own approach is that one sets clear objectives, structures a timetable to achieve those objectives and then monitors very carefully to see that these objectives are achieved on time. I certainly do not believe in a timewise open-ended approach to achieve objectives.

In an organisation of Escom's size there is an immense amount of experience, talent, education and skills. If it is to fulfil its task more efficiently, it is a question of whether Escom can mobilise all this expertise effectively — and you can only do that by working very closely with your management team. In this respect I am delighted to be working with Ian McRae, the senior GM/CEO.

You have said you intend improving Escom's management information. Why do you feel this is critical and will it be done?

Yes, I don't believe you can effectively manage a company unless the management team has good reliable management information. We would thus be looking at this and ensuring that important information for decision-making is available to management quickly and that it is reliable.

How?

By strengthening the whole financial structure of Escom. I'm hoping that we can bring in a couple of smart younger accountants to help us.

Will there be less interference in Escom by government in future?

Escom is such an important part of South Africa's infrastructure, and as such is so vital to our economy that I firmly believe there must be a good dialogue with our consumers, the government, our bankers and suppliers. We will certainly try to establish those good communications.

I do not think there is any desire on the part of government to interfere with Escom, but I think they want to be informed of what we do and we will certainly be keeping them informed. We are fortunate to have a Minister like Mr Danie Steyn who understands our situation and who has a very good understanding of the technical and financial aspects of electricity supply. He has certain responsibilities in terms of the new Act and we have to ensure that he has sufficient information to fulfil these responsibilities.

The De Villiers Commission recommends more involvement by the private sector in Escom. How will this be achieved?

Here there are two issues; firstly, at council level we have complete involvement by the private sector because the council consists largely of leaders from the private sector who represent the industrial and commercial consumers and mining. Secondly, we will be looking at what functions are currently being fulfilled by Escom and whether more of these functions can be done more efficiently and more cost-effectively by elements of the private sector.

Do you see Escom being privatised either in part or in whole?

This also applies to the question of privatisation. I do not see it as our main task at the moment. Our main task is to do what we are presently doing more effectively. Escom can probably give a number of the tasks that it is doing in-house to the private sector.

Will Escom subcontract work out to the private sector? What role will Escom play in bringing the public and private sector closer together?

You do realise that the major portion of our construction activities already goes to private contractors. We do not build our own power stations — Escom merely acts as the project managers. For instance if you look at any of the big power stations that we are building right now, we have some 700 contracts with private industry per power station. So subcontracting is being carried out right now on a large scale.

In the new Electricity Council you already have a coming together of the public and the private sectors. I personally have a very strong view that South Africa can only progress in the longer term if there is a close working together by the private and public sectors.

More emphasis will in future be placed on Escom's profitability. What does this mean?

Escom's task is to supply electricity for SA now and in the future. The demand for electricity percentage-wise is correlated, but higher than the growth in the gdp. So therefore if there is a growth in gdp of 3%, the growth in demand for electricity will run at about 6%.

This means that Escom will have to continue in future to create large generation capacities; which is expensive, which needs capital and a portion of that capital will need to be supplied out of Escom's own surpluses. Just as in the case of a private company Escom must produce some surplus to be able to finance a portion of its own growth, now Escom has to generate some of its fund requirements from its own income.

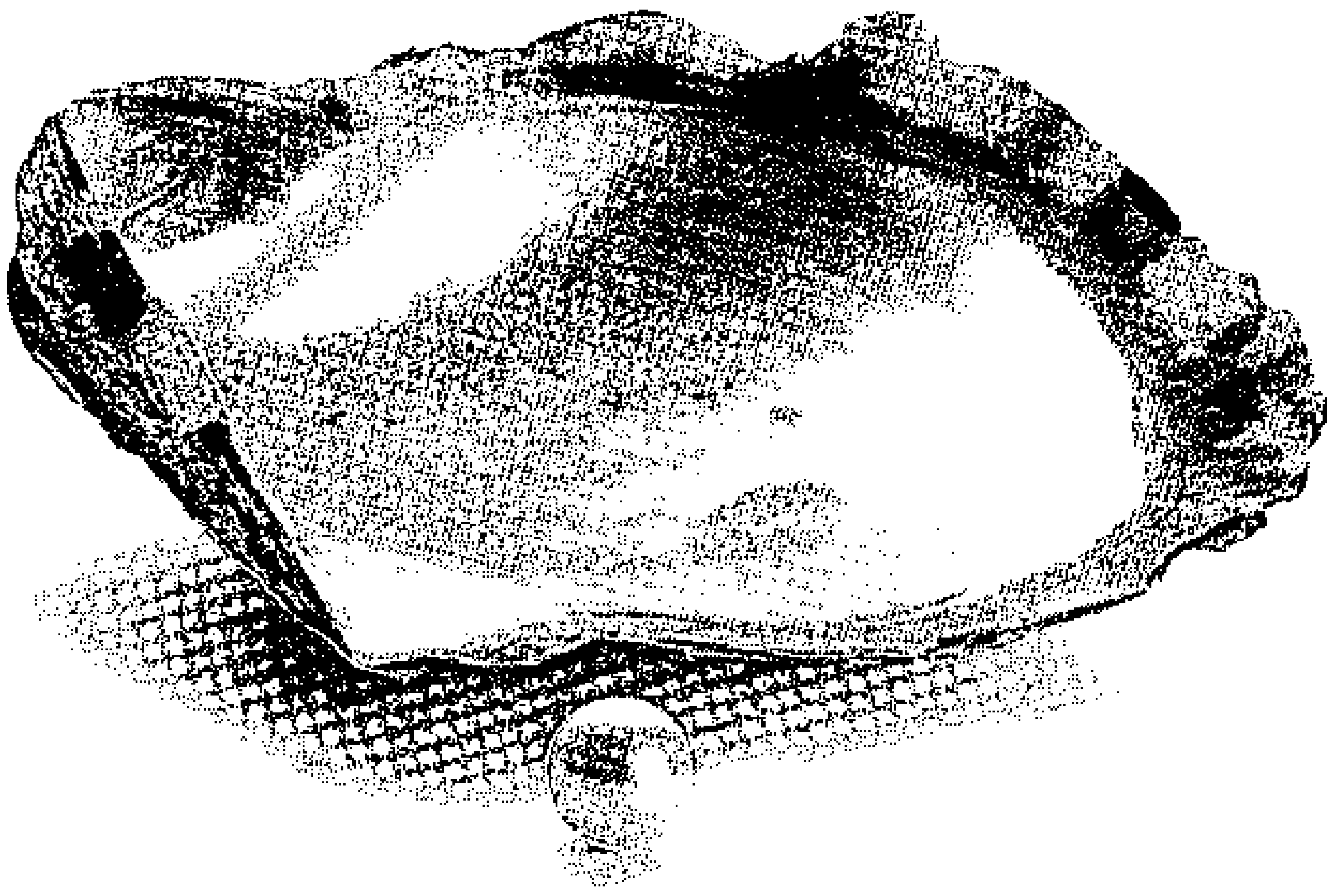
The international banking community put this figure at about 30% of capital requirement which needs to come from internal sources and 70% can then be borrowed. If such surplus is not generated the lenders would not be prepared to supply funds.

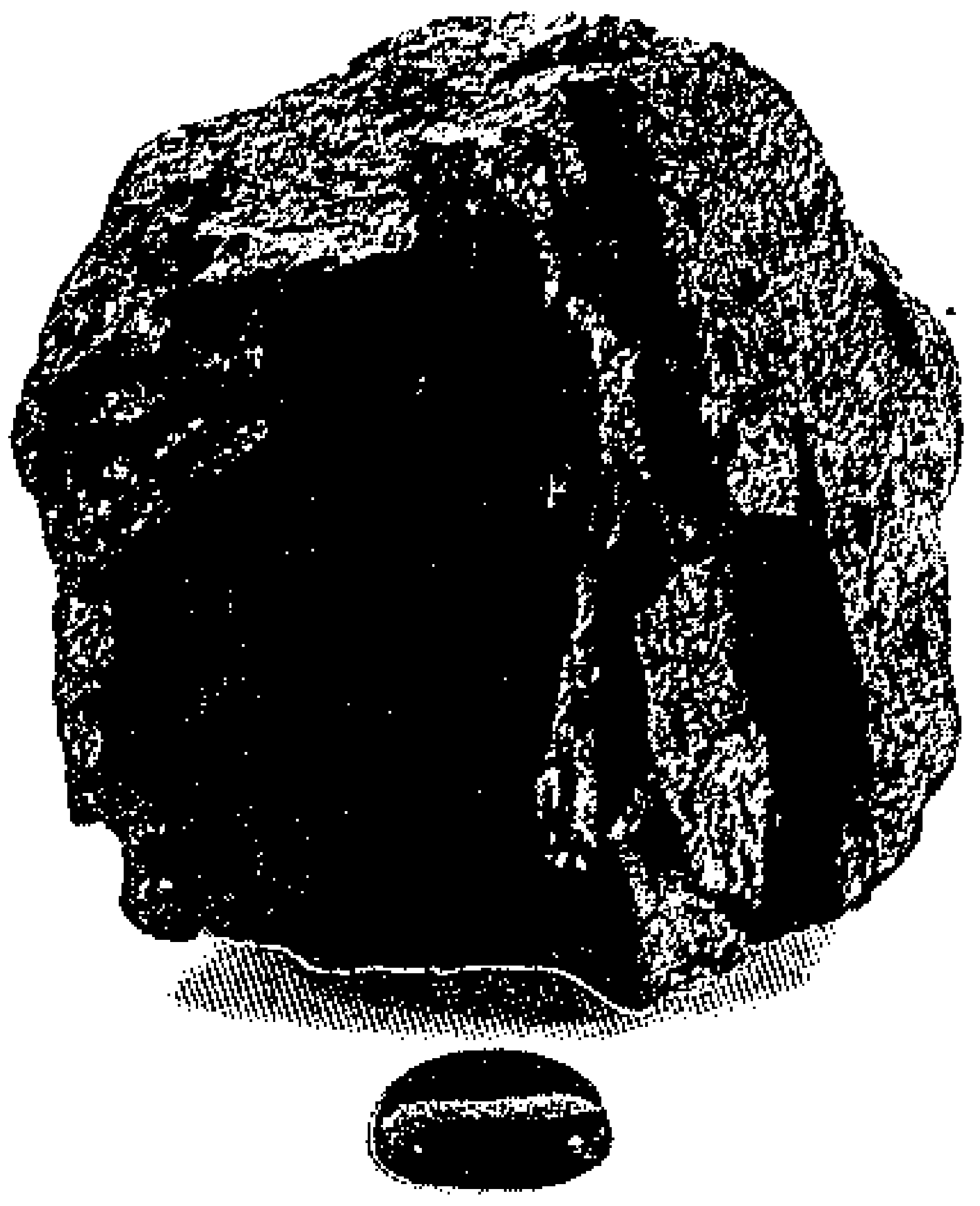
Do you see a role for blacks in Escom's management structure?

About the role of blacks in Escom's management structure, I have gone on record in the past as saying that South Africa cannot go on supplying its future skill needs from whites only, and that if we are going to grow in future, if we are going to be able to create the jobs which are needed in future, we will have to look for these skills among our black population. The talent, ability and the intelligence is there. What we have to do is to identify and develop it quickly and therefore it would be Escom's hope that in the future we will be able to mobilise more black skills in both higher management and technical echelons.

What do you personally see as your greatest challenge at Escom?

The biggest challenge is to how we can most effectively mobilise the great amount of talent and skill in Escom and to set very clear objectives so that we can fulfil our task of providing power for the continued economic growth of SA most efficiently. ■





Teetering on the edge

Two price hikes by Opec during the Seventies threw the industrial world into inflationary turmoil. What could be the counter-effects of a collapse of Opec and the oil price in the mid-Eighties?

The risk of a sharp fall in oil prices to market-clearing levels — if Opec loses its already shaky grip — haunts every economist, market analyst and minister of finance around the world.

So much money has been committed to oil production on the assumption of continued high prices — frequently in the form of borrowings — that a chain of bankruptcies would unfold if oil fell, say, to $15 per barrel from its present range of $25 to $26,5 (exact prices are related to grade and location).

Remember that the price for the former marker grade of Arabian light crude was once set at over $34 per barrel, while at the climax of the 1979 panic small quantities of oil were being traded on the spot market at over $40.

One factor, frequently overlooked, fortunately makes the recent market behaviour of oil somewhat less one-sided than a simplistic examination of the dollar-denominated price alone would indicate.

The exaggerated rise in the dollar over the last couple of years — to levels far above any sustainable long-term equilibrium — has achieved one indisputable result.

Countries such as Japan, Germany, France and Britain, not to mention SA itself, are still paying as high a price (or even higher) for imported oil in terms of their domestic currencies than, say, two years ago, despite recent drastic falls in the dollar-denominated price.

A second, closely related, factor is the link between oil prices — measured across the range of major currencies — and the economic policies and level of activity in the industrial world. What makes analysis of this linkage especially difficult is that this causative linkage operates both ways.

Opec's Yamani ... pining for the glory days

On the one hand, economic policies practised by the industrial countries, especially the US, influence all prices including the oil price. On the other, sharp rises or falls in the oil price have profound worldwide influences on economic policies and levels of activity.

Major moves in the oil price frequently require strong policy initiatives by Western governments and monetary authorities to counter the likely adverse influences.

On an historical point of some importance, the Western industrial countries fudged their responses to Opec's two major price hikes in the Seventies. Governments failed to make consumers absorb an immediate cut in their living standards when oil went up.

Instead they attempted to accommodate the increase through lax monetary policy, so setting in train the damaging inflation which characterised that period. The inflationary trend of the late Seventies in turn required the most savage slump since the Thirties to stabilise prices.

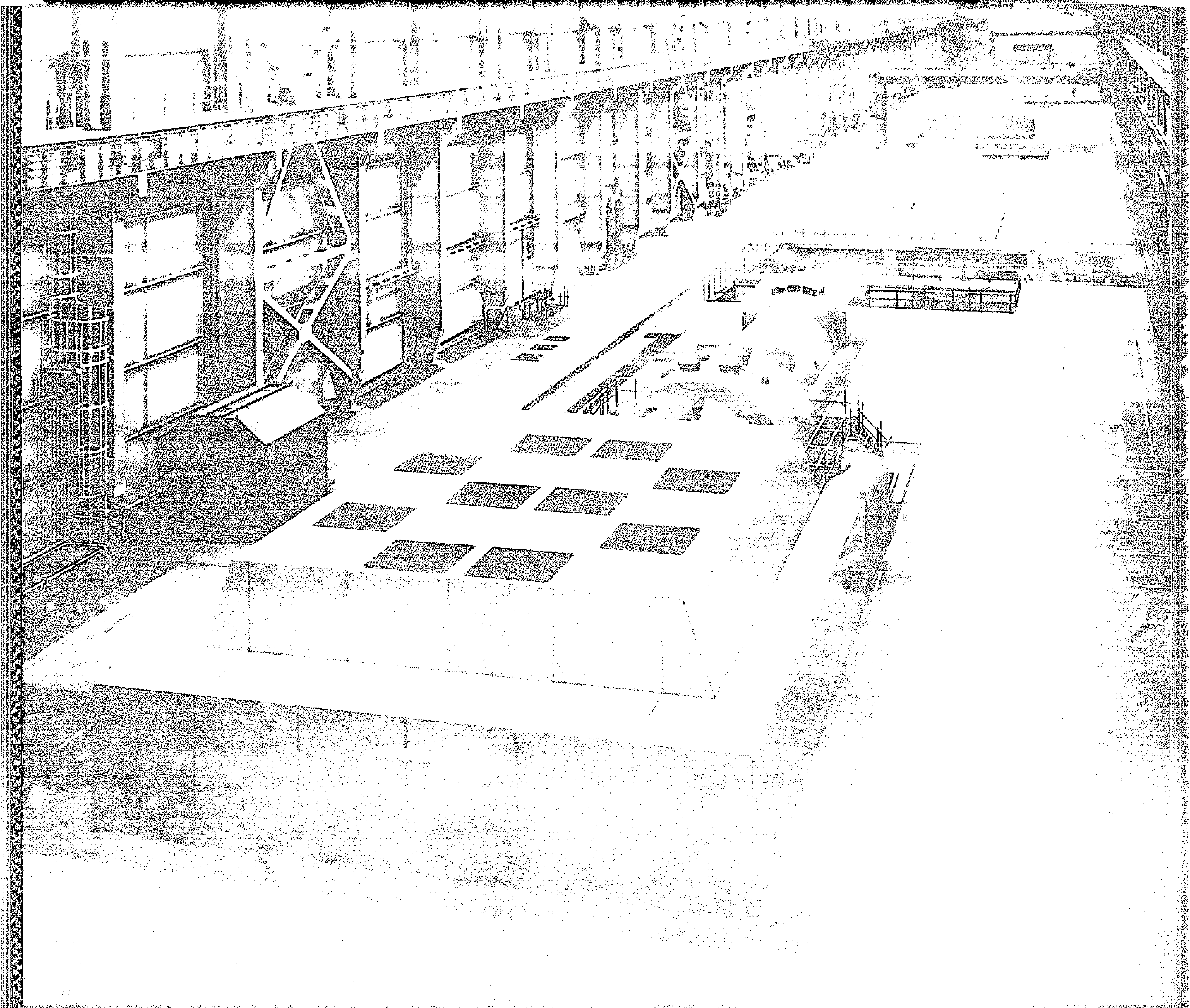
Now, the compass reading has swivelled around a full 180 degrees. High-cost oil producers, notably in the US, are threatened by a fall in the oil price below the current range of around $25 to $27 a barrel.

Although prolific and low-cost Third World producers such as Mexico could continue to produce at much lower dollar oil-prices, their need for marginal revenue in the light of heavy borrowings from Western banks and swelling populations remains strong. Mexico, for example, owes about $90 billion, mostly to US banks.

Other heavily populated oil producers such as Nigeria are at least as precariously based as Mexico.

How did Opec move the oil market so savagely against itself?

The answer has a tragic simplicity — sheer greed in pricing policies at a time when the oil cartel thought it held all the best cards, coupled with total disregard for the long-term ef-

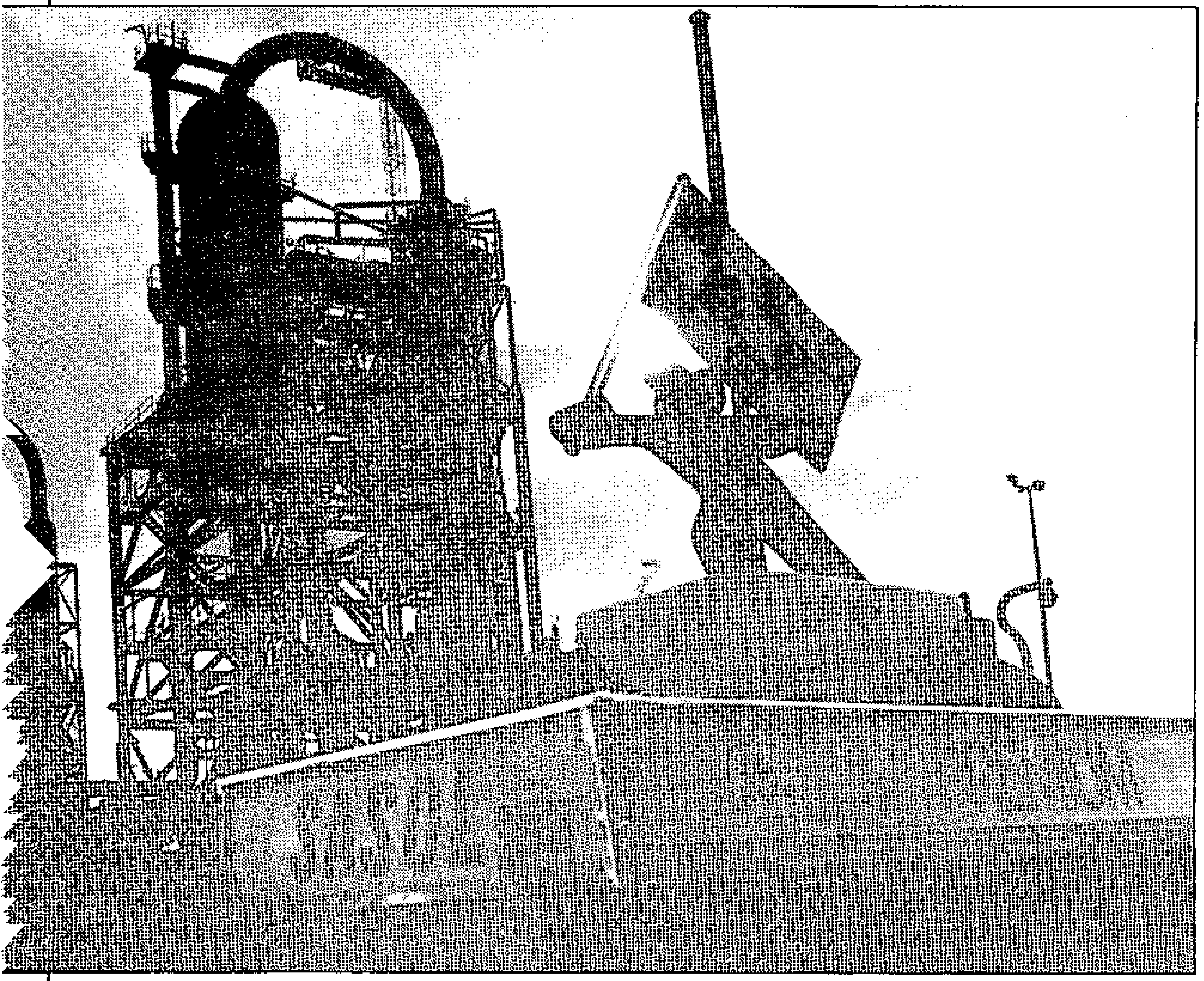


fects on demand of price increases of perhaps eight- to ten-fold.

The US, for one, was accustomed for decades to treating oil and its products as what economists would call almost a "free good." It was invariably cheaper to substitute oil for other factors of production where technically possible.

So Americans drove large, cheap, but gas-guzzling, automobiles and went to work in office blocks with easy-to-build glass curtain walls which required airconditioning in summer and heating in winter.

The pricing traumas of the Seventies set in train slow but sure responses to use oil more efficiently or find substitutes. Such countries as France and Japan built large oil-fired generating plants to power their post-war surges in industrial output and influential journals, among them *The Economist*, urged governments to shut down high-cost domestic coal industries and rely on oil imports dictated by market forces.



Sasol's Secunda plant, SA's riposte to Opec

Opec's *demarche* changed all that, perhaps for our lifetime. Coal came back into its own for generating power in such countries as the US, while France launched a spectacular and successful nuclear power programme which has already drastically reduced its previous dependence on imported oil for electricity generation.

On the supply side, Britain, Norway, Mexico and Alaska came in as major producers, between them producing some 7m barrels per day (bpd). Soviet output has grown by 3m bpd since the early Seventies, while other smaller non-Opec producers such as Egypt, Angola, India and Brazil have, between them, added substantially to world supply and are likely, along with other new producers, to continue to boost non-Opec production.

In 1973, Opec produced 11 316m barrels, or 31m bpd. Recent flash estimates have hovered somewhere between 15m and 16m bpd, but the latest estimate for May is a meagre 14m bpd. If confirmed, the latest decline means that well over a half of the cartel's capacity is already shut in.

But it is too soon to predict with any confidence that even this swinging cut will stabilise the dollar-denominated oil price. One factor working in Opec's favour, though, is a sharp decline in inventories of oil in the major consuming countries.

If the running down of stocks proves to be a self-limiting factor — as it logically must, sooner or later — then demand for newly-produced oil will rise correspondingly and perhaps remove the threat of a price collapse.

By way of contrast to Opec's production cuts, total world output had, at the end of 1984, barely changed from the level of 58,1m bpd achieved in 1973; the slack was taken up by major "consumer-producers" which include the Soviet Union (the world's largest producer). It must be supposed, though, that total world output has since declined — during the first half of 1985 — in line with Opec's own cuts.

Saudi Arabia, which was producing at one stage at over 10m bpd to help out the US, is down to 2,5m bpd and becoming increasingly resentful at having to carry most of the burden — in lost output and revenue — of holding the cartel together.

The Saudi *rial* has recently been devalued and it is becoming increasingly apparent that even that country's financial resources, measured against vast development commitments, are not infinite. So the scope for the Saudis to mount yet another rescue effort through further major cuts in their own output looks rather limited.

The Saudi Oil Minister, Sheikh Ahmed Yamani, recently uttered a dire-sounding threat — that if other cartel members did not stop their price chiselling, the Saudis would open the valves, flood the market with oil and bring the price crashing to that doomsday level of $15 a barrel.

There have indeed been some recent significant price cuts by non-Opec producers, notably Mexico, which has cut the price of its heavy grade of Maya crude by $1,50.

The aforegoing analysis is sufficient to indicate the hazards of even short-term predictions at this sensitive juncture. We have to accept that there is a significant risk that the oil price may crash, perhaps even to Yamani's suggested level of $15.

The more optimistic view would be that the production cuts by cartel members already in place, coupled with a near-term end to inventory depletion and the advent of autumn in the northern hemisphere, will stabilise the situation.

If, however, the "worst-case scenario" is fulfilled, the risk of a major world deflation would be enhanced. What would happen next would depend on the responses of the governments and central bankers of the major industrial countries.

They should be prepared to act boldly by following an aggressively expansionary policy to enable the Western countries to gather a benefit from lower oil prices in the form of higher industrial output and consumption, while staving off a banking crisis. Otherwise, the result could be as bad as 1929-32.

And whether SA would, in the very short run, benefit from lower oil prices is very much open to question. Any direct benefits to the balance of payments and the economy might be more than offset by a fall in the gold price as oil prices fell.

Over a slightly longer time, the results of an oil price crash might, on the contrary, be more positive for gold (through the mechanisms of Western monetary and fiscal responses to a serious banking crisis).

But the complexities of the multiple interactions between the dollar oil price, the dollar gold price and the value of the rand make it rather difficult to forecast the oil price in rands, and hence local pump prices.

Still less is it possible to quantify the short-term responses of gold to oil price vagaries. It is, therefore, the right time for SA to plan and to be prepared psychologically for many divergent possibilities. ■

The quiet achiever

What small industrial power has developed the world's only commercial-scale synfuel plant, where such giants as the US, the Soviet Union and Japan have failed in their efforts? The quiet achiever is SA and the plant — Sasol

South Africa perceived the political factor in oil a generation ahead of everyone else and this gave Sasol an early lead in working up the rudimentary synthetic fuels chemistry of the mid-Fifties into a mature technology capable of supporting a substantial output of synthetic liquid fuels at affordable cost.

Says Theo van der Pas, a director of Sastech (which provides engineering services to the group) and a gm of Sasol Ltd: "If America had started research seriously at the same time as Sasol, then synthetic liquids would also be an economic process there."

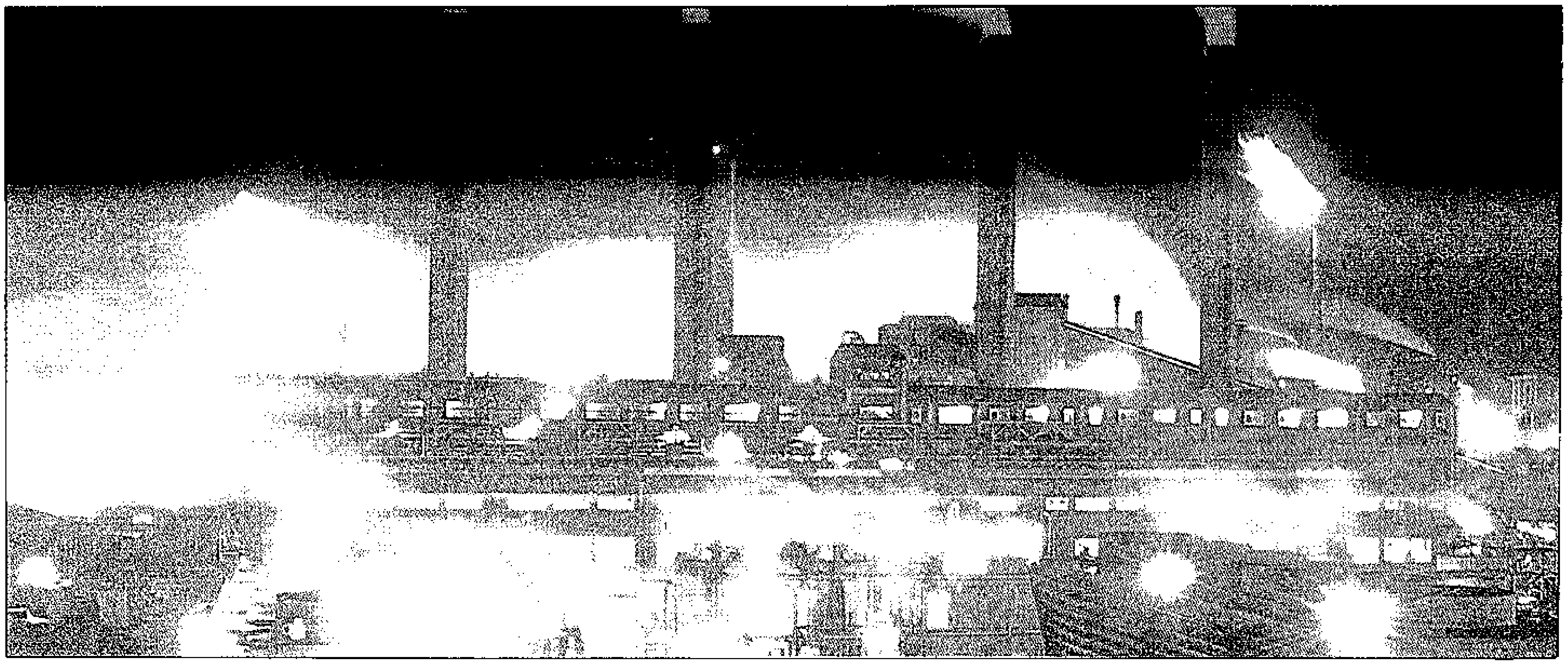
That was not the case, either in the US or in any other industrial nation, so Sasol is likely to remain the world's only synfuels producer well into the future.

What are the elements of the processes used by Sasol to turn SA's plentiful, easy to mine but high-ash coal into conventional liquid fuels? The starting point is to break down the complex, variable and unmanageable coal molecules into something much simpler and more uniform, capable of serving as the building blocks for creating hydrocarbon molecules, with their spines of carbon atoms linked to each other (liquid fuels such as petrol and diesel are essentially mixtures of hydrocarbons of marginally different molecular types).

Despite determined research efforts directed at so-called direct liquefaction of coal, the only effective method for our type of coal remains gasification with steam and oxygen. Sasol uses the Lurgi variant of this process, one of the methods which operates below the slagging point of the ash produced. The ash is removed from the gasifiers as solid residue.

The product of the Lurgi gasification is so-called synthesis gas — a highly reactive mixture of carbon monoxide and hydrogen, laced with impurities which have to be removed before the stream is clean enough to sustain the Fischer-Tropsch (FT) synthetic reactions which follow.

These impurities comprise, firstly, substantial quantities of carbon dioxide pro-



duced as an inevitable co-product in the gasification of coal. The carbon dioxide is inert in the FT synthesis but needs to be removed for maximum efficiency.

The carbon content of this waste product represents an unavoidable loss of part of the carbon content of the coal. Viewed in thermodynamic terms, the output of carbon dioxide reflects the energy cost of smashing the coal molecules down to synthetically usable components.

Apart from carbon dioxide, coal gasification also produces smaller quantities of ammonia and hydrogen sulphide, as well as tarry products — which yield valuable chemicals after work-up.

After two stages of purification, what is left is a pure mixture of carbon monoxide and hydrogen in carefully manipulated ratios. The synthesis gas is fed to one of two variants of FT synthesisers — the Arge and the Synthol.

The Arge reactor — only in use at Sasol 1 — is what chemical engineers call a fixed bed reactor, meaning that the synthesis gas passes over a static bed of catalytic material. The Arge reactor is good at producing solid hydrocarbons. It is the source of the high-quality waxes produced by Sasol and sold as valuable chemicals in their own right on a worldwide basis. Arge, although it does produce liquids as well as waxes, cannot be scaled up to produce synthetic fuels on the scale needed by SA.

Fortunately, the Synthol reactor perfected by Sasol proved eminently suitable for scaling up. This reactor uses a circulating type of fluidised catalyst and can be identified by the gooseneck feature made familiar by photographs of Sasol 1 and Secunda.

Sasol 2 and Sasol 3, which today provide an important proportion of SA's petrol and diesel, employ only the Synthol reactor. Not only that, but synthetic fuel output is maximised (at some cost to the energy efficiency of the process) by recycling the methane inevitably formed as a co-product during the FT synthesis. At Sasol 1, the methane is tapped off for sale by Gaskor.

The scale of operations at Secunda is breathtaking, even by world standards. The Secunda collieries are producing at around 30 Mt/year (compared to 6 Mt at Sasol 1's Sigma colliery), and there is nothing anywhere to compare with the number and size of the 80 Lurgi gasifiers which feed the scaled-up Synthol converters, nor is there any installation anywhere in the least comparable with the 16 Synthol converters.

The products of the Synthol reactors are primarily substances capable of being worked up through conventioning refining process into petrol and diesel, as well as a variety of chemical co-products, which are also worked up for sale. The latter include ketones and alcohols.

At present, co-product ethanol (ethyl alcohol) surplus to the needs of the chemical market is added to Sasol's petrol blend. Initial problems with certain makes of carburettor and plastic fuel lines have been overcome. Sasol is at pains to emphasise that petrol containing 8%-12% ethanol remains a conventional motor fuel blend.

Sasol 2 and 3 have been commissioned and are functioning at or above rated capacity. "Debottlenecking" will add somewhere around 6% to rated capacity by the time this programme is complete. The combined synthetic fuel output of the Secunda giants dwarfs the synfuel output of Sasol 1. But the original plant remains important, both as a diversified chemical plant in its own right and because R & D — for historical reasons — has stayed at Sasolburg.

This gigantic financial commitment —

IN THE PINK

Sasol — the quoted company — impresses by sheer scale. At the end of 1984, looking at group accounts, shareholders' funds totalled R2 078m, with long-term debt of R2 080m and capital employed of R5 139m.

Net current assets were R128m. Group turnover was R2 217m, excluding excise duty and levies; net income before taxation was R431m, and earnings attributable to shareholders, R413m.

Sasol's debt includes a loan of R1 500m from the State, bearing interest equivalent to the five-year Escom rate, plus 1,5%, so net interest paid for the six months to June 30 was R127m.

Sasol Ltd plans to repay R400m and Sasol 3 an added R300m of State debt at the end of this financial year. At this rate, these debts will be substantially reduced in two to three years.

Dividends took R412m. There was no transfer to general reserve, but a deferred tax adjustment of R17m was included.

Sasol 3's latest interim dividend was nine times covered by that plant's after-tax profit of R225m. Earnings per share for 1984 were 73,3c, dividents 33,0c and net asset value 369,1c.

Sasol, first listed in 1979, has established an enviable track record in earnings growth.

Earnings a share rose by 37% in 1981, 19,8% in 1982, 16,4% in 1983 and 18,4% in 1984.

There was a rights issue in November 1983 to finance the acquisition of the remaining 50% of Sasol 2, which the company had not yet acquired.

The future trend of earnings will be largely determined by the benefits from continued debt repayment.

which government is now recovering through the continuing process of privatisation — has achieved a very substantial tranche of local synfuels output. Output level, as with local oil consumption and imports, is kept secret for security reasons.

The result in fuel marketing terms is that liquid fuels made from imported crude oil have largely been backed out of the inland market. But Sasol maintains no more than token retail representation at the "blue pump," resting content with its profits from manufacturing fuels and chemicals.

The bulk of synfuels output is sold to the oil majors who market it under their own brand names, and Sasol has no intention of changing present arrangements, despite a flurry of recent media rumours to the contrary.

Under an arrangement called "equality of misery," the output cuts necessitated by Sasol's current share of the liquid fuels market are distributed equally among all the refineries, including Natref at Sasolburg, in which Sasol itself has a 52,2% shate.

The implications (for Sasol's cash flow) of the takeover of all of Sasol 2 and half of Sasol 3 are that no new commitment to synfuels production can be contemplated by the group for years to come. The strain — in skilled manpower terms — of bringing the Secunda complex to full output so rapidly also acts as a major constraint.

On the other hand, Sasol has been busy rationalising and even expanding its output of such other chemicals as explosives and fertilisers (derived from co-product ammonia), although the market weakness in some fields, especially fertilisers and plastics, make these grim times for all local chemical producers.

Sasol conducts a vigorous research programme covering three main areas: improving the efficiency of existing processes; new synthetic processes such as direct liquefaction of coal; and environmental management.

The last aspect has presented Sasol with a problem now well on the way to solution — getting rid of the "rotten eggs" smell of hydrogen sulphide extracted as an impurity from the synthesis gas produced at Secunda.

The Stretford plant intended to oxidise the hydrogen sulphide into valuable sulphur did not work as intended because the carbon dioxide content of the waste gas affected its acidity. But modifications to take care of the deficiency are well advanced.

However, the capital cost to Sasol will be substantial, although the group hopes revenue from sulphur sales will at least cover operating costs, and may even generate some return on the expected commitment of R150m to R200m.

Work is advanced on a major improvement to the Synthol reactor through switching from the circulating catalyst currently employed to a fixed fluidised bed. Other smaller improvements to the whole train of synthetic and refining operations are being constantly examined.

Sasol's top management is responding vigorously to the change in philosophy entailed in becoming a private sector company, but md Joe Stegmann emphasises that Sasol was originally registered as a company under the Act and has never had a special charter as a parastatal body.

After the gigantic growth phase at Secunda the group is concentrating on efficiency, with emphasis on cost control, improved output through marginal gains in operating capability of its units, and manpower development through special programmes.

An area to watch — in the *FM's* opinion — is undoubtedly Black labour relations, as recent troubles have shown. This is, however, a stricture that could be applied across the board to all of SA industry. ■

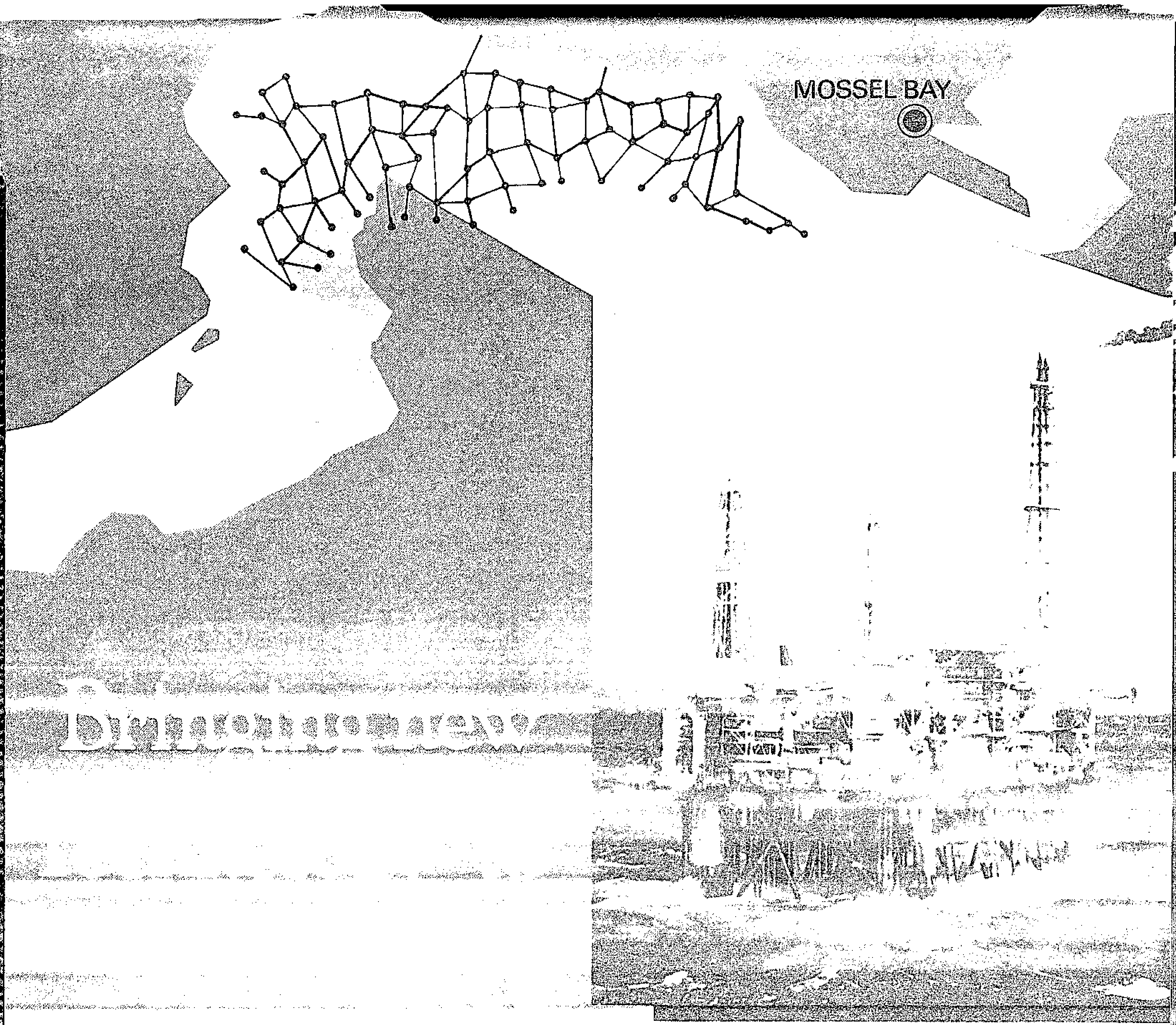
Undersea riches

Although the findings of the Mossel Bay oil feasibility study are not expected before the end of the year, there is a strong possibility a R2 billion oil and gas project could be set up by 1990 to exploit offshore deposits

Soekor has established that the gas field at Mossel Bay has reserves of more than 1,5 trillion cubic feet, enough to last at least 30 years providing between 23 000 and 25 000 barrels of petrol and diesel a day.

The feasibility study will confirm the reserves and cover such aspects as the type and cost of the on-shore conversion plant, the type of offshore rig to be used, the type of pipeline from the offshore sources to the conversion plant and the number of pipes

Van Zyl . . . Mossel Bay findings delayed by government



Soekor chose EMSO to [illegible] plants in general.

necessary.

The engineering feasibility study is being carried out by a 25-man team from Engineering Management Services Offshore (EMSO), a company jointly owned by Murray & Roberts (60%) and Crawford Russel (40%).

It is thought the possible offshore structure will be sited 64 km from the coast and anchored in a depth of 103 metres. Indications are that the offshore rig will be a steel structure with an eight-legged steel jacket attached to the seabed by four piles. This jacket will comprise about 2 000 t of steel which will support a 100 t platform for the various facilities, processes and accommodation for about 100 people.

The main platform is to be erected at the FA field. Thereafter, a smaller platform may be installed on the neighbouring FM field and the two connected by a pipeline.

EMSO is also investigating whether SA industry can cope with the amount of plant and equipment needed and whether it could meet the tight programme and necessary standards. So far, its findings have been positive and there is no reason why most of the work should not be carried out by local companies. However, some technical expertise will have to be imported because such an enterprise has never been undertaken here before.

Although it is early days to be talking about subcontracts, it is generally thought it would be unlikely for the main contract to be taken from EMSO, in view of the fact that tenders for the feasibility study were dependent upon whether the contractors would be capable of carrying out their recommendations.

The steel jacket on its own would require its own plant which would have to be built adjacent to a nearby harbour for shipment direct to the platform. The fabrication would require the services of nearly 600 people.

The onshore feasibility part of the study is being carried out by Bateman Engineering and Foster Wheeler Engineering and Dorbyl is thought a likely subcontractor.

Volkskas Merchant Bank is to look into the financial aspects of the project and supply economic advice. According to financial experts, it seems likely some of the R2 000m necessary will be supplied by overseas funds.

They also question why specialist overseas banks and consultants which concentrate on oil/gas feasibility studies have been excluded from the Mossel Bay study.

Once the total feasibility study is accepted, conceptual design and the production of engineering detail and detailed cost estimates will follow. If all goes according to plan, the project will probably be operational by 1990.

The study includes not only the technical but also the economic potential of the gas as a source of fuel and is being financed by Soekor, the State and a consortium of local oil companies. The amount already spent on exploring the possibilities is thought to be about R150m.

For some time now government has been making provision for the establishment of an energy bank which will build up funds for the development of ventures such as the Mossel Bay gas project. Speculators believe public financial involvement might be similar to that in Sasol, namely Soekor and government with the public given an investment opportunity.

Oil companies would obviously seek investment, especially those which have participated in the feasibility study, and such financial involvement would give them certain distribution rights through their garage chains. Public shareholding would follow once the project was on-stream and a value put on the shares.

Although SA has very little problem obtaining oil at present, some experts predict shortages by the end of this decade, with prices escalating by as much as 500% by the end of the century.

Initial estimates of the Mossel Bay project are as follows:

☐ Cost of providing the offshore production facilities — R600m;

☐ Facilities for conveying the gas and oil condensate to shore — R150m;

☐ Cost of the conversion plant and storage facilities — R1 000m; and

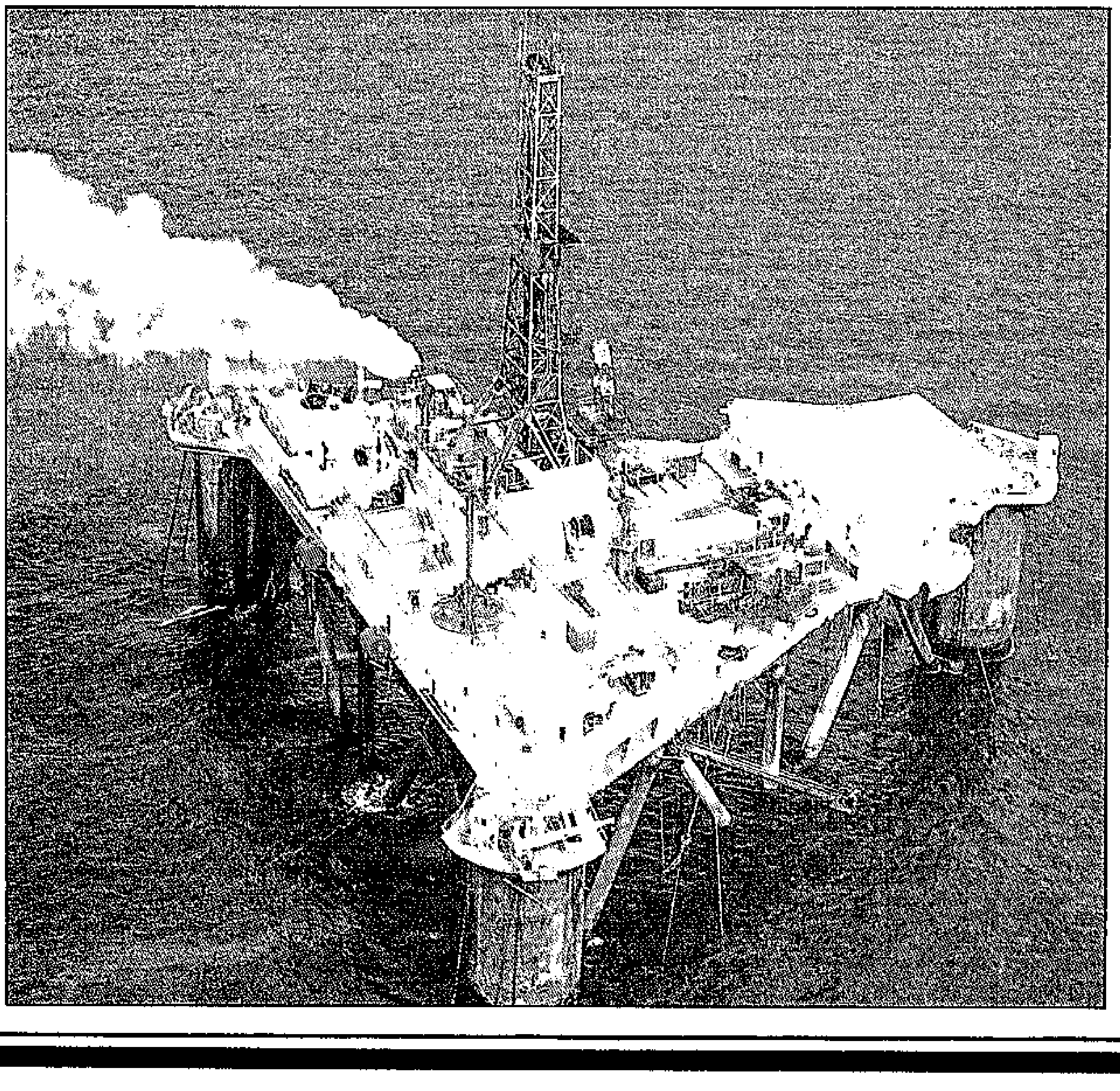
☐ Supporting infrastructure — R250m.

With a total cost of R2 000m (excluding the feasibility cost of R150m) speculators believe it unlikely government will make a negative decision when the findings become public at the end of the year.

According to Dr P J van Zyl, managing director of Soekor, even if SA is successful in finding large quantities of oil off its coastline, the country's fuel needs would be best solved by a series of small projects such as the proposed Mossel Bay fuel-from-gas scheme combined with Sasol.

"We are far from being self-sufficient in liquid fuels and the demand for such fuels is growing daily," he says. "Even if large finds capable of producing 100 000 to 150 000 barrels of oil a day were made, we do not have to exploit them immediately. We should rather expect to solve our liquid fuel needs by a series of different, smaller but viable projects which would have the additional value of being strategically less vulnerable. We believe both the strategic and also financial value of any locally produced fuel is very important. Just imagine what SA's position would have been with the recent drop in the value of the rand and the increase in the price of petrol without Sasol? We also think that at the moment there is no other method of manufacture of synthetic fuel to beat the Soekor proposal using natural gas."

In a survey conducted last December it was revealed that if the Mossel Bay find produced gas and condensates averaging 22 000 barels of fuel a day, within five years SA's fuel import bill would be reduced by nearly R500m and gas production and conversion plant profits could amount to more than R400m a year. ■



All clear for nuclear?

Koeberg's teething problems have been expensive but they have not deterred the planners of the next nuclear power station

One of the reasons Escom was accused by the French of over-reacting and closing Koeberg at the beginning of the year may have been because some of the French reactors had the same problem but were not closed down because of the winter peak consumption demands.

As it turned out it could be considered an over-reaction but, Ian McRae, senior GM of Escom, explains: "We did not really have sufficient knowledge to judge the extent of the problem and in the interest of safety we shut down the plant for a full investigation. This revealed a mild steel inclusion in the stainless steel pipework which would have resulted in corrosion once the boric acid water flowing through the pipes came into contact with it.

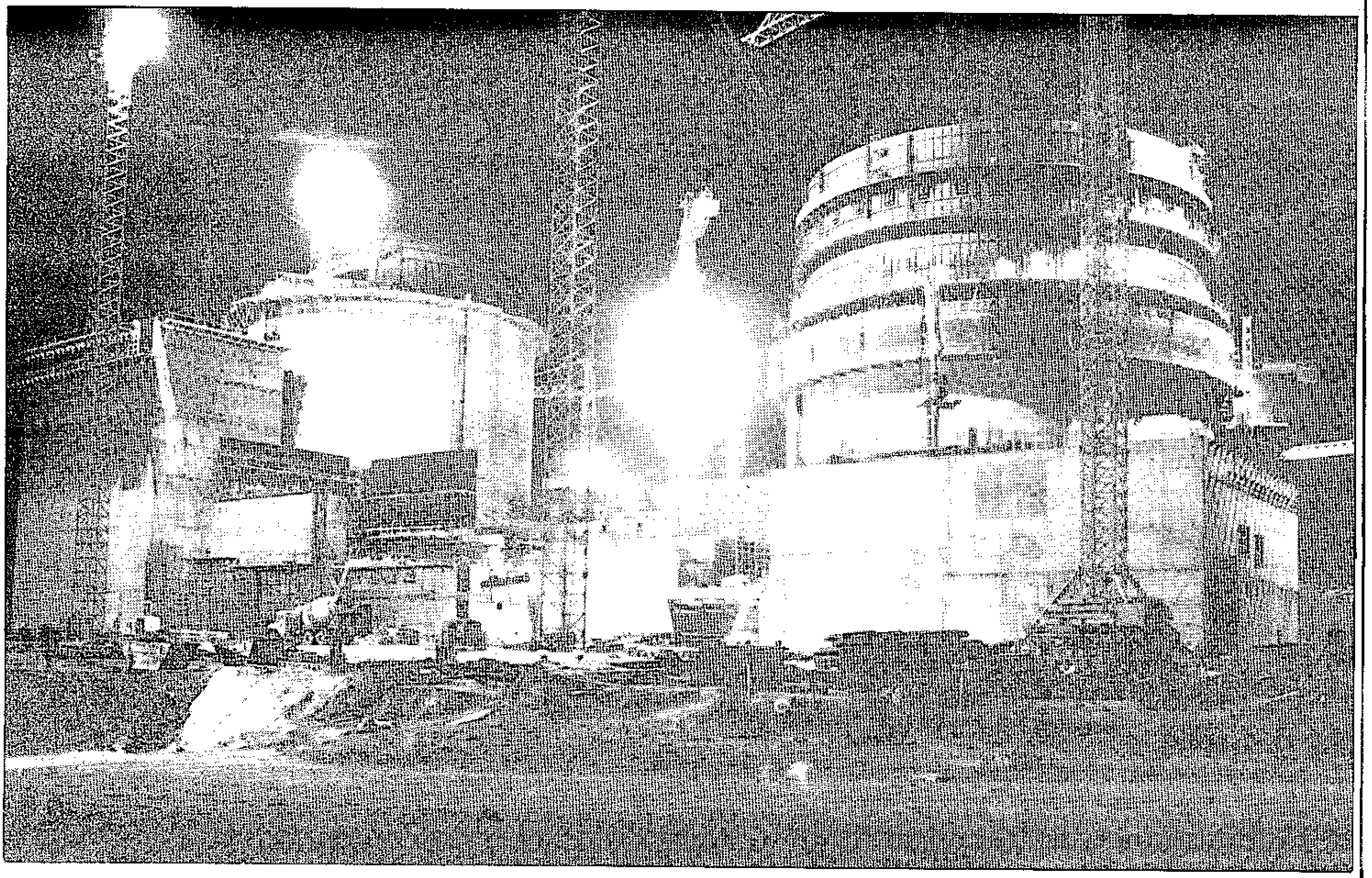
"Having discovered the problem, we still had to establish whether there was a possibility of the problem existing in the stainless steel supplied by other steel manufacturers. This was the main reason for the protracted investigation. We had to visit all 43 steel manufacturers which supplied stainless steel for all the pipes which took us as far afield as Canada, the US, Europe and Japan.

"The problem was confined to a manufacturer in Sweden who had used a particular system to identify the ingots with a mild steel tag. In our particular case the tags were longer than usual and inadvertently some contamination had resulted. It must be pointed out while all pipes were tested, only one or two sections were faulty."

It seems strange in view of the strict quality control requirements that this could happen, however, as it transpired it was not critical. At worst there could have been a leak in the system which would have been detected immediately.

Much has been written about the cost of the closure but it would seem the vital issue has been missed. One reactor has been completed and handed over to Escom but is still under guarantee by the French consortium, Framateg.

The other has not yet been handed over, so therefore it is still the responsibility of the contractor. In the case of the first reactor, it is McRae's opinion that certain costs should be borne by the French. Items such as the search for the Swedish steel manufacturer and the various overseas trips cannot be laid at their door but there are others for which they have a responsibility. Nevertheless,



most of the costs incurred have yet to be quantified.

The cost of alternative generation as a result of the closure to date has not exceeded the Koeberg generating costs so there is no loss to Escom on that score. The reason is that the coal-fired power stations have lower operating costs until Valindaba comes onstream in a year or two. Under normal circumstances, both reactors would have to be closed annually for maintenance, a change of fuel and inspection purposes.

This would take about six weeks so reserve capacity is provided in the interconnected power system. Further reserve capacity is also supplied for all the coal power stations. Because coal has to be transported from the Transvaal, these are high-cost stations and now generally used for generating over peak periods and for reserve capacity.

Should coal, as a valuable and waning asset, be allowed to be burnt in power stations? Are our coal power stations using lowgrade coal causing unnecessary pollution? As a uranium producer, are we keeping abreast with nuclear technology? It is for all these reasons Koeberg was established and a similar plant is being contemplated, although its exact location has not been decided.

According to Dr J W L de Villiers, chairman of the Atomic Energy Corporation, the only proven alternative for coal in the foreseeable future is uranium, of which SA has adequate reserves. The present reserves recoverable at a cost of R160/kg is estimated at 500 000 t.

If used in thermal reactors of the Koeberg design, this is equivalent in energy content to 15 000 Mt of coal, which does not constitute a significant amount. If, however, this uranium is used in fast breeder reactors of which demonstration units are in operation in the US, Britain, France and the Soviet Union, our uranium reserves will be equivalent to 900 000 Mt of coal, allowing enough time for the development of economical fusion reactors or of other, perhaps renewable, resources for electricity production. In the absence of such resources, the only alternative in the long term would be the fast breeder reactor.

Professor JPF Sellschop, head of the Wits-CSIR Schonland Research Centre for Nuclear Sciences, says the concept of the breeder reactor causes concern to many because of the possibility of producing weapon-grade materials. However, he says nuclear reactors are no more dangerous than a chemical plant, in fact less so.

There is a risk factor to all means of producing energy, but the risk factor in producing nuclear power is on record as the lowest. McRae is confident the time will come for SA to build a breeder reactor as long as we do not become too nervous about plutonium and the politics associated with such reactors.

The costs of nuclear electricity generated along cost lines relative to the cost of electricity produced by coal inland, plus transmission costs, will be the decisive factor for determining the future use of the country's uranium resources for electricity generation.

In SA at the moment nuclear reactors can only hope to compete financially with coal generation provided they are sited at the coast. Nuclear could never compete with coal at Middelburg or Witbank where power stations are linked to a colliery. SA is one of the few countries in the world where the "mine mouth" stations are possible which provide one of the cheapest power supplies.

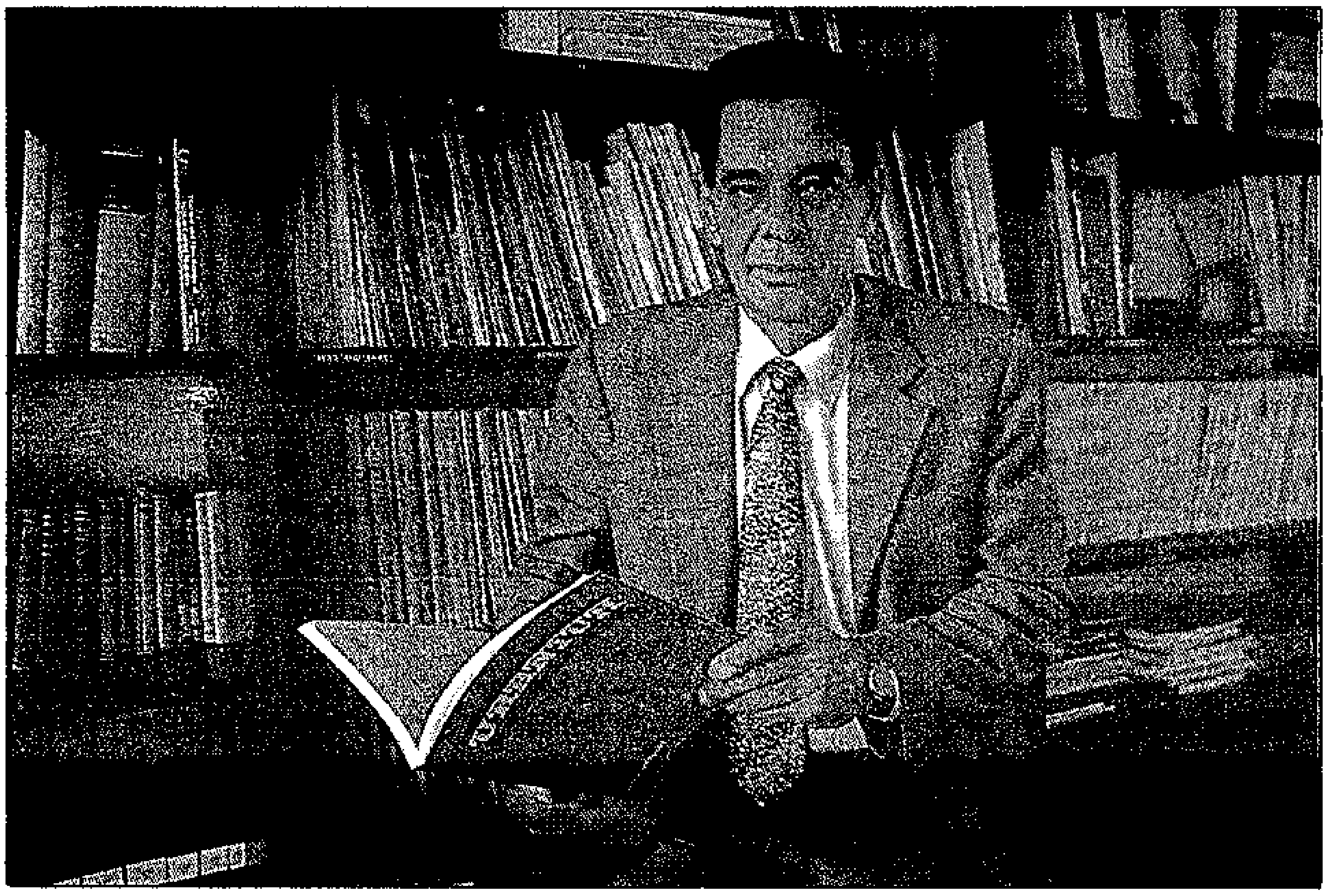
In France the capital-related cost for a nuclear power station is only 39% higher than for a coal-fired station, whereas in SA this figure is of the order of 74%. Also, in SA the fuel costs are much lower than in France for a coal-fired station. These two factors to a large extent account for the advantage of nuclear power over coal in France, while in SA coal still has a significant advantage over nuclear power.

According to De Villiers there are a host of other factors which will determine the future role of nuclear power in this country. Air pollution will become a major problem in the eastern Transvaal and control measures

may add 30% to the capital cost of coal-fired stations.

The availability and future cost of cooling water, the necessity for dry cooling, and the resultant loss of efficiency will increase and a real escalation of 5% a year is used.

Interest on capital loans was taken at 16% a year for coal-fired stations and 1% less for a nuclear station, as foreign supplier financing is usually available for nuclear at lower interest rates than for coal-fired stations.



De Villiers ... economics will dictate the future of nuclear energy

Nuclear capital costs have escalated above the general escalation rate in the past 10 years, mainly because of the stringent safety measures demanded by society, as well as lengthy construction times caused mainly by public intervention in the US. It is generally accepted that further escalation may be even less than the general escalation rate as the nuclear industry has now reached maturity and there are strong indications that the effects of large accidents have been grossly over-estimated.

Recent inquiries have indicated that doubling Koeberg's capacity may cost slightly less than the present Koeberg if ordered in 1985. It is expected, once the local nuclear industry grows, the capital cost ratio will approach the figure prevailing in Europe. However, the capital cost increase of R300m above Koeberg cost has been assumed to allow for improvements.

It is generally accepted that the present situation of an oversupply of uranium, enrichment services and fuel fabrication services will continue for some 10 years and that nuclear fuel costs will decrease at a rate of 2% a year below the general escalation rate for the next decade.

Electricity costs as delivered in the western Cape for an inland coal-fired power station may become higher than for a coastal nuclear power station after 10 years and the total cost of electricity taken over the useful life of the nuclear power station could be less than for an inland coal-fired station.

As far as public opposition to nuclear energy is concerned, it is now generally accepted by responsible environmentalists and ecologists that nuclear energy has a much smaller impact on the environment than coal-based energy systems.

Says Sellschop: "At the moment it is early days for Koeberg to show any affect on the environment but, based on the experience of similar reactors elsewhere in the world, there is unlikely to be any adverse effects. Indeed, the effects are most likely to be benign.

"On the other hand it is commendably responsible of Escom to ensure environmental research is carried out by independent bodies such as the Wits-CSIR Schonland Research Centre. I confirm my expectation that the environment will benefit. It will be interesting to see the consequences of the small rise in the temperature of the sea which many claim will stimulate growth and sea life. Nuclear fission reactors, whether ordinary or breeder do not produce carbon dioxide or any form of chemical air pollution."

It is generally acepted that living next to a nuclear power station is less radioactive than jetting around the world, working with coal or in gold mines or even living at a high altitude.

Uranium exists throughout the earth's crust at an average of 2 g/t-4 g/t of matter but at much higher levels in some geological conditions. Part of Canada, India and Brazil have extremely high natural counts of uranium. Uranium also abounds in the oceans with 4 000 Mt of it in the sea at low concentrations.

De Villiers confirmed that the safety record of nuclear power stations has proved far safer than other industries. There is strong evidence the effects of large nuclear accidents have been grossly overestimated and if this can be conclusively demonstrated the opposition to nuclear energy will largely disappear.

On the subject of future nuclear power generation, Sellschop says France, being a leader in nuclear power, will soon be producing cheaper power than, say, Germany and will be willing to sell it at a lower cost than any country can produce it them-

WASTE OF A LIFETIME

Volumes in terms of raw fuel and waste differ greatly between coal and nuclear power stations. Nuclear waste from the average person's consumption of this energy form would amount over a lifetime to a disc 10 cm in diameter and 1 cm thick.

Compare this to the ash removed daily in winter from a fireplace or an anthracite heater, which is often greater than the nuclear "ash" of a lifetime.

Radioactive ash has to be stored in a safe place in such a way that it is not exposed openly to the environment for thousands of years. It can be stored in stainless steel containers or it can be mixed with melted glass and allowed to congeal. The containers or glass can be stored in underground mines, under the ice cap, in sediments at the ocean bottom or underground, such as in the northern Cape where Koeberg's waste will be stored. So far numerous methods of disposal have been proposed, most of them convincing but none of them apparently able to satisfy the harshest critics.

In Sweden, the government is spending more than R300m to store nuclear waste from the country's 12 reactors.

However, while the public tends to react emotionally to the mere mention of nuclear power, those in the know are much more practical.

Professor J P F Sellschop, head of the Wits-CSIR Schonland Research Centre for Nuclear Sciences, believes a change in concept is necessary.

"Instead of regarding it as abhorrent, we should spend time and research into finding means of using it to everyone's advantage," he says. "I believe fervently that nuclear waste is not something to bury and hide. It is time we became positive and carried out research into methods of making use of this radioactive hot waste. Meaningful applications would range over a wide span, while always maintaining strict safety criteria."

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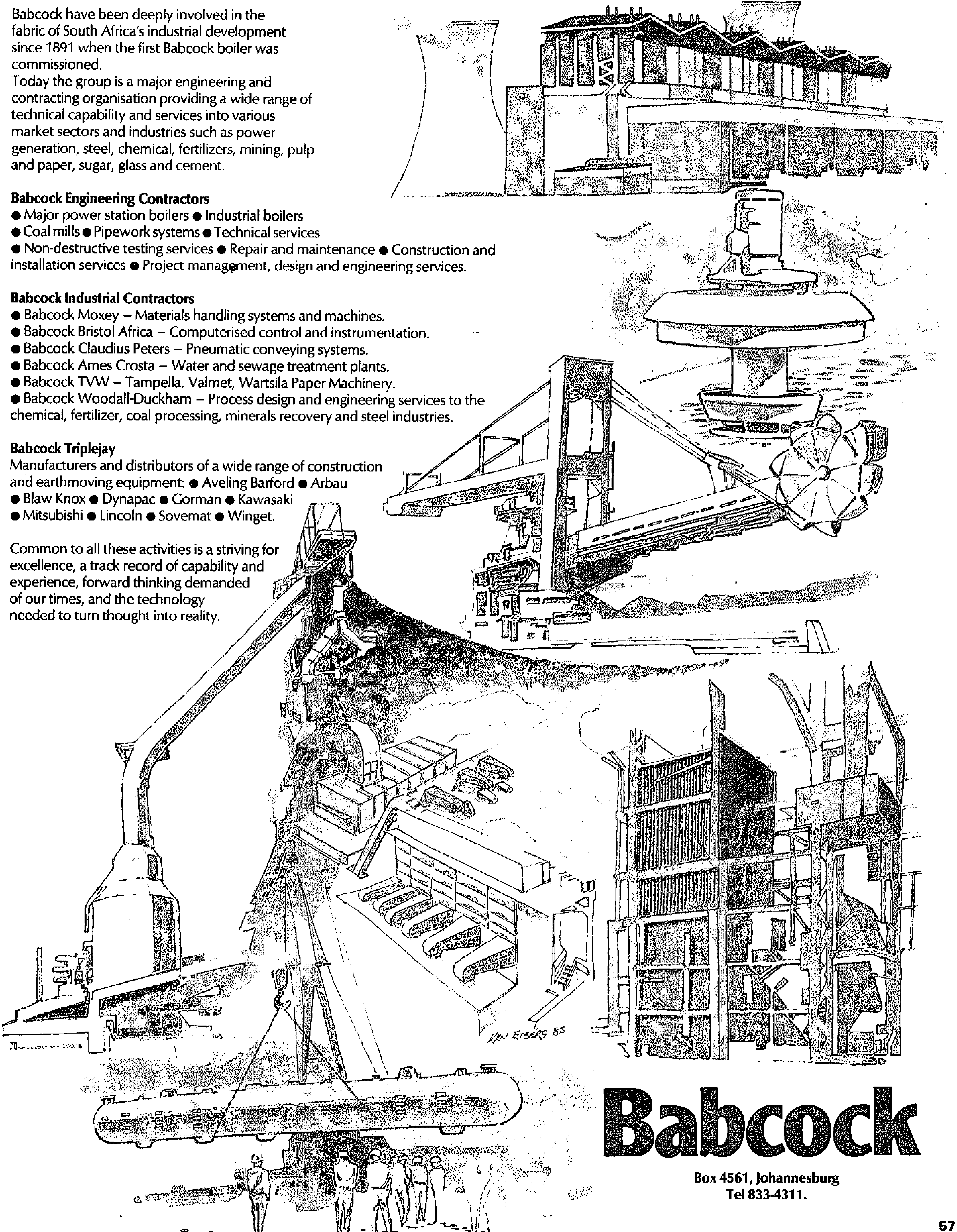

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Solar energy

Problems associated with nuclear energy, oil and coal raise the question of whether the radiant output of the sun could be an economic alternative to both nuclear and fossil fuels

It would be particularly advantageous if we could plug in to solar power instead of further depleting our planet's non-renewable resources.

Every day the earth receives radiant energy from the sun equivalent to 4 200 billion kWh. About 30% of this energy is reflected back into outer space by the earth's atmosphere and a further 23% is used up in the circulation of the atmosphere and hydrosphere.

This leaves nearly 2 000 billion kWh of energy which is absorbed each day by the earth's surface, converted into long-wave radiation (heat) and reflected into outer space. The amount of energy reaching the earth's surface naturally varies from place to place depending on latitude and weather conditions.

It is not supplied continuously either, owing to the cycle of day and night. In the southern part of the US the average amount of radiant energy reaching the earth's surface in the course of the year is about 1 800 kWh/m², whereas in north Germany it is only about 1 000 kWh/m².

Solar energy reaching the earth in one year is equal to the heat energy supplied by 185 billion tons of coal — nearly 40 times known global coal resources. The entire energy consumption of the world in the year 1970 was about 7 200 Mt of coal equivalent, or only 0,004% of the solar energy reaching earth.

The main problem in harnessing solar energy is that the surface area receiving the sun's radiation is large and installations are thus costly. Tropical desert regions, averaged over the seasons and over day and night, receive about 250 W/m².

Ian McRae, senior general manager at Escom, confirms that solar power has been considered for large-scale generation but says it is not yet a practical alternative, not only because of the huge areas required to produce fairly small amounts of electricity but because it would also require a 100% back-up supply for days without sunshine. Solar power does, however, have immediate applications in some smaller areas, he says.

Leading suppliers of solar units are Arco Solar in Johannesburg and Alternative Energy of Elandsfontein, Transvaal. Arco Solar marketing director Malcolm Siebert says there is already interest in SA in solar modules for use in remote areas and communities not supplied with power, especially in farming districts. More intensive use is foreseen in telecommunications and transport systems, as well as for pumping and irrigation schemes.

"The beauty of solar energy," he says, "is that it provides an endless supply of electricity from an abundant and perpetually renewable energy source. Modules are virtually maintenance-free, quiet, non-polluting and easy to install."

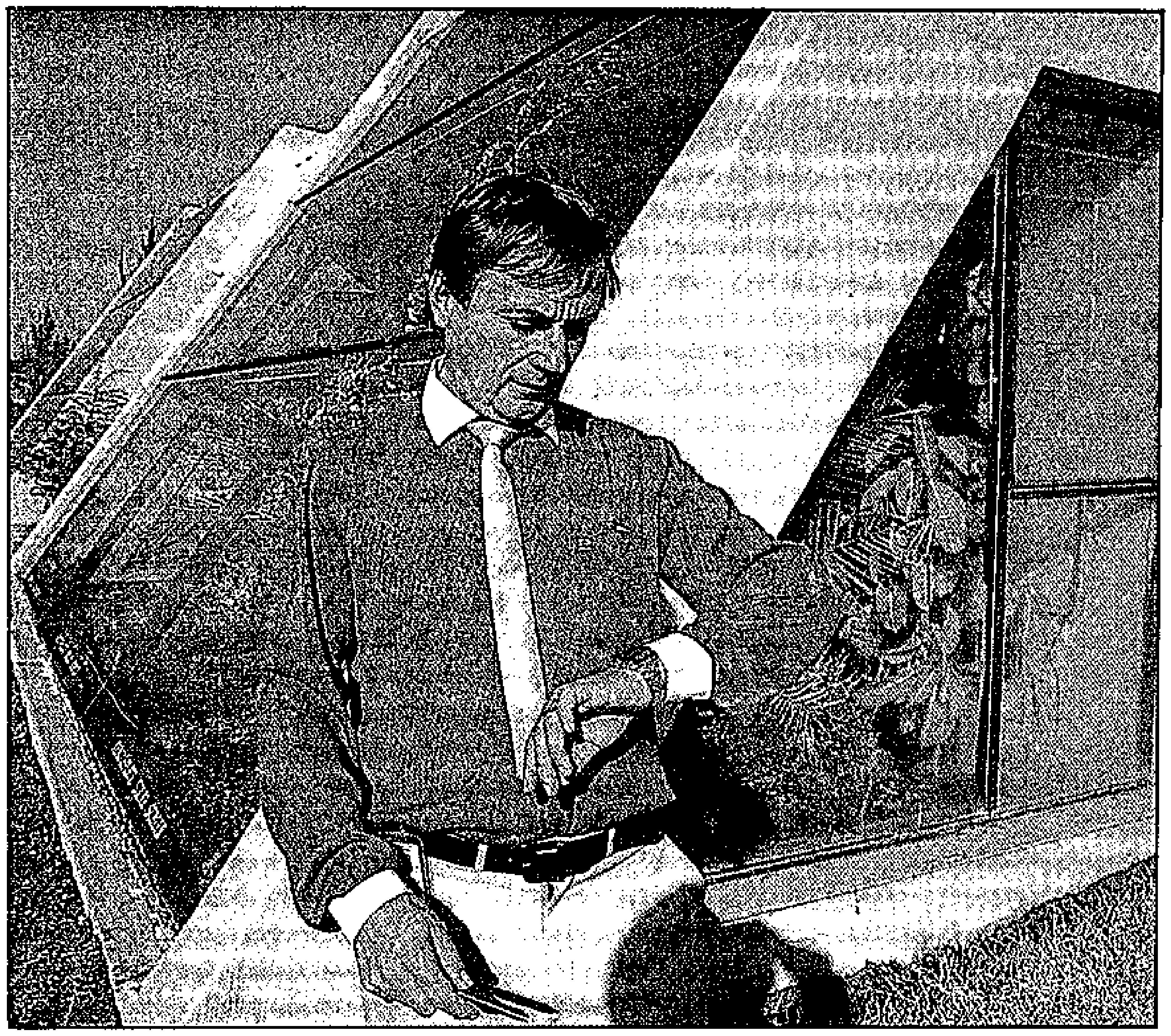
Alternative Energy GM Ali Linzbacher points out that a certain percentage of energy needed in the day for industrial purposes — at least 6,6% — does not have to be stored and could be supplied by the sun.

He says one of the problems preventing solar power becoming more popular is the initial outlay. The aesthetic appearance of units is also seen as a drawback with the more house-proud, particularly women who often do not have to worry about electricity costs. Another problem is that those who can afford solar units are not necessarily those who need to economise on power bills.

"Architects are often ignorant of the needs of solar plant," says Linzbacher. "Adding it to an original design often means the support and structure end up costing the same as the actual solar unit, which would not happen if the unit had been taken into consideration first."

This happened with a R500 000 contract for solar units at a hospital in Namibia, which is likely to be doubled because an extension has to be built to house the system. Large contracts such as this cause further problems for the manufacturer. He has to take on more staff, but only for the duration as contracts of this size are rare. Another setback can happen when building contracts run into financial trouble; being the last to be installed the solar system is usually the first to be cancelled.

Linzbacher believes solar energy would be ideal for abattoirs using 200-500*l* of hot water on a beef carcass. However, the fact that solar power cuts eventual running costs is not considered in capital outlay decisions and this also applies to some townhouse developers. The developers are not concerned with the buyer's electricity bills, although solar units are cheaper by the dozen. A notable exception is Anglo American, whose gold and diamond divisions have specified solar units for many of the new black housing developments at the mines, particularly at Jwaneng where electricity rates are higher. ■



Alternative Energy's Linzbacher . . . developers not concerned

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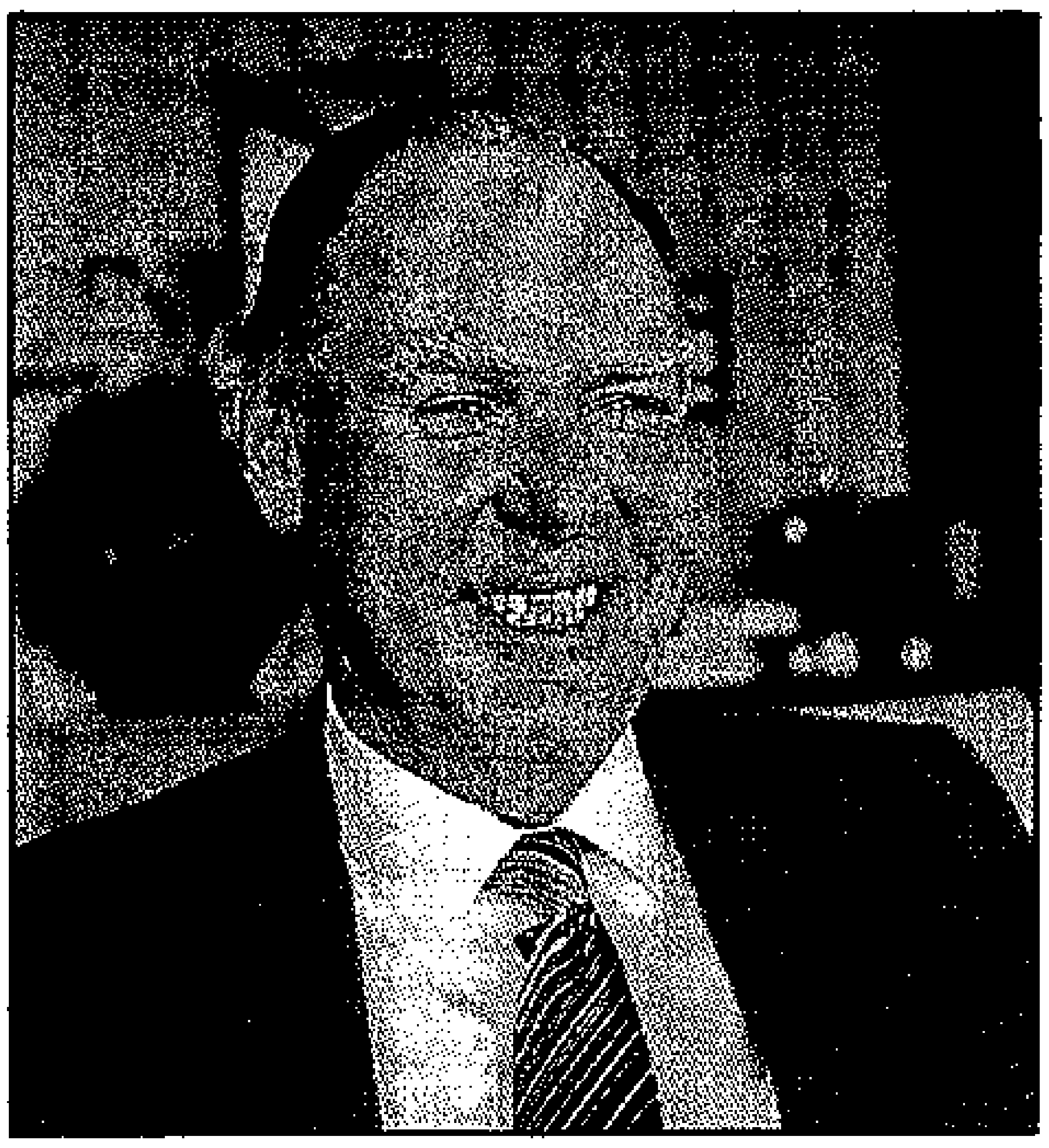
selves. In fact, in every country in the world except SA, nuclear power in spite of heavy capital overheads is cheaper than any other form of power, with the exception of hydro power.

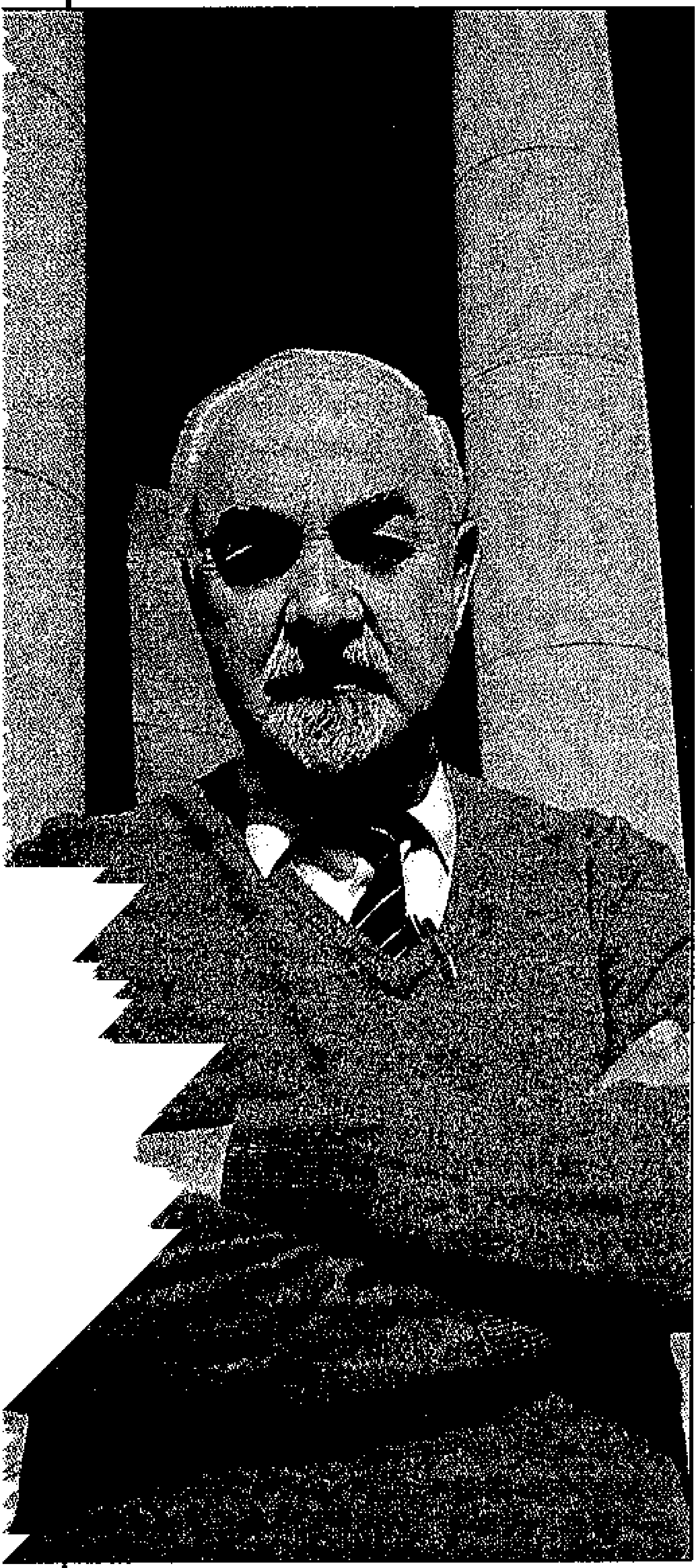
"The future of nuclear power in SA is just as vital," he says. "We, as producers of uranium, must keep abreast with the technology which the rest of the world is adopting. It is essential we carry out research into uranium and keep a foot in the energy production scene. There will come a time when coal in this country will become uneconomical to convert into electricity."

Asked about the future of uranium internationally, Sellschop added: "So long as the old type of reactor such as Koeberg is in existence, uranium will be used but the breeder reactor will take over. The technology is already proven but there are still engineering and material problems in fusion to be solved which might take us to the year 2050. With an unlimited supply of hydrogen in the sea, fusion may ultimately become the leading source of energy, leaving uranium as a minor nuclear energy component."



Escom's McRae ... closed Koeberg in the interest of safety

De Villiers, concluded by saying: "I am convinced that in the final instance economics will dictate the future role which nuclear energy will play in the generation of electricity in SA. I am also convinced that both our indigenous resources, coal as well as uranium, should be used in a complementary way to satisfy the demand for electricity instead of exporting nearly all our total uranium resources and burning our coal resources for power generation. Coal is an extremely valuable resource for the chemical and liquid fuel industry and I would rather see us storing the relatively small amounts of nuclear waste safely than to leave future generations without coal. ■



Wits' Rallis ... whole area of energy research must be covered

Changing equations

The energy issue that dominated the current affairs scene in the Seventies has changed focus. There is a glut of oil and prices have started to slide. Coal is also in oversupply. The spectre of shortages has melted away

The **familiar** energy equation that measured future demand with gnp growth forecasts has changed. Enviromental issues and advances in energy conservation, too, are now juggling the logistics of how far the world can stretch its primary energy resources.

Time's wing'd chariot, nevertheless, draws near.

Indeed, the one immutable energy truth is that fossil fuels, such as oil and coal, are finite. Mossel Bay's gas reserves, for example, may yield around 20 000 barrels of liquid fuel a day for 15 to 20 years — then the rigs will have to be towed away.

In the train of hydrocarbon fuels come the less "plannable" alternative energy sources. These range from plain good housekeeping — load and energy conservation — to the exotics such as biomass and wave energy. But packaging these technologies for commercial and industrial use is still a long way down the pike.

Our last energy survey painted a bleak picture of SA spending less on research than any other members of the Organisation for Economic Co-operation and Development — a figure according to UCT Energy Research Institute director Richard Dutkiewicz of about 4% of the amount spent by each member.

A year later, Dutkiewicz is as pessimistic about the future. Government continues to tighten its financial corset and the threads of an energy research policy still have to be woven into a coherent pattern.

Trite as it sounds, the adage that the insurance policy is only expensive before the catastrophe is pertinent in the energy research context. Clearly, there must also be economic parameters.

In this case, research should focus on localised problems and, where applicable, to tailoring overseas technology to fit our own requirements. "Rather than trying to win the Nobel prize," says Dutkiewicz, "energy research in SA should lean to the applied rather than the fundamental."

The point is well made. Should SA's offshore gas reserves ever prove economically exploitable, for example, we should look to the market for the technology rather than developing our own. In this instance, Mobil's Zeolite methanol-to-petroleum catalyst — already widely used in New Zealand — would be a natural.

And the same yardstick should apply to alternative energy research. Pumping capital into developing solar photovoltaic cells, stresses Dutkiewicz, would be a wasteful duplication of work being carried out by solar R & D pathfinders Japan and the US.

"Buy the technology when it becomes available," he says.

A strong body of opinion, however, also believes that SA should pick up the gauntlet in the global energy challenge. Costa Rallis, John Orr professor of mechanical engineering at Wits, for example, accepts in principle Dutkiewicz's parameters, but stresses that the whole range of research must be represented in SA — from the scientists' passive understanding of what "is" to the wholly applicable, such as developing hydrogen as a transport fuel, for example.

Nevertheless, the era of the practical testbed is upon us. Increasingly, the R & D concept is being given a new slant, with the emphasis on *demonstration* — or R D & D, as it is known.

Above all, research in SA must be finely tuned to the country's overall energy stategy of diversifying energy supplies away from oil towards coal.

Abroad, industrialised nations are economising on the use of oil at a particularly rapid rate, thanks to earlier investment in conservation and the use of non-oil fuels. According to the International Energy Agency's latest report, consumption in OECD countries in the first half of 1985 is about 1,5% down on a year ago, although industrial production rose 3,5% in the same period.

At home, under the aegis of the Department of Mineral and Energy Affairs (DMEA) and the CSIR, the National Programme on Energy Research is putting its weight behind shielding SA's Achilles' heel by reducing the intake of imported oil with an indigenous transport fuel.

Increasing synfuel output, of course, lowers imports but, by the same token, lifts coal demand. In the longer term, this means increasing coal use for synfuel production and — possibly by the second or third decade of the next century — jettisoning coal-fired electricity output entirely.

The coal equation is a complex one. Current thinking puts the amount of economically recoverable coal reserves at 58 500 Mt. Assuming coal demand remains static at around 170 Mt/year, SA faces the cheering prospect of enough coal to last the next 400 years. Of course, it will not.

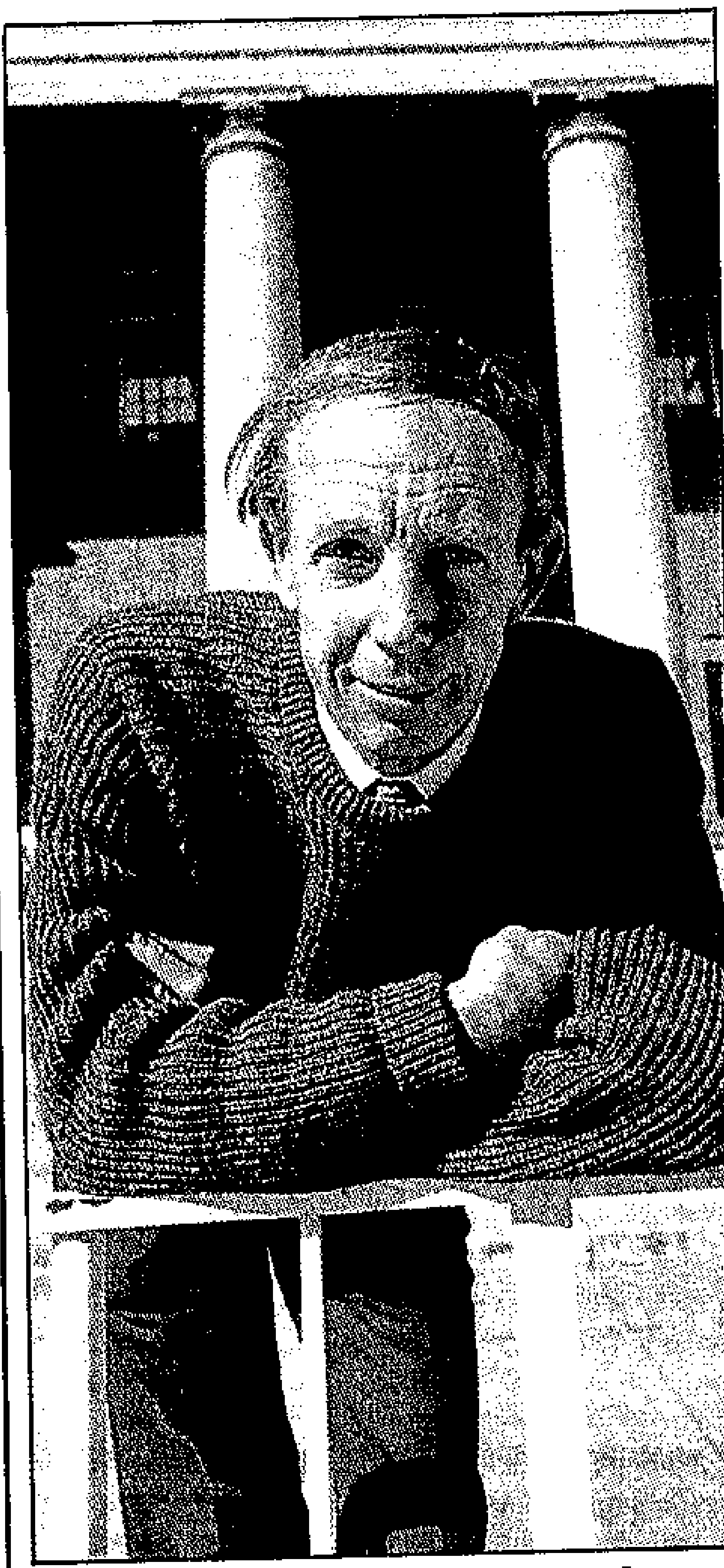
So what progress has been made in the past year to prolong the life of SA's coal reserves?

Two events stand out. In April, the Pretoria-based National Fluidised Bed Combustion plant came on-stream as a demonstration model to stimulate interest in burning "waste" coal in an enviromentally acceptable manner. In the eastern Transvaal, for example, mounds of unburnable coal languish in stockpiles to no economic benefit.

But the process, as Dieter Krueger, chief co-ordinator of the National Coal Research Programme, explains, is still in its infancy, with only a few commercial plants operating in SA.

And a UCT/Wits-designed "value added" plant is currently being put through its paces at a fine coal washing plant on the Witwatersrand.

Wits professor of Mechanical Engineering, Neville Tully, argues that load energy and conservation are the likely frontrunners in keeping coal at the centre of the energy map. So far, however, advances in reducing demand have been stalled by a lack of central information about the effects conservation has on industry and the national fuel system.



Tully . . . energy auditing for industry

Says Tully: "From a purely techno-economic standpoint, an energy data bank is the prerequisite to meaningful research into conservation." But talk of a free flow of energy information stirs up muddy water.

The Petroleum Act is a prime example. "Knowing who supplies oil to SA is of no consequence to the energy economist," says Dutkiewicz, "but it's vital to have precise data on, for example, the globular amount of oil being imported into SA."

To what extent, then, the SA Energy Information System (SAEIS) — being developed by the CSIR and the CSTI as a national energy information bank — will take up the information slack is unclear. Some observers, however, fear that SAEIS data will prove too academic to be of much use for applied research projects — the R D & D issue again.

The private sector, too, is aggravating the information squeeze. In describing SA's corporate attitude to energy management Tully invariably resorts to phrases such as "window dressing" and "wall of indifference." He explains that at the hub of this lethargy — and squandering — is the fact that SA's rich coal deposits enable the consumer, particularly the high-energy user, to buy energy at a premium compared to his OECD peers.

"Small wonder," says Tully, "that SA is virtually bottom of the energy efficiency league in the West."

Since academe has been unable to open the private sector's energy "books,' government, it is argued, should step in and prise open the corporate clam. Not surprisingly, Tully is asking for mandatory energy audits, with the data made public in the same way as annual financial reports.

Because energy is not a major national priority, central funding for research and exploration, like the rest of the economy, bobs on uncertain waters. The upshot, for example, of gold and uranium prices slipping on world bourses three years ago — as the Nuclear Development Corporation notes in its latest review — adversely affected uranium exploration on the home front.

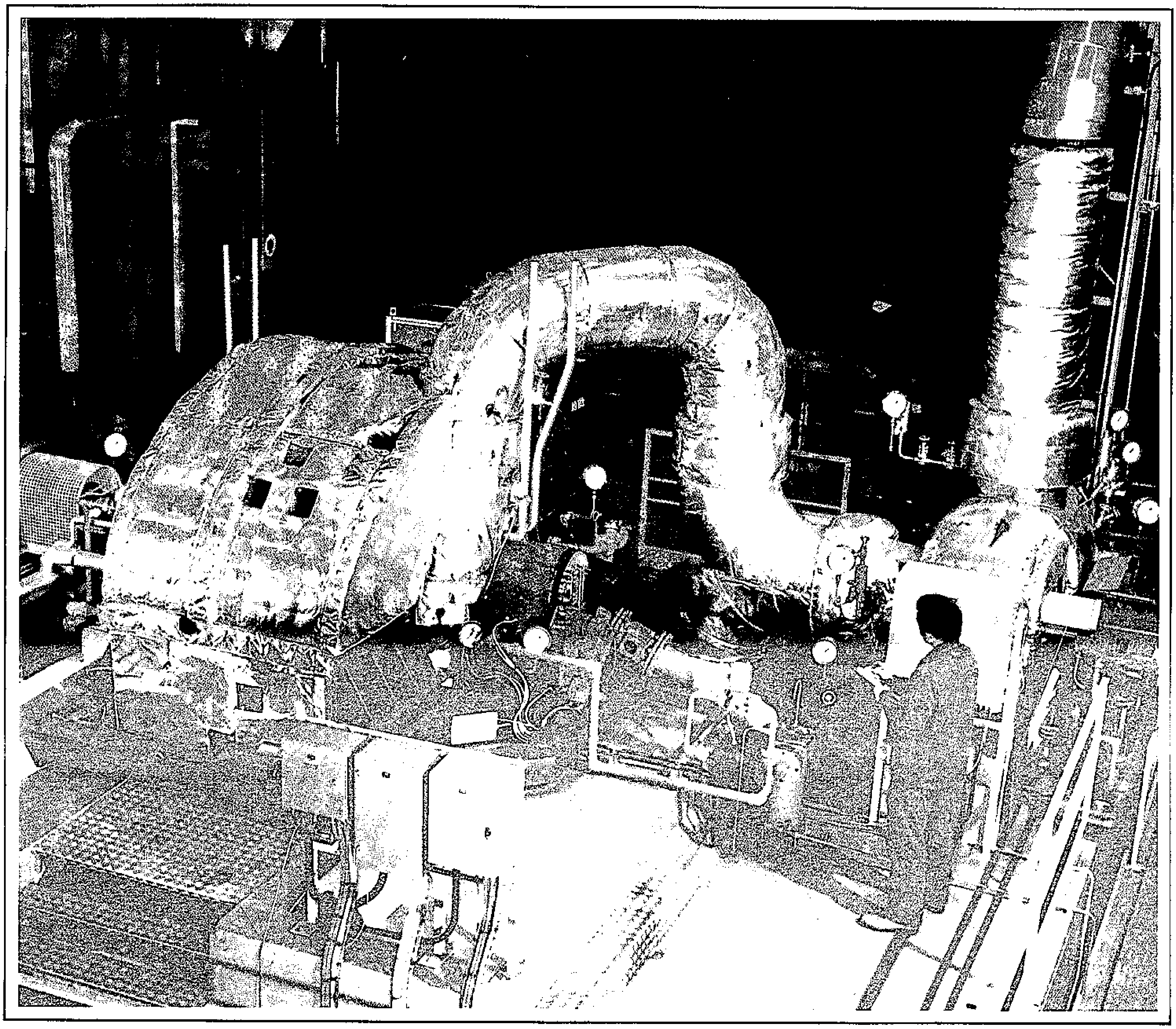
And changes in how much additional generating capacity will be needed in the future has caused Escom to trim its growth rate 1% over the next two decades because load forecasts indicate a slowdown in demand. The Majuba project, for example, will be shelved until 1987.

Sasol, too, is not contemplating a major expansion on the synfuels side, although another plant is likely to come on-stream before the century is out. This moratorium, however, gives Sasol an invaluable breather to upgrade and develop its synfuel technology, which would be incorporated into future plants.

Says Sasol process design manager John Mariott: "By concentrating our efforts on existing synthesis and catalyst technologies, we can make significant advances in obtaining, for example, a fixed fluidised bed alternative to our existing circulating bed technology to improve the gasification and fuel synthesis process."

Ultimately, the direct liquefaction of coal would be a cheaper and more efficient route than Sasol's Fischer-Tropsch synthesis — so far, the world's only fully commercialised oil from coal route. The rider is that sufficiently large deposits of high grade coal would be needed. A third-generation process, however, is unlikely to be available until well into the Nineties.

If Sasol is likely in the long term to bypass the methanol route to synthetic hydrocarbons in favour of direct liquefaction, there is



a compelling argument for making inroads into alternative fuels.

AECI's Ammonia 4 Plant is probably the world's only coal-based methanol producer, with a daily output of 60 kilolitres. And the chances of putting another plant on-stream, with a massively uprated output, appear good.

Since methanol and ethanol can be used to spark ignition engines, interest in their development seems assured. A study team at UCT, for example, is currently measuring emission levels of petrol blended with these alternatives as an extender.

There is also wide scope for developing methanol to fuel diesel engines. Since coal is more suitable for diesel production than oil, methanol, blended with improvers, could eventually come into its own, particularly for engines with high compression ratios.

The future of ethanol seems less assured. Ethanol is an alcohol produced as a by-product of the Sasol process or from renewable agricultural products such as sugar cane and maize. When sugar export prices are low — as they are now — interest is stirred in its commercial-scale production as a lead-free octane enhancer in petrol.

Indeed, the SA Sugar Millers' Association (SMA) is homing in on the advantages that could flow from a downstream ethanol industry. The SMA recently joined forces with the CSIR in an ethanol feasibilty project and dispatched a study team to Brazil — a world leader in alcohol fuels — to report on latest developments in alcohol fuel technology.

However, Rallis points out that stringent safeguards would have to be applied to a home-based ethanol industry to prevent a pull-pull situation with food production. "It's a question of fuel for engines or food for people," he says.

Despite past convulsions, nuclear energy is the clear frontrunner in the energy race

The rank outsider, it seems, in the energy race to ensure SA's future transport fuel needs supply appears to be oil itself. Soekor abandoned its on-shore search for oil in 1978, although there is some small-scale exploration in the eastern Transvaal for oil in shale deposits. According to the DMEA's latest annual report, however, the seams are thin by world standards.

For the next half-century at least, SA will continue to lean heavily on coal, with the large coal-fired power "blocks" dominating the generation scene before the inevitable switch to nuclear power.

Increasingly, it is becoming apparent that several areas of the energy economy (especially in the domestic sector) could be satisfied by alternative technologies. On paper, their potential looms large, although to what extent this route is paved with gold remains uncertain.

Such well-rocked hobbyhorses as solar energy, wave power, geothermal and biomass join the fringe circuit of alternative energy forms. But the list of improbables is long. Electric power from wave energy, for example, although successfully harnessed in France, is unlikey to pay off in the SA context.

Although the long-term potential of photovoltaic energy conversion is vast, official thinking, according to Tully, has written solar sources off as a dead letter for the moment. This is a pity.

Even in Britain's uncertain climate, British Petroleum (BP) has built a pilot 30 kW solar photovoltaic plant that feeds power into the central electricity grid. The information gleaned from the exercise, it's hoped, will help develop solar electricity in the developing world.

And harnessing solar power to the grid is an attractive energy foil to the spectre of worsening urban "rustbelts," forests caked with sulphur dioxide and the volatility — both real and perceived — of nuclear power.

While the technology options available to manufacturers are mushrooming, large-scale photovoltaic generation (devices which convert the sun's energy to electricity) is a costly and distant scenario. And given SA's cheap power, solar energy is likely to be a cash cow for the consumer until costs are brought in line with mainline power generation.

If large-scale alternative energy "blocks" seem a long way off, simple logic shows that the frontrunner in the energy race is nuclear power. Indeed it is estimated that the switch to nuclear power will have to take place before SA's coal reserves begin to run out, probably within the next 40-50 years.

While the scenario is a foregone conclusion, however, the reservations are many.

The fallout over Three Mile Island may have largely settled, but the accident was enough to temporarily mothball several plants under construction in the US and some, like Austria's Zwentendorf, to be permanently shelved. Koeberg, of course, has also had its share of teething problems; most recently in January when stainless steel pipes, suspected of having ferritic inclusions, caused Unit One to be shut down.

Added to these convulsions is the fact that the nuclear marketplace in the West is depressed — compared to the building drives in the Soviet Union, Japan and Comecon countries. The US, for example, appears unlikely to order another reactor until well into the next decade.

Escom manager (Nuclear) Peter Spencer believes this slow-down in growth will give the industry a much needed breather to concentrate on research and standardise reactor designs, like the mooted pressurised water reactor (PWR) at Sizewell in England. "The next half-century," he says, "will see the refinement and consolidation of existing technologies."

By the end of the decade, it is hoped, advances in PWR technology — spearheaded by Westinghouse and General Electric Corporation in the US, plus licensees in Japan — will lead to a more "forgiving" plant, with better efficiency and safety than, for example, light water reactors.

The fast breeder reactor is a longer term prospect. Spencer points out that severe economic penalties are being incurred by countries undertaking R & D work in this field. In France, for example, the fast breeder reactor has already lost some backing, with clear signals that Paris is putting the project on the back burner to concentrate on PWR development.

According to Spencer, at least one more local power station will probably have to be ordered before the century is out, which will almost certainly be situated, like Koeberg, on the coast. At this stage, however, plans have not been drawn up to site a new plant.

Progress at a brisker pace is being made in shoring up against the vagaries of enriched uranium supply. When the Atomic Energy Commision's larger plant comes on-stream, an estimated 300 t/year in separative work will be carried out.

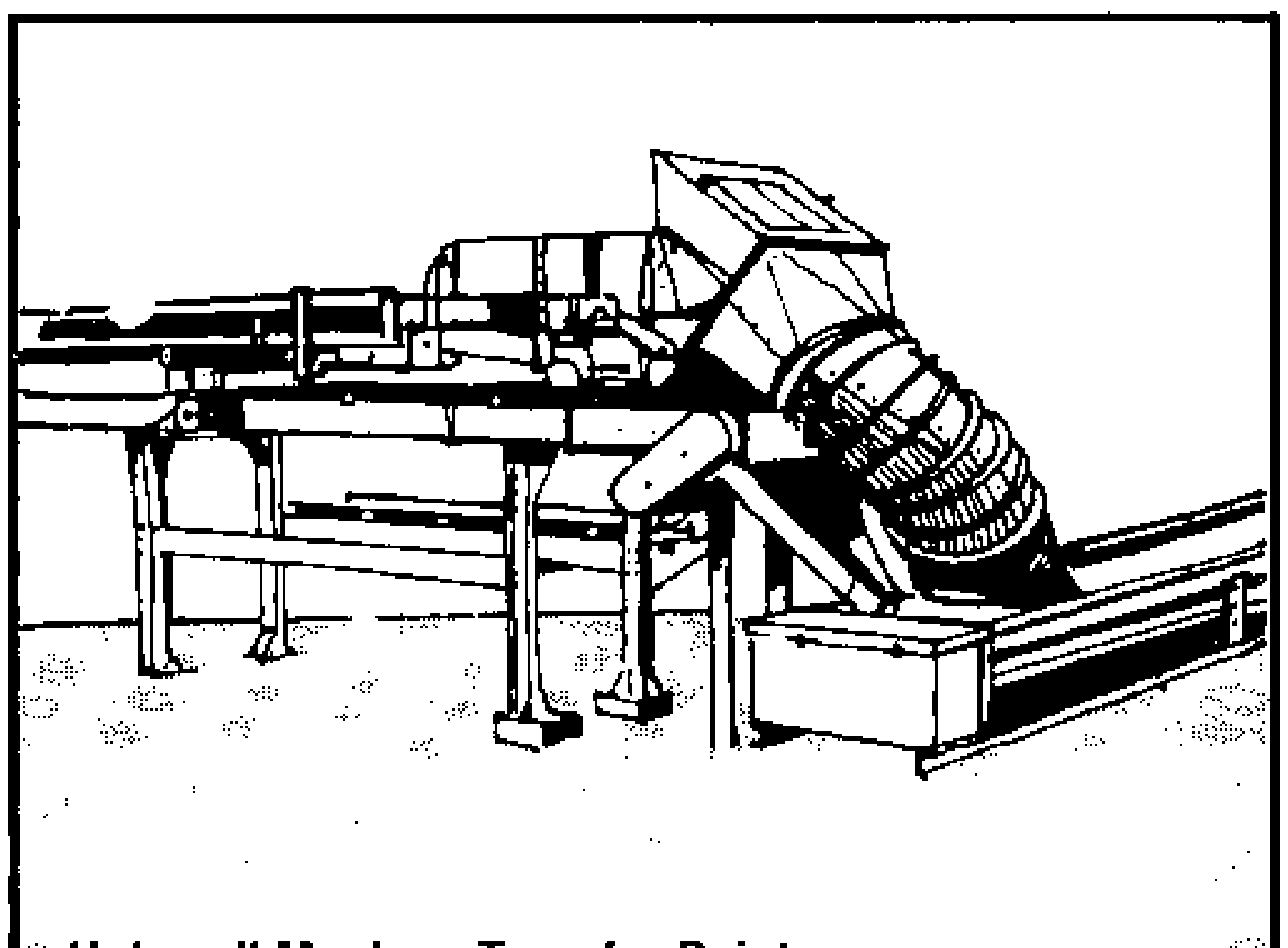
In 1978, Washington blackballed SA from tapping into US enriched uranium sources under contract to the DMEA. The upshot was that Escom had to find alternative supplies to get Koeberg operational.

Lastly, it is all too easy to overlook the energy needs of SA's Third World communities and research into so-called "appropriate" technology, such as firewood replacement.

The Human Resources Institute at UCT is testing firewood stoves which, it is hoped, will improve the utilisation factor 10 times.

Indeed, as Tully points out, here is a unique opportunity for SA to contribute to a global Third World problem — and to garner credit.

"With the Republic literally on the doorstep, it's a sad reflection that most pathfinding research into this area is being carried out in European universities," he says.



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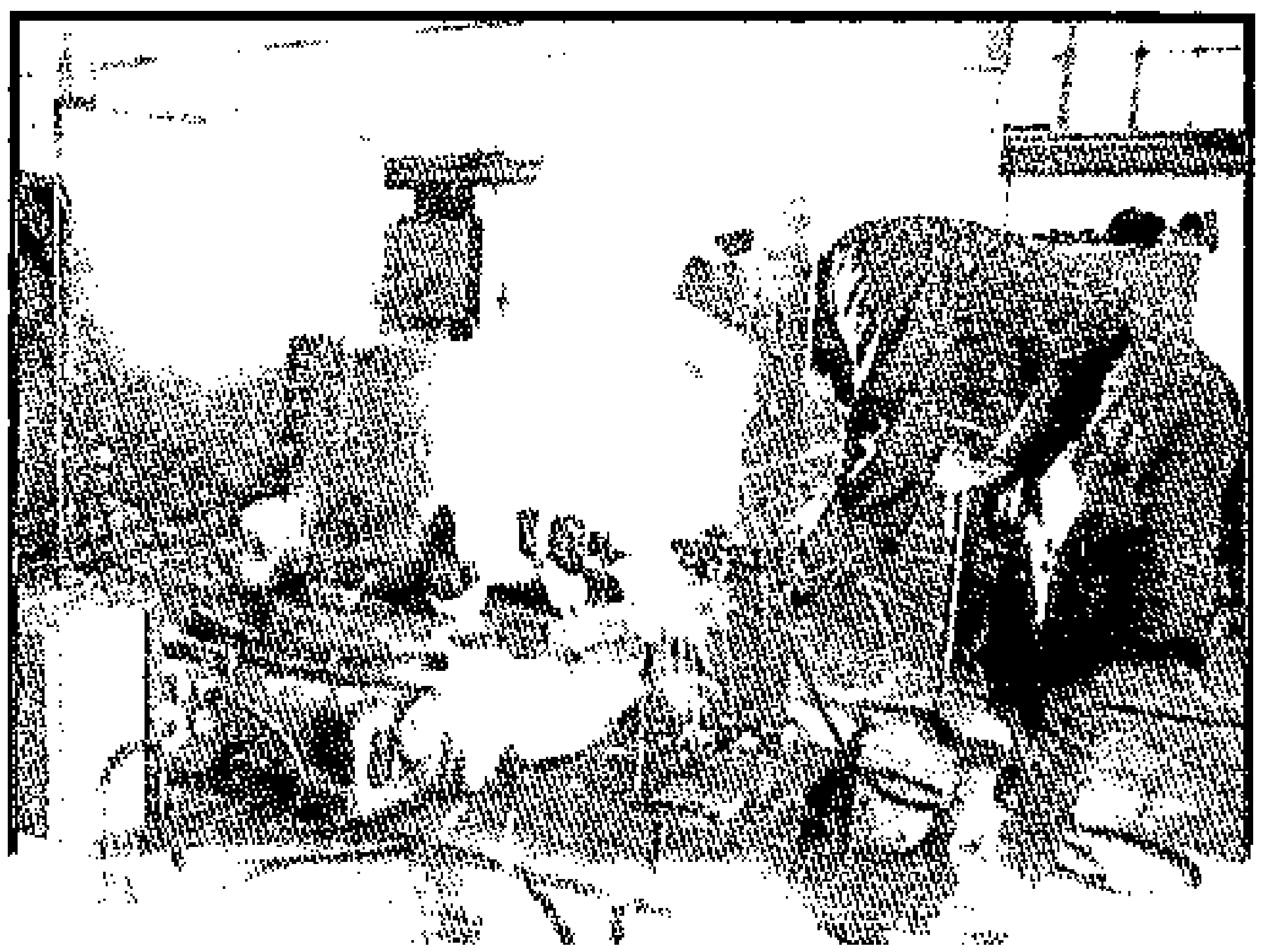

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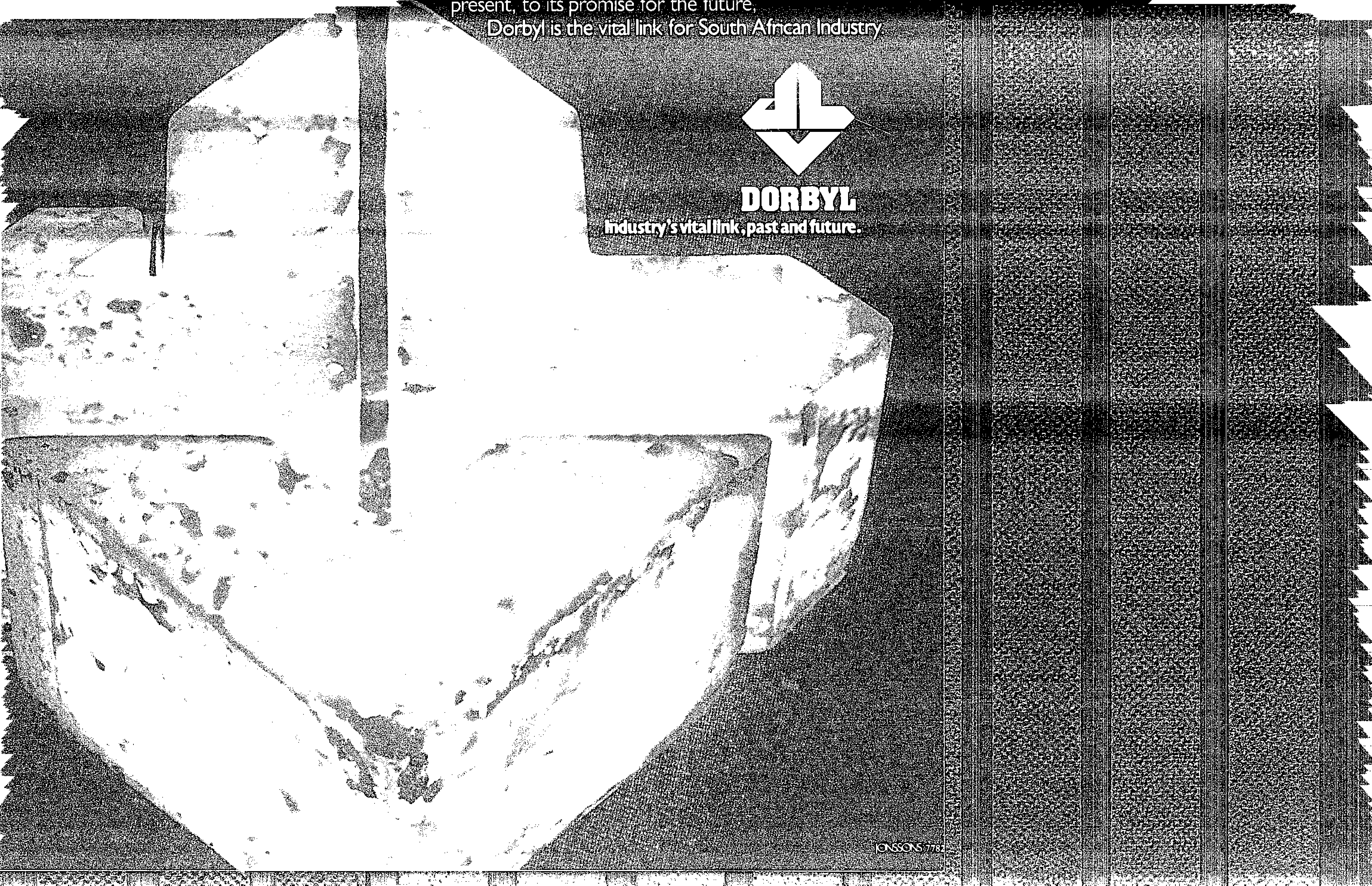
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New tariffs will benefit rural consumer

DISPATCH 19:08:85

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Dispatch Reporter

EAST LONDON — Escom's proposed new tariff structure would benefit most small rural consumers on the Border, the commission's head of power sales in the Eastern Cape, Mr Martin Opperman, said yesterday.

"Generally the small rural consumers will be about 20 per cent better off."

Not all such consumers, however, would benefit from the new tariffs that would come into effect from January 1 next year if Escom's proposals were accepted by the Electricity Control Board.

"In some cases these consumers will pay more than they are paying at present. It all depends on the circumstances of the individual user."

Mr Opperman said the new tariffs would hinge on two aspects relating to charges for Escom power. "Firstly, the different tariffs charged by the various undertakings around the country will be done away with. From next year one set of tariffs will apply and Escom will become a single undertaking.

"At the moment tariffs in the Eastern Cape are about 20 per cent higher than the lowest tariffs, which are charged in the Eastern Transvaal. We will be appreciably better off with a uniform set of tariffs for the whole country."

The new set of tariffs would affect both large and small consumers, and farmers.

"Secondly, the proposed new structure would do away with monthly extension charges for farmers. For many years Escom has been criticised by organised agriculture for these charges which are the commission's means of recovering capital expenditure."

The monthly extension charges would be replaced by a monthly capital charge, but Escom would recover most of its capital expenditure by way of tariffs. The tariffs would be slightly higher for small rural consumers.

"The practical effect will be that rural consumers who, on average, need less than 2 km of network for their supply, will pay no monthly capital charges.

"If more than 2 km of network is needed, the monthly capital charge will be calculated by taking into account the 'free' first two kilometres. The charges will therefore only be for distances over and above the initial 2 km."

The proposed new tariffs would, it was hoped, "open up the unelectrified areas of the country.

"Escom is expecting many applications for supply to come streaming in if the new tariffs are approved."

The proposed new structure, which was gazetted a week ago and advertised in national newspapers, is open for public comment.

19/8/85

260 5.5

Work starts on Soekor's head office

Tygerberg Bureau

WORK on the new R8-million head office for Soekor, the Government-financed oil exploration company, has started between the national road and Frans Conradie Drive in Parow.

The four-storey complex is expected to be completed in October next year.

A spokesman for Soekor said the reason for the move from the head office in Braamfontein, Johannesburg, was the centralisation of all functions of the company in premises nearer Soekor's operations.

GAS PROJECT

He said the possibility of the Mossel Bay gas project being launched soon was another factor which influenced the move.

The building will include a laboratory, basement parking for 80 cars and further on-site parking for 100 cars.

The spokesman said it was not yet possible to say exactly how many workers would be transferred to Cape Town. The building would probably accommodate about 400 people.

New fuel price rise threatens

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STAR **Mercury Correspondent** 22/8/85

PRETORIA—Another increase in the price of fuel — it would be the second this year — threatens if there is no substantial improvement soon in the exchange value of the rand, according to sources here.

Earlier this year, when he announced the 40 percent petrol price hike, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, warned of the threat of another fuel price hike later in the year.

In Pretoria yesterday the Director General of Mineral and Energy Affairs, Mr Louw Alberts, said the price increase announced in February had been based on a rand-dollar exchange rate of 50,5 c.

However, 'for quite a few months' the rate had hovered around 52 and 53 c.

'The result was we were able to build up our "slate" fund in the interests of the motorist', he said.

At this stage motorists had been paying a little more than they strictly should have been paying, but the excess had gone into the fund for their ultimate benefit.

'At present the fund is being used to support and maintain the current price and the motorist is actually now paying less than he should be paying for his petrol.'

However, when the fund was empty and there was no indication of a substantial strengthening of the rand, 'we will have to look at the situation again — we will have no choice', Mr Alberts said.

Other sources pointed out that last month and earlier this month, when the rand was steady above 50 c, there was strong speculation that the petrol price would be cut.

Mercury

The Government, according to departmental sources, had been eager to drop the price as soon as there was a reasonable possibility of the rand holding steady above 50 c.

However, 'the roof fell in' after President Botha's address in Durban last week.

The rand plunged below 38 c following strong adverse international reaction to his speech. Although it had recovered somewhat, if it continued at this low level the high dollar costs of crude would make an upward adjustment of the price unavoidable, the sources said.

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Govt must come clear

PFP to query Chiavelli ‘oil deal’ in House

B. Day 22/8/85

PETER WALLINGTON

THE PFP is to urge government in Parliament to reveal, once and for all, whether millionaire Marino Chiavelli had supplied oil to South Africa.

After last week’s out-of-court multi-million-rand settlement, between Chiavelli and Fontana Holdings’ MD Taki Xenopolous, PFP energy spokesman Brian Goodall says it is time for government to release more details on the case and on Chiavelli’s role, if any, in procuring oil for SA.

He adds that he will ask Mineral and Energy Affairs Minister Danie Steyn whether he stands by his statement — made in Parliament last year — that Chiavelli had not been involved in procuring oil for SA.

The Xenopolous-Chiavelli court wrangle, and the settlement, have been kept secret in terms of the National Supplies Procurement Act. The estimated cost of the settlement, including legal costs, is thought to have reached R150m.

Goodall says he will press for more details on the court case.

“Basically, we want to know whether Xenopolous was claiming commission on oil purchases and whether Chiavelli settled the case on that basis.”

Goodall says the PFP also wants to know whether SA’s oil supplies had been prejudiced, and whether it had lost any money in the deal.

“The secrecy surrounding the case has become counter-productive. There was a massive sum of money involved in the deal, and the public have legitimate questions which have not been satisfactorily answered” he says.

The advocate-general, Justice Piet van der Walt, said in his report to Parliament last year that, as far as he could ascertain, crude oil had never been sold to SA by Chiavelli or purchased by him on the country’s behalf.

Nevertheless, he said that Chiavelli “might possibly be a link in the chain of delivery but there is nothing except speculation to support this”.

In the report he said Fontana Holdings was claiming about R85m plus interest from Chiavelli on the grounds of an alleged agreement to pay commission. This would be payable, it was alleged, if Fontana could prove that Chiavelli supplied crude oil to SA.

He also said that once the court case had run its course, more evidence or information might become available.

Fuel price rise in the balance

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E. Post

22.08.85

From Page 1

then was 46,5 cents.

"In other words the prices were being carried to an extent of 4 cents," he said.

For quite a few months now the rate had hovered between 52 and 53 US cents, resulting in a "slate fund" having been built up for motorists.

At that stage motorists were paying more than they should have been, but the excess went into the fund for their ultimate benefit.

Last week, after President P W Botha's "letdown" speech at the Natal National Party congress in Durban, the rand plunged to below 38 cents, and has since recovered to just above 40 cents, which is way below the 50,5 cents set as a base in February.

"The amounts we used (in the 'slate fund') are obviously now being used up and if there is no indication of a substantial strengthening of the rand, we will have to look at the situation again.

"We may be talking not of years, but of a period in the order of months," Dr Alberts warned today.

Weak rand to hit fuel price?

AA

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Dispatch Correspondent

DISPATCH

PRETORIA — Another increase in the price of fuel — it would be the second this year — is threatened if there is no substantial improvement soon in the exchange value of the rand.

20:08:85

Earlier this year, when he announced the 40 per cent petrol price hike, the Minister of Mineral and Energy affairs, Mr Danie Steyn, warned of the threat of another fuel price hike later in the year.

Yesterday, the director general of mineral and energy affairs, Mr Louw Alberts, said the price increase announced in February was based on a rand-dollar exchange rate of 50,5c and "for quite a few months" the rate hovered around 52c and 53c.

DIAA

"The result was we were able to build up our 'slate' fund in the interests of the motorist."

"At present the fund is being used to support and maintain the current price and the motorist is actually now paying less than he should be paying."

However, when the fund was empty and there was no indication of a substantial strengthening of the rand, "we will have to look at the situation again" Mr Alberts said.

● The rand fell yesterday to a low of 39,6 US cents in a thin, nervous market but closed at 40 US cents.

(55) DISPATCH

AA discounts fuel price reports

23:08:85

Dispatch Bureau

JOHANNESBURG — The Automobile Association has discounted reports that the price of petrol will be increased unless there is a substantial improvement in the rand's exchange rate.

The AA predicts the price of petrol will come down before it goes up.

Mr Gideon van Oudtshoorn, manager of the public relations division of the AA, said yesterday that when the price of petrol jumped by 40 per cent in January this year, the Minister of Mineral and Energy Affairs had promised to cut the price of fuel "the moment the rand-dollar price stabilised."

"We are holding the minister to his promise," he said. "We may not be financiers but we do not believe the rand-dollar exchange rates will stay as low as they are for long."

The exchange rate is still hovering at 40 US cents to the rand.

The director-general of mineral and energy affairs, Dr Louw Alberts, said in Pretoria this week the price increase in petrol announced earlier this year was based on a rand/dollar exchange rate of 50,5c.

And while the motorist, for several months, was paying slightly more for fuel, it had been possible to build up a "slate fund" in his interests.

The situation had now been reversed and the motorist was paying less than he should for petrol. The fund, he said, was being used to support and maintain the current fuel prices until the rand strengthened.

But, while some sources speculate that the price of fuel will rise if the fund runs dry before the exchange rates improve, Mr Van Oudtshoorn believes political consideration will not influence exchange rates for long.

Petrol will come down by about 10 per cent a litre, he says.

"However, we will support a move to pay an extra two cents a litre for petrol if the government decides to abolish third party insurance and levy fuel instead," Mr Van Oudtshoorn added. "We believe a fuel tax will be fairer than increased third party insurance charges."

● The volatility of the rand on foreign exchange markets was again evident yesterday, with thin trading further aggravating movements of the currency, reports Sapa.

The rand, which hit a low of 39,60 US cents on Wednesday dropped further yesterday to a low of 38,50, before closing at 40,50.

Editorial opinion P17

Petrol: Same price

THERE is to be no immediate rise in the petrol price following the sharp drop in the exchange rate of the rand against the dollar, but the Government is watching the position carefully.

The Minister of Mineral and Energy Affairs, Mr Dânie Steyn, is expected to issue a statement to this effect within the next few days.

23/8/85

The rand has gone as low as 38 US cents and yesterday it was hovering around 39c.

The South African petrol price is based on a calculation assuming that the rand is worth 50 US cents.

Sowetan

Oil supplies are paid for in dollars. — **SOWETAN Correspondent.**

SS

ARGUS 23/8/85

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Major flaw in Koeberg emergency plan — Coogan

Municipal Reporter

ARRANGEMENTS for public safety following a nuclear emergency at Koeberg would be "quite unacceptable" in other countries, says Cape Town's medical officer of health, Dr Reg Coogan.

Dr Coogan's 1984 annual report, released yesterday, notes that in the event of a nuclear emergency at Koeberg ultimate responsibility for the health and safety of 1,5 million people up to 80km away lies with the operators of the plant. This is described as a "major flaw" in emergency planning.

"The financial implications for Escom could be awesome. A potential conflict of interest looms large," Dr Coogan says.

"The responsibility for public safety should rest with the highest independent State authority. This is the universal practice overseas. The present arrangement here would be quite unacceptable in other countries."

"Exercise"

Dr Coogan's report also says that although emergency exercises of "varying degrees of severity" were held during the year, the capability of the regional control to take over civil defence in the event of an emergency extending beyond the divisional council area towards the city "has not been demonstrated".

A 24-hour-a-day system of monitoring radiation from Koeberg, installed by the city health department in 1982 "to allay the fears of the general public", has been stabilised and calibrated in the past three years, according to the report.

Six continuous gamma radiation monitors placed in an arc across the boundary of the municipal area to monitor background radiation have shown "remarkably consistent readings" of between 100 and 110 millirems a year for the city. (These are normal levels of ambient radiation).

System of alarms

"In addition, a system of alarms has been installed so that if high or low radiation is monitored, the civil defence control centre, which is manned 24 hours-a-day, will know immediately and the necessary action will be initiated," the report says.

The city health department also checks six monitors installed by Escom "to ensure that monitoring by Escom is being carried out" and for comparison with readings with the council's own monitors.

Progress has also been made towards setting up another independent monitor on Robben Island.

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B. Day

27/8/85

Price control of oil must stay, warns Total

LAWRENCE BEDFORD

TOTAL is concerned at the prospect of abolition of price control in the oil industry.

An editorial in the August edition of its house journal, *Total in SA*, warns that de-control of fuel prices would also have to encompass the abolition of other controls on the oil industry.

It says there is a climate of encouraging free competition and a moving away from forms of control.

This would immediately open up a "hornet's nest of related problems":

☐ The principles of a free market with regard to the oil industry do not exist because SA does not have access to world markets;

☐ The future development of synfuel projects will be at risk in an environment of price instability, which would follow de-control of prices;

☐ Geographic pricing inconsistencies would develop, against the national interest;

☐ Cross-subsidisation would inevitably follow, with major retailers with diversified interests using petrol as a loss leader to the detriment of the average retailer;

☐ The viability of the small businessman would be seriously challenged;

☐ Concentration of power would increase, cancelling out any possible initial benefits.

The strategic nature of oil in South Africa and the absence of free access to work markets, coupled with the urgent necessity to develop our own indigenous production, have led to the comprehensive legislation, carefully developed over many years, as a safeguard in the national interest, says Total.

Chairman Alfonso Hough writes in a separate article in the magazine that the cost structure of fuels is strictly controlled by government and that this in turn simultaneously controls the profit margin on the oil companies as well as that of fuel retailers.

The rationale behind cost control is often not understood and often unfounded and ill-conceived criticism is directed at this form of control, Hough says.

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dence today at the mightiest financial centre on

bought newspapers on the way to work this morn-

Dealers who normally gather in front of the

would be welcomed.

Govt may decide today on timing of fuel hike

Pretoria Bureau

28/8/85

STAR

The Department of Mineral and Energy Affairs today repeated its warning that it cannot continue to stave off a petrol-price rise in the face of a consistently weak rand.

Indications are that a price increase is imminent after the rand's increasingly poor showing, and particularly in the light of its drop yesterday to around 35 US cents.

The Cabinet is expected to make a decision at its weekly meeting today on how much longer the Government can delay passing the increased imported cost of fuel on to the consumer.

Mr Theuns Burger, spokesman for the Department of Mineral and Energy Affairs, said the dwindling value of South Africa's currency had put the authorities in "a very precarious position".

He indicated that an increase would become unavoidable if the rand continued to flag after the Johannesburg Stock Exchange resumed trading on Monday.

The authorities, he said, would be watching the situation closely and if it continued at present levels, there would be no option but to raise the fuel price.

However, Mr Burger declined to comment on how big the increase could be. There has been speculation that it may be as much as 10c a litre.

Earlier this year, motorists had to budget for a 40 percent rise in the petrol price.

When that came into effect, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, warned that another increase might be necessary this year.

However, just last month there were reports that a firming of the rand meant the price could be cut. These hopes appear now to have been dashed.

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Petrol price rise worries motorists, says the AA

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Sowetan 29/8/85

THE Automobile Association was being inundated by phone calls from motorists who were up in arms at the possibility of a further increase in the price of petrol, a spokesman for the AA said yesterday.

He was commenting on a statement by the director-general of Mineral and Energy Affairs, Dr Louw Alberts, that an increase would become necessary when the stabilisation fund was exhausted.

This fund had been strengthened by the improved rand/dollar exchange rate until recently, when the rand began dropping, Dr Alberts said.

"The 40 percent increase in the price of petrol in January this year, followed by a further two percent increase in GST shortly afterwards, shocked and dismayed motorists," the spokesman said.

"The Minister of Mineral and Energy Affairs, Mr Danie Steyn, said at the time that the increase was an interim measure that would be reviewed when the rand-/dollar exchange rate stabilised. When this happened recently, he repeated his promise but did not reduce the price."

Concern

The spokesman said the commitment that linked the retail price of Sasol fuel to that of petroleum derived from crude oil was "unfortunate" in that it deprived motorists of the choice of buying fuel from indigenous resources not affected by the rand/dollar exchange rate.

"The exorbitant inland pipeline charge of 6,5 cents a litre also remains a matter of serious concern to the AA and should receive urgent attention by the Government as the tariff is many times the actual cost of providing the service.

"If the pipeline charge was reduced now, it would serve to cushion the effects of the fuel price related to the rand/dollar exchange rate and the possibility of a further increase mentioned by Dr Alberts."

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DISPATCH

31/08/85

Escom tariffs up 10pc from September

Dispatch Correspondent

JOHANNESBURG — Escom has announced an average increase of 10 per cent in electricity charges with effect from September.

Escom estimates that together with the increase announced in January this year, the price increase for the year as a whole will be approximately 15 per cent and, as such, will not further increase the present rate of inflation.

Announcing this yesterday, Mr John Maree, Escom's new chairman, said the need for a further 10 per cent increase in the middle of 1985 had been foreseen when the last 10 per cent rise was announced in January.

The projected mid-year increase had been deferred for two months to enable the newly-appointed Electricity Council and Escom's management board to give due consideration to the utility's financial needs. The delay in implementing this new price had saved consumers nearly R100 million.

Mr Maree said all the main electricity consumer groups were represented on the Electricity Council and were party to the decision.

Electricity Council and the management board were taking a hard look at Escom's capital programme and its financing needs in the context of the rapidly changing financial environment, which is affecting the whole of South Africa at present, he said.

With the risk of more restricted access to overseas sources of capital, and therefore greater pressure for funds in the local capital market, Escom has to generate higher levels of income to cover its expenses and the cost of servicing its borrowing, and to create a cash source to contribute towards financing its expansion.

"It is essential that Escom contributes from its own cash resources some of the money needed to finance its already committed capital projects," Mr Maree said.

"Escom is a large foreign borrower, and in the current climate, we have to hedge against the risk of overseas sources of funds running dry, as also the increasing cost of those funds. Up to now we have not had serious problems, but we have to take a long-term view," he said.

Mr Maree said Escom's management was busy with a major efficiency drive and would shortly be embarking on a campaign to persuade electricity consumers to conserve their usage.

"In all-out planning we have to be able to meet the growth in the demand for electricity," he said.

Farmers reassured P14

AA firmly against fuel rise in present system

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The Automobile Association strongly opposes any petrol increase which retains the existing structure of pipeline charges, taxes and levies on the inland price of fuel — which makes up about about a third of the present 90,1 cents a litre.

In a statement, an AA spokesman, reacting to persistent rumours of an imminent increase in the petrol price to at least R1 a litre, also expressed concern with the windfall profits which Sasol would derive from the nation's plight.

STAR

"The current foreign exchange situation is without precedent in our economic history and the steps now being taken to temporarily suspend foreign exchange transactions will hopefully staunch the run on our currency," he said.

31/8/85

"However, if the Government is serious about containing inflation, flexibility should be shown in the petrol price structure."

The spokesman said the current share price and level of activity on the Johannesburg Stock Exchange for Sasol shares was indicative of the market's expectations that this counter would yet again make windfall profits on the back of the nation's woes.

He said Sasol's petroleum industry, to a large extent, was created from the tax imposed on fuel — whereafter it was privatised.

"The association has no objection to the investor deriving reasonable profits, but viewed against the background of relatively small increases in operating costs, with fairly constant demand, the benefit it enjoyed from huge increases in the landed cost of fuel because of the weakness of the rand should not accrue to the shareholder in full."

The AA proposed a levy on Sasol's profits to boost the stabilisation fund as a cushion against fuel price increases arising from currency fluctuation in the short term.

Petrol price may rise soon

[illegible]

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E Post

05/09/85

PRETORIA — The price of petrol would have to go up soon if the dollar-rand exchange rate did not improve, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said today.

Speaking to reporters after a meeting in Pretoria of Energy Ministers of the Transkei, Bophuthatswana, Venda and Ciskei states, he said funds the Government had available to "cushion" the impact of a price increase to the consumer were exhausted.

"If the dollar-rand exchange rate does not improve soon, there will have to be a price increase," he said.

Mr Steyn declined to say specifically what exchange rate would be required to prevent an increase, but pointed out that the present price of fuel was based on a rate of 50 US cents to the rand.

This is a figure the rand has not seen for a long time.

Mr Steyn emphasised that any change in the price of petrol had to be approved by the Cabinet, which is scheduled to hold its next meeting on Wednesday.

He declined to comment on speculation that a price rise could be announced next week. — Sapa

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Petrol price up at weekend

E·POST 06/09/85

PRETORIA — An increase in the petrol price would be announced this weekend, but the increase might not come into effect for several days, Government sources said today.

They said the rise was likely to be as little as 5c or 6c a litre, but it could be the first of a series of fuel price increases in the coming months. Sources said this would minimise disruption and avoid a rush by motorists.

Thus the announcement would be far less spectacular than the one earlier this year, when fuel prices jumped by nearly 40%. — Sapa

Govt expected

d to announce increase of about 5c a litre

Price of

petrol to go up?

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by

Sue Leeman, Pretoria Bureau

STAR 7/9/85

The Government is expected to announce an increase of around 5c a litre in the price of petrol this weekend.

The new prices — about 95c a litre for premium and 93c a litre for regular — will probably come into effect early next week.

Although the expected increase, just under five percent, can be considered modest, it may well be followed by further hikes if the rand continues its weak performance of recent weeks.

This weekend's announcement will bring to an end weeks of speculation about an increase.

Government officials have repeatedly warned that a price rise was unavoidable due the falling rand. Unless the rand/dollar exchange rate stabilised at about 50 US cents per rand, they said, a petrol price would be inevitable. The exchange rate is now averaging about 38 US cents.

All fuel transactions in South Africa, including those involving Sasol, are conducted in dollars and the falling rand has increased the wholesale price of fuel by an average of 12 US cents a litre in recent weeks.

The petrol stabilisation fund — intended to cushion the consumer against the effects of import price fluctuation — has become depleted in recent months as the rand has steadily weakened and dropped below 40c.

The Cabinet is known to have approved a price increase at its weekly meeting on Wednesday and the department has since been working out the details.

Fuel price rise is forecast

Mercury 7/9/85

55 **Mercury Reporters**

THE Department of Mineral and Energy Affairs is expected to announce a fuel price increase this weekend. The increase is to help in losses incurred by the depressed rand.

It is understood the Cabinet approved the rise earlier this week.

But sources in Pretoria said the expected increase might simply be the first in a series of rises in coming months.

They said the authorities wanted to minimise disruption and avoid a rush to the fuel pumps.

One source said: 'We want to give people ample time to adjust.'

Transkei and Ciskei increase price of fuel

[illegible] [illegible] [illegible] SS

DISPATCH 10/09/85

EAST LONDON — Ciskei and Transkei have also increased the price of fuel.

In a statement from Umtata, the Transkeian Minister of Works and Energy, Mr G. T. Vika, said the increase was because of the rand/dollar exchange rate, which was at present 38c to the dollar.

Mr Vika who issued the statement on behalf of Transkei's Minister for Planning, Commerce, Industry and Tourism, Mr Ramsey Madikizela, who is on a European tour, said the hike followed a similar move in South Africa.

He said the future price would depend entirely on the strength of the rand against the dollar.

He explained that 98 octane petrol had increased from 86,76c per litre to 91c a litre; 93 octane petrol would go up from 83,40c per litre to 87,70c per litre.

He said diesel, which had cost 84c a litre, would now cost 88,30c a litre.

In Bisho the Director of Communications, Mr Headman Somtunzi, said that with the exclusion of the general sales tax in the fuel price structure the increase in all Ciskei outlets was 4c a litre for petrol and diesel.

He said he hoped Ciskeian fuel users would view the increase as an unavoidable measure and would not lose sight of the government's endeavours to probe ways and means to neutralise the ever-rising cost of fuel acquisition.

10/09/85 DISPATCH

EL consumers to pay more for electricity

EAST LONDON — The city's 58 000 electricity consumers can expect a nine per cent hike in power they have used from September 1.

Last night the action committee gave the go-ahead to apply to the Electricity Control Board to implement the hike.

This was confirmed by the chairman of the action committee, Mr Donald Card.

The hike follows a 10 per cent increase announced by Escom. It came into effect on September 1.

Mr Card said the nine per cent hike would be effected by means of an increase of the present surcharge from six per cent to 15,5 per cent.

He said the Escom announcement had meant an additional R2,3 million had to be found for the 10-month period of the present financial year.

It had to be passed on to the consumer.

"Obviously we don't like burdening the already over-burdened consumer more, but as you can see, we had no alternative," Mr Card said.

The Escom increase followed an increase in January. The new hike brought the increases for this year to 15 per cent.

Escom said a hard look was being taken at its capital programme and its financial needs in the context of the rapidly changing financial environment which was affecting the whole of South Africa.

Before the January increase, the city council said the scheduled increases following the Escom hike would be less than five per cent.

Two amendments to the electricity tariffs made this possible. The first amendment came with the amalgamation of the Border and Orange River Escom undertakings and the second through Escom's announcement of various increases for different parts of the country.

Increase in PE's power tariff likely

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~~244~~

Municipal Reporter

PORT ELIZABETH consumers may pay more for electricity from next month.

E Post

A 5,1% tariff increase was accepted by the City Council's Works and Traffic Committee at its monthly meeting yesterday.

11/09/85

And if the Administrator approves a further increase, consumers can expect to pay an overall 8% more for electricity in the next few months.

In a report, the City Electrical Engineer, Mr Charles Adams, said Escom had announced a 10% increase in the electricity tariff on August 30 and he recommended that a surcharge of 8% be applied.

The committee chairman, Mr Frikkie Kotze, said the local economic situation had deteriorated and instead of a 2% sale increase, a 2% sale decrease could be expected.

The municipality was not permitted to go over the 5,1% surcharge without the approval of the Administrator, he said.

A decision on the price increase will be made by the City Council before the end of the month.

Port Elizabeth may get its own Koeberg

(55)

DISPATCH 12/09/83

Dispatch Correspondent

PORT ELIZABETH — Two areas near here have been earmarked as potential sites for South Africa's second nuclear power station, the Electricity Supply Commission (Escom) announced yesterday.

The site west of Port Elizabeth stretches about 60 kilometres along the coastline from the Tsitsikamma River mouth to Cape St Francis, and is 18 kilometres deep. The second site under consideration in the area is bounded by the Sundays River mouth and Cape Padrone. It is also about 18 kilometres deep.

Seventeen other coastal sites, which were not identified, will also be investigated by Escom in an R8-million, six-year search which starts with the Port Elizabeth sites next month.

Escom's assistant senior general manager, Mr Lood Rothman, stressed at a press conference here yesterday that a decision to build a second nuclear power station had not been taken yet.

"However, it is clear that at some stage in the future more nuclear power stations will have to be built to meet electricity needs, and we must ensure that sites are identified and reserved for future use."

He said that after suitable sites had been identified they would be "put in cold storage pending further decisions. We would be looking at another nuclear power station at the end of the century."

He confirmed that a site for a second nuclear power station would have to be identified by 1988 if it were to be commissioned before the year 2000.

The projected cost of constructing a second station was estimated at about R7 000 million.

Escom officials said market conditions would determine whether the new project would be undertaken on a turnkey basis — as with Koeberg where a French consortium had been contracted. Civil works comprising 20 per cent of the Koeberg project were undertaken locally.

The sites under consideration in the Eastern Cape embrace about 62 properties. Most of the site east of Port Elizabeth belongs to the Department of Forestry, while the site to the city's west is largely privately-owned.

Asked about the economic wisdom of a second Koeberg, given the unfavourable exchange rate, the current recession and a projected decline in demand for power, Mr Rothman said alternative sources of energy had to be investigated irrespective of the state of the economy.

The cost of generating power at Koeberg is an estimated 300 per cent higher than the cost of power from coal-fired stations. However, Escom believes that energy from coal will become expensive as resources diminish, while nuclear power will get cheaper.

At current consumption rates, South Africa's coal reserves will last more than 450 years.

Price of oil and grease up

13/9/85

Motoring Editor

THE price of lubricating oil and grease went up on Monday, the same day the price of fuel was increased by 4,5 c/ℓ.

Lubricating oil went up by 17 c/ℓ and grease by 14 c/kg.

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The increase was not a Government one as unlike the fuel price, oil and grease are not controlled and price increases are decided by the oil companies.

An industry spokesman said yesterday that the increases were because the price set earlier this year had been based on an exchange rate of $0,465 to the rand. The rand had dropped to much lower levels, necessitating the increase.

Mercury

Sasol fuel subsidy to hold price urged

(55) S. Times 15/9/85

By Ciaran Ryan

SASOL may be asked by the Government to subsidise the cost of imported fuel if the rand continues to decline.

Such action would help to keep price increases to a minimum — or avoid them.

Sasol's policy of parity pricing — charging the same as imported fuel — has enabled it to justify a 50% price increase in fuel since January this year. But there has been no significant change in Sasol's production costs.

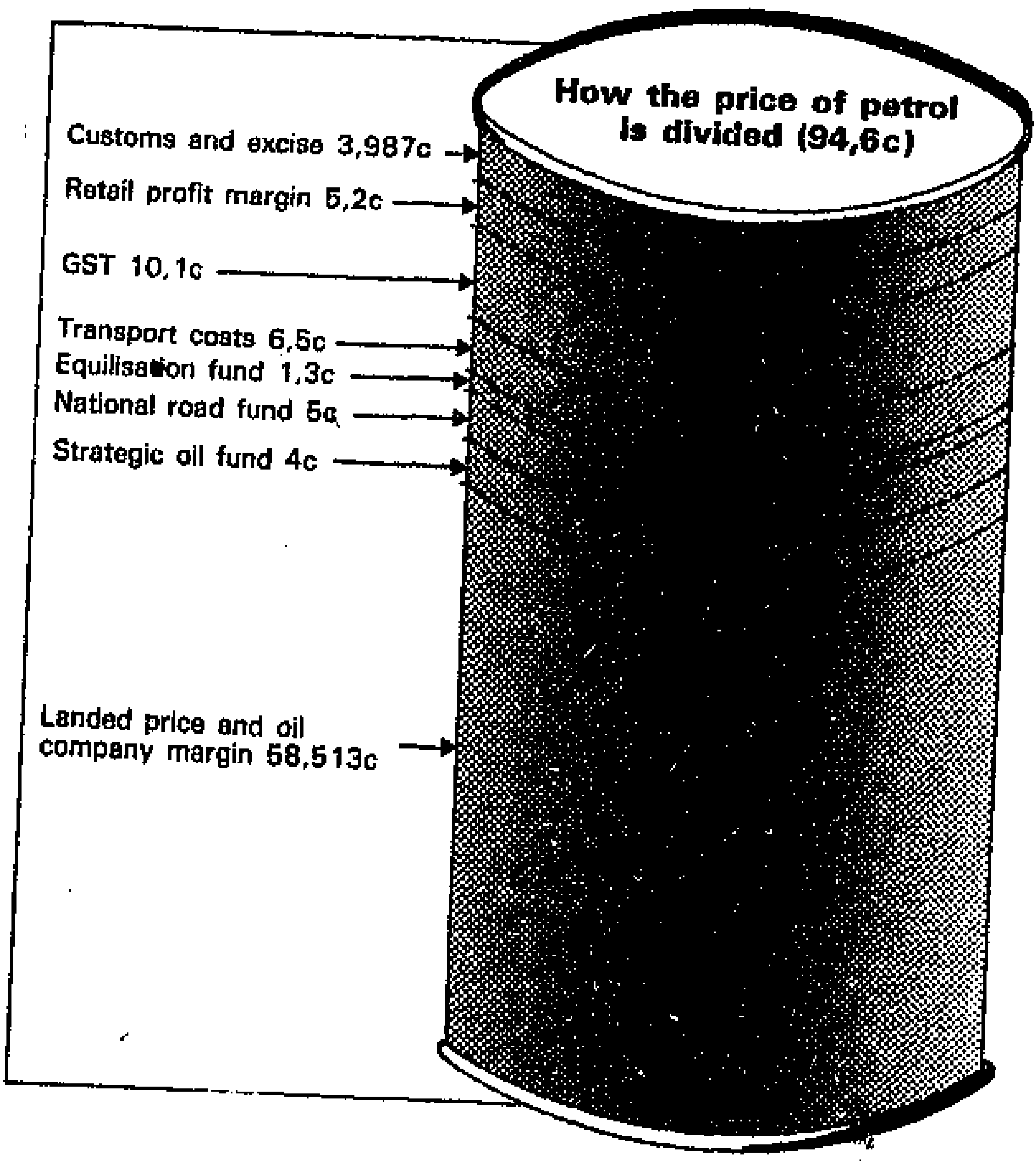
Christmas

Price increases could be avoided if Sasol subsidise SA's fuel bill out of its galloping profits.

Price increases in imported fuel are likely before the end of the year if the rand refuses to budge from US$0,40.

The Director-General of the Department of Mineral and Energy Affairs, Louw Alberts, told Business Times: "If the rand does not recover we may be forced to increase the price of fuel again this year.

"If this happens we may have to start talks with Sasol and other oil companies to see if they can make a contribution to the needs of the country."



How the cost of a litre of petrol is divided

At an exchange rate of US$0,40, another 5c/l may be slapped on the price of imported fuel before Christmas. It is possible that Sasol may be called on to contribute 1c or 2c a litre to the equalisation fund which was set up to smooth out the effect of exchange-rate fluctuations on oil imports.

A spokesman says Sasol is not making exorbitant profits. The company has only recently reached the position where it no longer needs protection and a subsidy of 4,5c/l was removed earlier this year.

"Sasol did not ask for extra protection when it had to contend with an overvalued rand worth US$1,20.

"It is also obvious from our recently published financial results that at these prices, Sasol earns only a relatively moderate return on investment."

The Government appears to have moved to a policy of free-market pricing for fuel.

Dr Alberts says: "Fuel prices will be adjusted much more rapidly in future in response to exchange-rate movements.

"We want to avoid a situation, such as we had in January this year, where we held out as long as possible before announcing a 40% price increase."

Reserves

Last week petrol prices went up by 4,5c/l to 94,6c/l — an increase of 5%. Diesel prices for road users increased by 4,5c/l, for industrial use by 2,9c/l and for bus transport by 4,7c/l.

The price of diesel for agricultural uses was not increased. Illuminating kerosene for industrial use rose by 6,9c/l.

Petrol went up by 40% in January based on an exchange rate of US$0,5015 when the exchange rate was actually US$0,465. The difference was subsidised by the sale of a small amount of SA's oil reserves.

Petrol likely to cost R1 a litre

[redacted]

Pretoria Bureau

[redacted] 55

The long-expected increase in the petrol price will almost certainly be announced in the next few days and motorists may find themselves paying in the region of R1 for a litre of premium petrol.

There is new speculation that the increase will be the first of several small price rises to be staggered over the coming months depending on the performance of the rand.

6/9/85

The Department of Mineral and Energy Affairs will issue a statement on the fuel situation this afternoon but, as the authorities are being cagey over the matter, the statement will be embargoed for 2 pm tomorrow.

STAR

The Government has made repeated warning noises recently to the effect that, if the rand/dollar exchange rate did not stabilise at about 50 US cents, a petrol price rise would be unavoidable.

That rate has now plummeted to an average of about 38 US cents.

The Cabinet is understood to have approved a price increase at its weekly meeting on Wednesday and the department has since been working out the details.

The petrol stabilisation fund — which is intended to cushion the consumer against the effects of import price fluctuation — has been depleted in recent months with the steady weakening of the rand to below 40 US cents.

Sept clipping

Petrol price expected to hit R1 a litre next week

Mercury Correspondent

PRETORIA—The Cabinet is expected to approve a petrol price increase — it could be raised to a rand a litre — at its meeting in Pretoria next week.

A point has been reached with the rand trading at less than 40 U S cents where the drained stabilisation fund can no longer support the present price.

The fund is based on an exchange rate of 50,5 U S cents to the rand.

The battered rand means that currently South Africa is paying about R2,60 for a dollar's worth of oil.

Minister of Mineral and Energy Affairs Danie Steyn said last week that funds to hold the price at the current level were limited and a price rise would have to be considered if the rate remained low. 55

Around June, when the exchange rate stengthened to more than 50 cents, a small price reduction became possible.

However, it was decided instead to increase the contribution to the National Road Fund to 5 c a litre on petrol.

The Government, Mr Steyn said, had learnt a costly lesson earlier this year in delaying a price rise.

Government sources said that even before foreign exchange dealings were blocked a decision had been taken to raise the petrol price.

However it was decided to delay an announcment until the impact on the rand of the loan repayment freeze could be measured. Mercury

It seems clear now that no spectacular recovery of the rand can be expected. 6/9/85

PFP finance spokesman Harry Schwarz said any increase would be a serious blow to the anti-inflation campaign.

Cape Times 6/9/85

Fuel price increase 'inevitable'

1/55

Motoring Editor

OIL COMPANY spokesmen in Cape Town yesterday said it was inevitable that the price of petrol would go up because of the rand/dollar exchange rate.

Speculation is that the price will jump by about 14 cents from 86 cents to more than R1 a litre. It will be the first time in South Africa that the price has gone over the R1/ℓ mark and will put this country in line with most other countries in the world.

Only 10 years ago petrol cost 10 cents/ℓ. If the price does go above R1 this week it will mean a 1 000 percent increase in the past decade — certainly the most expensive commodity which the public has to buy on a weekly basis.

Service station operators were in the dark yesterday as to when the increase would occur. However, they said they had contacted their bank managers on their overdraft facilities and had placed orders with the oil companies to fill their tanks as soon as possible.

The average petrol load is 25 000 ℓ so full tanks at the old price at the time of the increase can mean a considerable profit to the operator.

Sapa reports from Pretoria that the Minister of Mineral and Energy Affairs, Mr Danie Steyn, yesterday said the price of petrol would have to go up soon if the dollar/rand exchange rate did not improve.

'Cushion' funds exhausted

Speaking to reporters after a meeting in Pretoria of energy ministers of Transkei, Bophuthatswana, Venda and Ciskei (TBVC) states, he said funds the government had available to "cushion" the impact of a price hike on the consumer were exhausted.

Mr Steyn declined to say specifically what exchange rate would be required to prevent an increase, but pointed out that the present price of fuel was based on a rate of 50 US cents to the rand, a figure the rand has not seen for a long-time.

Mr Steyn emphasized that any change in the price of petrol had to be approved by the Cabinet, which is scheduled to hold its next meeting on Wednesday.

The minister declined to comment on speculation that a price hike could be announced next week.

Replying to another question, he emphasized that the by-elections on October 30 would not delay the announcement of any increase.

985

Big run on petrol pumps

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Mercury Reporter

SPECULATION before the weekend that a petrol price rise was imminent caused a run on pumps from Friday evening that left at least one garage's pumps dry by Sunday.

But an irate Bluff resident has alleged that the garage owner closed his pumps at the weekend to cash in on the 4,5 c/ℓ price rise effective from today.

Yesterday the resident, who does not wish to be named, described how he had gone to the Bluff Service Station to fill his car, only to see three of the four pumps covered with signs saying the pumps had 'run dry'.

A spokesman for the garage has denied the allegations, pointing out that the pumps ran out on Saturday evening 'after we had served queues and queues of cars throughout the night'.

Yesterday morning only one pump was still operative.

The average increase of 4,5 c/ℓ was announced at the weekend in spite of the fact that the last petrol increase was only seven months ago.

Dr Louw Albert, Director General of the Department of Mineral and Energy Affairs, said the increase 'largely reflects the effect of the exchange rate'.

The increase in the pump sales of all octane petrols is inclusive of sales tax.

9/9/85

Diesel fuel for road users will also increase by 4,5 c/ℓ and by 2,9 c/ℓ for industrial purposes while for bus transport purposes the increase is 4,7 c/ℓ.

Mercury

Meanwhile Mr Dave McNaught, an independent candidate for the Port Natal by-election, has labelled the price rise 'alarming' and called for an immediate inquiry into the Government's Sasol production plans.

They were originally designed to buffer South Africa from the fluctuations on the foreign market and should by now be producing some 60 percent of the country's fuel needs from coal, he said.

He challenged the Government to justify the current increase and predicted that South Africans were in for further shocks.

The signs at the centre of a controversy.

Petrol price goes up 4,5c a litre from today

Pretoria Bureau

Motorists, already hit by other travel cost increases, will pay 4,5c a litre more for all grades of petrol and diesel sold at the pumps from today.

The Department of Mineral and Energy Affairs has warned that further rises can be expected if the rand fails to recover.

It is feared that these increases — coupled with price rises for other consumer items — could further retard any decline in the inflation rate.

From today the price of premium petrol will be 94,6c a litre while regular petrol will sell at 92,2c.

The rise comprises a wholesale price increase of 4c a litre plus GST of 0,5c a litre.

The wholesale price of diesel to bulk buyers has been raised by 3,8c a litre and diesel bought for agricultural purposes is up by 2,9c a litre. Bus transport companies will pay 6,9c a litre more for diesel.

The Director-General of Mineral and Energy Affairs, Dr Louw Alberts, said that after January's 40 percent price increase it had been decided increases should be implemented more regularly.

He said the increase had been kept to a minimum — only 5 percent despite a 21,5 percent increase in the rand price of crude oil since January.

An AA spokesman said that although the increase looked modest it had to be seen against the background of rising motoring costs.

● The price of bread could increase again in October. The Wheat Board is understood to have asked for a 10 percent increase in the producer price of wheat.

● See Page 6.

STAR

9/9/85

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Site for nuclear plant sought near PE

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E Post
11/09/85

By MARTIN STRYDOM

AN R8-million countrywide search for future nuclear power station sites will begin in areas west and east of Port Elizabeth next month, Escom said today.

The search will start in the area west of PE and takes in the stretch of coast from Cape St Francis to the Tsitsikamma River.

The second area will be an area east of PE, from the Sundays River mouth to Cape Padrone.

The sites, which will extend nine kilometres inland and nine kilometres into the sea, are two of 19 coastal sites isolated for investigation by Escom.

The announcement was made at a Press conference in PE.

Mr Lood Rothman, assistant senior general manager of Escom, said: "We must stress that no decision has yet been taken to build a nuclear power station."

He said it was clear that at some stage in the future more would have to be built and "basic prudence dictates that viable sites should be identified and secured as early as possible".

"A particular site within the finally selected area will only be chosen when the decision to build the nuclear power station is taken," he said.

After such a decision is taken, it will take about 13 years to build a nuclear power station and bring it on stream.

The 19 areas, which have been isolated after an initial countrywide survey, are to be subjected to more detailed examination, including exploration, drilling and exhaustive examination of enviromental implications.

Dr Dennis Toens, head of the geological section of the Atomic Energy Corporation, said they would be opening an office in Humansdorp next month.

"We will be working south of Humansdorp initially," he said.

Investigations of the various areas should take up to two years and Escom said it would keep the public informed of general progress.

A team of Escom executives will also be discussing the project with various individuals and groups in the Eastern Cape during the next two weeks.

Mr Louis Koch, chief director of the East Cape Development Board, who chaired the meeting, said that if the tests were positive he would support the building of a nuclear power station in Region D.

● Mr Rothman said in a statement that Escom did not believe that the recent limited sanctions imposed on South Africa by the United States would hamper its plans.

Mercury

11/9/85

(55)

Nuclear power for 'ideology' says lecturer

Pietermaritzburg Bureau

NUCLEAR power in South Africa was uneconomical but was being developed for 'ideological' reasons and at the expense of the country's general well-being, Mr Thomas Auf der Heyde of Koeberg Alert said here yesterday.

Speaking on the local university campus Mr Auf der Heyde, who is also a lecturer in chemistry at the University of the Western Cape, said nuclear power would lead to centralised and capital intensive industries which would need minimal numbers of workers to operate.

Mr Auf der Heyde said the development policies of the Government tended to cater for the country's First World needs while neglecting the Third World problems.

He said that according to Mr Jan Smith, chairman of Escom, nuclear produced electricty was about twice as expensive as that produced from coal.

'The nuclear industry will put nuclear weapons within the State's reach and help create unhindered economic expansion within the framework of a siege economy,' he said.

A nuclear concern group to monitor and create awareness of the nuclear 'threat' in South Africa was established in Pietermaritzburg after Mr Auf der Heyde had spoken.

variety of implements South Africa."

CA TnH 12/11/85

(55) [illegible]

Second Koeberg to be on E Cape coast?

Own Correspondent

PORT ELIZABETH. — Two areas near here have been earmarked as potential sites for South Africa's second nuclear power station, Escom announced yesterday.

The first site under consideration stretches about 60km along the coastline from the Tsitsikamma River mouth to Cape St Francis and is 18km deep. The second site is bounded by the Sundays River mouth and Cape Padrone and is also about 18km deep.

Seventeen other coastal sites, which were not identified, will also be investigated by Escom in an R8 million, six-year search which starts next month.

Escom's assistant senior general manager, Mr Lood Rothman, said the decision to build a second nuclear power station had not been taken yet.

"However, it is clear that at some stage in the future more nuclear power stations will have to be built to meet electricity needs.

"We would be looking at another nuclear power station at the end of the century," he said, adding that the public would be informed of the investigation's progress because of the "greater sensitivity that exists towards nuclear generation".

The projected cost of a second station was estimated at R7 000 million.

Investigation of both sites, which starts next month and will take about two years, will include exploration drilling and "exhaustive examination of environmental implications".

Escom expects that future projects will be modelled on Koeberg, which has two 920 megawatt reactors.

Asked about the economic wisdom of a second Koeberg, given the unfavourable exchange rate, the current recession and a projected decline in demand for power, Mr Rothman said alternative sources of energy had to be investigated irrespective of the state of the economy.

R8m, 6-year search for S A atom-power station sites begins

13/9/85

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Mercury

Mercury Reporter

An R8 000 000, six-year search for South Africa's future nuclear power station sites begins in October, Escom said in a statement yesterday.

Escom said it planned to keep planning authorities — and the public — fully informed.

Although 19 coastal areas had already been selected as 'candidate areas,' an Escom spokesman was yesterday unable to confirm or deny speculation that one of the sites under consideration was a spot near Zinkwasi, at the mouth of the Tugela River in Natal.

'We must again stress that no decision has yet been taken to build a nuclear power-station. However, it is clear that at some stage in the future more will have to be built,' said senior general manager Mr Ian McRae in a statement.

Conflict

'For the moment, large areas rather than specific sites are the target. A particular site within the finally-selected area will be chosen only when the decision to build the nuclear power-station is taken.

'Basic prudence dictates that viable sites should be identified and secured as early as possible, so that both government and local planning authorities can take them into account and avoid conflict over land use.'

He said the 19 coastal 'candidate areas' would be subjected to more extensive examination, including exploration drilling and exhaustive examination of environmental implications.

The now-completed initial work involved identifying candidate regions and then segmenting these into areas.

'We are extremely conscious of the concern the public has about nuclear power-stations and radioactivity, and this will at all times be borne in mind during our investigation,' Mr McRae said.

'The importance of keeping the public informed about the progress of investigations lies in the greater sensitivity that exists towards the nuclear generation of electricity.'

The first two 'candidate areas' were to the east and west of Port Elizabeth.

'Escom wishes, where possible, to avoid placing a further burden on inland water resources and, as at Koeberg, sea water can be used for cooling. However, 'candidate areas' inland may also be investigated.'

● Our Pietermaritzburg Bureau reports that a nuclear concern group will be formed in Pietermartizburg next week to monitor any possible establishment of a nuclear power-station in Natal.

Mr Mark Gandar of the Institute of Natural Resources said similar groups will also be launched this month in Grahamstown and Johannesburg.

The Pietermaritzburg group will be launched at a talk by Mr Gandar, on 'The dark side of nuclear energy in South Africa', and Mr Mr T Auf der Heyde, of Koeberg Alert, on 'South Africa: a nuclear State'.

55 [redacted] B. Day 13/9/88

Escom shrugs off ban on nuclear equipment

LAWRENCE BEDFORD

SANCTIONS are unlikely to short-circuit Escom's plans for a second nuclear power station.

Senior GM Ian McRae said yesterday: "I don't believe we should become negative about our nuclear future because of the latest sanctions. I believe things could change which could bring about the removal of such sanctions."

Escom announced on Wednesday it was about to begin an R8m, six-year search for future power station sites. Its effort is being concentrated on the coastal regions.

Earlier in the week, however, foreign ministers from European Economic Community nations, with the exception of Britain, agreed on a list of sanctions against SA, including a ban on new nuclear equipment.

Among those agreeing on the action was France, which was responsible for much of the work on SA's only existing nuclear power station at Koeberg in the Western Cape.

Whatever the problems, however, McRae insisted Escom must increase its nuclear power capability.

"Looking into the next century, we would switch out of coal for the generation of electricity by about 2050."

McRae said Escom was in a slightly different position today than it was when it decided to develop its first nuclear station.

While it had tendered for Koeberg on a turnkey basis, it now had a built-in nuclear infrastructure.

"Obviously, we wouldn't require quite so much as when we started at Koeberg. One of the advantages of not going on a turnkey basis is that you can purchase some components from one country and others from another."

McRae said Escom was still working on long-term growth projections of between 5% and 6% a year.

Fears coming true

LONG TERM INTEREST RATES

produce could be sold at a lower price

Justify 'Koeberg 2' — anti-nuclear body

CAPE TIMES 13/9/85

(55)

Environment Reporter

THE anti-nuclear lobby, Koeberg Alert, yesterday called on Escom to disclose publicly how it could justify the construction of a second nuclear power station.

Koeberg Alert also called for a public inquiry into the cost, safety and environmental impact to determine whether Escom should build a second nuclear power station.

Escom announced on Wednesday that it was looking at sites in the Eastern Cape.

A spokesman for Koeberg Alert, Mr John Venn, said recent events had shown that nuclear power was completely uneconomic here.

Mr Venn said Escom admitted last year that electricity from Koeberg cost three times as much as that from coal power stations in the Transvaal. It was also likely to be much cheaper to transmit electricity to the Eastern Cape from the Transvaal as was done at present than construct a nuclear power station.

He said, in addition, that the construction of a second nuclear power station was unlikely for the following reasons:

- The decline of the rand had made the cost of importing this technology extremely high.
- The recently imposed ban by the EEC and the United States on the transfer of nuclear technology would for the foreseeable future prevent the construction of another power station.
- The lower-than-expected growth in electricity demand would make the expansion of generating capacity unnecessary.

EDITORIAL OPINION

13/09/85 (55)

East Cape nuclear boost?

DISPATCH

The announcement in Port Elizabeth this week that the Electricity Supply Commission (Escom) is considering sites in the Eastern Cape for the construction of South Africa's second nuclear power station is of tremendous importance to the whole region.

If, indeed, one of the possible sites near Port Elizabeth proves to meet all the sensitive safety requirements — geologically, demographically and ecologically — billions of rands could be spent on an Eastern Cape development in the next 12 to 15 years. Much of this expenditure would take place in the region and would encourage other new, sympathetic economic initiatives.

If also, in addition to the provision of power, an Escom nuclear undertaking (possibly between Port Elizabeth and East London) was coupled with a back-to-back seawater desalination plant the whole region could see industrial and agricultural advancement undreamed of up to now.

Water is South Africa's greatest need — even more important than electrical power. It is, in fact, the scarcity of water that makes it necessary for Escom to turn to the planning of coastal nuclear power stations, so that seawater can be used for cooling purposes rather than the precious fresh water that has to be used now at all inland coal-fired stations.

The seawater pumped ashore for cooling purposes at an East Cape nuclear power plant could pass subsequently through a desalination process and then be piped throughout the region for use agriculturally, industrially or even domestically. Such water would supplement limited fresh water supplies and would be a boon to places like Port Alfred which are close to one of the socalled "candidate nuclear sites" and which are now largely dependent on borehole water.

Such places, it seems, need not worry unduly about safety considerations relating to the positioning of a nuclear plant. The examination and exploration of all possible sites will be intensive and thorough. Tests will include investigating the off-shore continental shelf, drilling and seismic checks. This alone will cost millions and could go on for up to six years.

And after all that, the construction work is sure to take another 12 years more. Therefore Escom is really talking about a 21st century switch-on date for the use of such power. Economic advantages, however, seem sure to accrue to the area chosen from the moment a final decision is taken.

SA can build two nuclear bombs a year, says expert

(55) STAR 14/9/85

Science Reporter

South Africa could build two atom bombs a year from nuclear material produced by its secret Valindaba uranium enrichment plant, says a former assistant director-general of the International Atomic Energy Agency (IAEA).

The pilot plant, near Hartbeespoort Dam, can make enough highly-enriched uranium for such bombs or other explosive devices in total secrecy because no inspectors of the Vienna-based agency are allowed into the plant, says Mr David Fischer, now retired but still a consultant to the IAEA and author of books on the spread of nuclear weapons.

Mr Fischer, writing in the Anglo-American Corporation magazine *Optima*, says South Africa's capability to make atom bombs is seen by many, "especially African nations, as a means of intimidation".

Yet if South Africa possesses such bombs, it has no plausible use for them, for there is no "credible target".

The country, Mr Fischer says, "is immeasurably stronger in conventional arms than any combination of forces that could plausibly be ranged against it. "If South Africa's security position were to deteriorate to the point where it felt that nuclear weapons had become strategically essential, it could quite legally withdraw from the Non-Proliferation Treaty (which aims to curb the spread of nuclear weapons) under article 10 of the treaty.

"In fact, a mere hint that it was contemplating such a step would cause Western capitals to offer much to dissuade it."

For South Africa there are some advantages in "deliberate ambiguity about one's (nuclear) intentions." By remaining uncommitted there is reason to handle South Africa with circumspection "lest it should feel compelled to flex its nuclear muscle", writes Mr Fischer, a former South African diplomat.

Valindaba is designed to manufacture 50 tons a year of lowly-enriched nuclear power station fuel for Koeberg nuclear plant. By re-processing such fuel, enrichment plants are capable of producing weapons-grade, or 90 percent enriched, uranium.

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First 'full steam' at Koeberg

Environment Reporter

KOEBERG nuclear power station generated 100 percent power for the first time at the weekend.

A statement issued by a spokesman for Escom, Mr Andre van Heerden, said full power had been generated at 10h35 on Saturday.

Mr Van Heerden said it was also the first time both units at the station were running at full capacity simultaneously and that the power station supplied its total capacity of 1 842 megawatts to the national grid.

He said the delivery of power at this level was not permanent, as unit 2 was still undergoing tests and would come into full commercial operation only after it had been taken over from the contractor, Framateg, later this year.

Take-over and commercial operation were dependent on Escom, the Atomic Energy Corporation and the Council for Nuclear Safety all being satisfied that unit 2 was operating satisfactorily.

Unit 1 of the power station came into commercial operation during July last year.

Mr Van Heerden said the Atomic Energy Corporation had also set a standard for the release of radiation from Koeberg during normal operation.

This was 25 millirem a year, a figure well below the internationally-accepted maximum level of 500 millirem a year for members of the public for all sources of radiation, he said.

(The millirem is a measure of the biological effect of radiation. The natural background radiation is about 100 millirem a year in Cape Town and 130 millirem a year in Johannesburg.)

The releases from Koeberg so far this year amounted to 0,35 millirem.

During 1984, releases amounted to less than one percent of the allowed limit, or 0,04 percent of the international standard.

He said Koeberg had produced six thousand million kilowatt hours since it first generated electricity in April last year.

To produce this energy about 400kg of uranium 235 was consumed.

This was the equivalent of three million tons of coal used at a coal-fired power station, about 40 percent of which would remain as ash.

Mr Van Heerden said water savings amounted to some 15 thousand million litres because sea water was available for cooling, rather than fresh water which would have been used inland.

This was 45 percent of the capacity of Steenbras Dam.

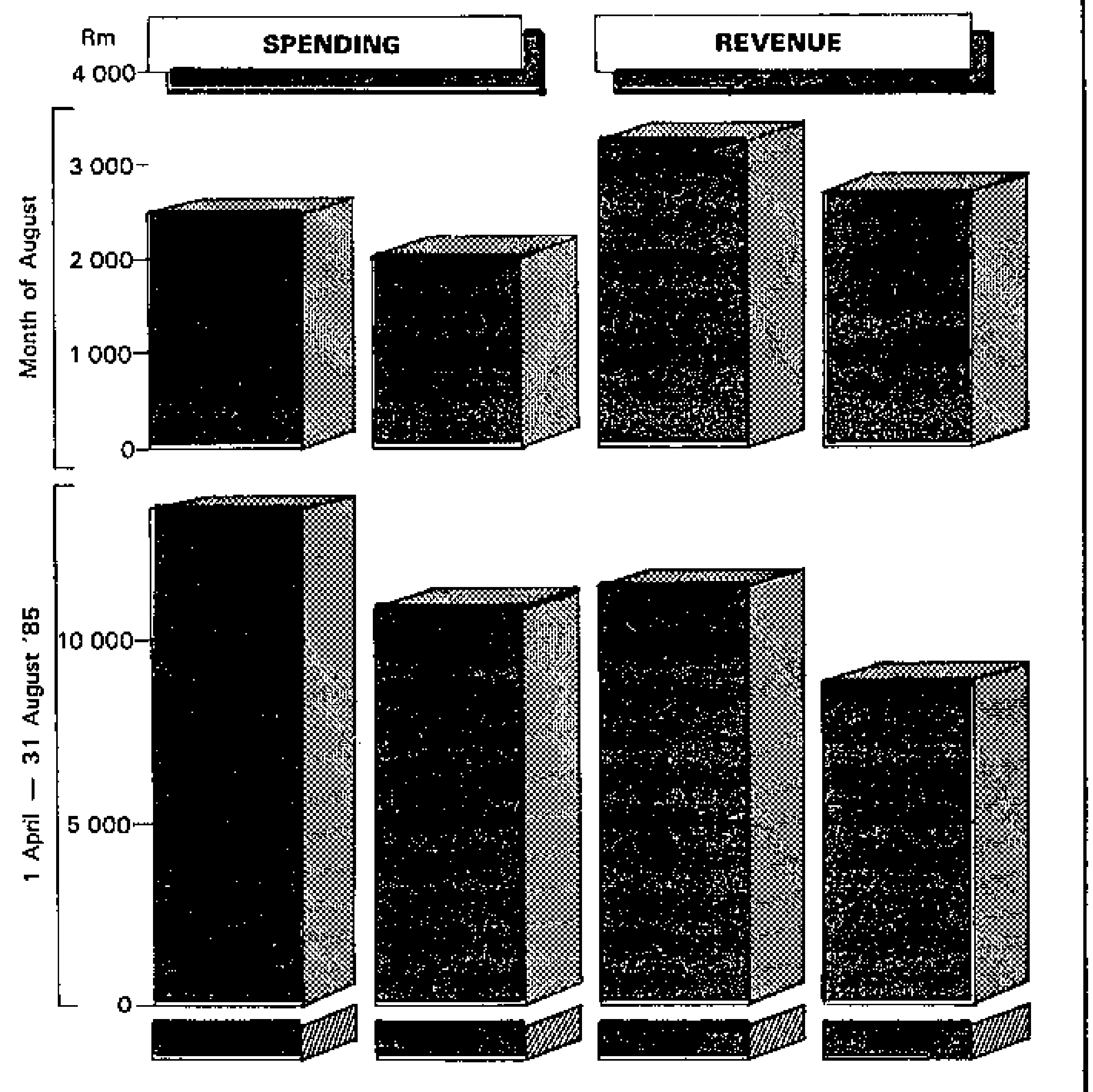
GOVERNMENT FINANCE

Pretoria's tax bonanza

The significant gap between government revenue and expenditure in the 1985-1986 tax year has been confirmed by figures for August. They show that if taxes continue to come in at the rate they have done in the first five months of the fiscal year, the tax take will be up R7,4 billion on 1984-1985.

Put another way, total revenues for the fiscal year would be R31,2 billion, almost covering projected spending of R31,5 billion and making the Budget deficit before borrowing largely academic.

WATCHING THE GAPS



The latest stats show that, year-on-year, August revenues increased 21% (52% in July). At the same time spending slowed to 19% against July's 38%. For the first five months of the 1985-1986 fiscal year, revenues have increased 31% against a budgeted 19%, while spending has risen 23% (11,4%).

Du Plessis

Most encouraging, perhaps, is the lower rate of government spending in August, although the average overspend for the year remains critically above estimates. The latest statistics show therefore that revenue estimates have been wildly under-estimated and, also, that government spending seems set to exceed budget.

In particular, the costs of financing the recent unrest and what Finance Minister Barend du Plessis calls "strategic costs" are unknown factors in the spending equation. Although of little comfort to taxpayers, revenue figures more than cover the spending overruns — and the "tax harvest" months are yet to come.

Certainly, if Pretoria has any confidence in its undertaking to control its increases in spending, the time for a tax cut announcement is overdue. Du Plessis recently suggested relief for top marginal taxpayers, but told the *FM* that tax cuts could be addressed only in the 1986 Budget.

There is also a suggestion that unbudgeted amounts will have to be found for massive losses incurred by the Reserve Bank in the recent foreign exchange and banking debacles.

Then there is the costs of financing government debt, which Du Plessis says may exceed projections.

Nevertheless, Inland Revenue's contribution to the revenue bonanza is growing. Its 58% July-on-July increase slowed to 28% in August — partly due to the smaller gap in the gst rate for the respective months.

But overall Inland Revenue's increase for the year as a whole is up 39% on a year ago, more than double the budgeted 19%.

The encouraging fall in August's spending is in line with Pretoria's commitment to improve expenditure monitoring in the 1985-1986 fiscal year. The purpose of the control system is to create an early warning mechanism for possible overspending.

But government has a safety valve in that it may "consider the priority and other implications of unavoidable but justified additional expenditure."

And clearly, expenditure to finance the foreign exchange, banking and township unrest disasters is unavoidable. So despite the taxpayers' gift to government, they can expect very little in return. ■

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PETROL PRICES ~~153~~ ~~2174~~

Future fall?

The idea that petrol could once again return to 70c/*l* may seem like something out of wonderland. But then so would a statement in 1973 that oil would cost over 1 800% more in just seven years' time.

But that's what happened. By late 1980, crude had peaked at $40 a barrel, having climbed from a mere $2,08 in 1973. Yet the price is now back down to $27 and heading to as low as $20 a barrel, according to many energy economists.

That the price of petrol was increased by 4,5c/*l* recently was not unexpected. Nor will it do much to confirm the suggested downtrend in the inflation rate. With Reef 93 Octane at 94,6c/*l*, it is certain that inflation will resume its upward spiral.

The latest figure for the cpi year-on-year rate dropped to 15,9% for July, after a peak of 16,44% the month before. It had been the first petrol price increase — by a massive 40% in January from 63,5c/*l* to 88,5c/*l* — followed by another in March when gst was raised to 12%, that gave the inflation rate its sharp boost from the beginning of the year. It rose from 13,9% in January to 16,44% in June.

Considering its weighting in the inflation index and accounting for indirect effects, inflation could be pushed up to as much as 17,5% over the next six months. Meanwhile, petrol pump specialists are adapting equipment for the R1 litre of fuel. It all looks very gloomy.

So perhaps a more cheerful outlook can be gleaned if one looks further ahead. A more favourable picture for domestic fuel depends primarily on two factors: the cost of crude oil and the dollar-rand exchange rate. One could not ask for more elusive imponderables.

Nevertheless, there is a distinct possibility that crude could fall to as low as $20 a barrel. The rand is expected to improve towards the end of this year, to, say, US$0,65. Put the two together and that suggests a pump price of 75c/*l*. A further improvement in the rand, even if crude picks up back to, say, $25 a barrel could still justify the authorities here setting a pump price of 70,5c/*l* by the end of 1986.

Those from the dismal science will dismiss

FM 20/9/85

All charged up over Council's R16 bill

A BONTEHEUWEL family, accused of tampering with the electricity meter in their home, are refusing to pay R16 for a new meter, because, they say: "We have been living here for 23 years and have never scratched around in the meter."

"The money is no problem. The principle is wrong. This is the first time in 23 years that we have this kind of problem and the Council accuses of tampering with the equipment. It's unfair," says Mr Clifford Williams, of Bonteheuwel Avenue

"Towards the end of last year, we noticed that something was wrong," Mr Williams explained.

"We called the Council who installed a test meter for a weekend, after which they installed a new meter free of charge. Shortly after that, I called them again to say that something was wrong with the trip switch, but they did not send out anyone to check out the problem.

"Then, two months ago, an inspector came here and asked who had tampered with the meter that they removed last year. After telling him that we never tampered with the meter, he removed it to have it examined. A few weeks later, the Council installed another meter."

Mr Williams received a Council letter informing him that the meter had been damaged and appeared to have been tampered with.

The Council bill of R16 followed shortly after the letter, Mr Williams said.

Herald 21/9/85

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STAR

[redacted] [redacted]

2/9/85

Steyn hints at further increase in petrol price

It was impossible to reduce the petrol price, the Minister of Mineral and Energy Affairs, Mr Danie Steyn, said yesterday. In fact, it would have to be increased if the dollar/rand exchange rate did not improve.

At the National Party's Transvaal congress in Pretoria, Mr Steyn said that there was a 5,45c a litre deficit in the price of petrol landed in South Africa.

This was being carried by the oil companies but, if the current low exchange rate of the rand continued, this deficit would have to be passed on to the consumer.

Replying to a congress resolution calling for a reduction in the petrol price, he said: "It's impossible."

Although Mr Steyn gave the assurance that the Government would not maintain the price of petrol if it could be lowered, delegates unanimously approved a proposal by Mr Steyn that consideration be given to incorporating third party insurance in the petrol price.

"Then the man who uses the road more pays more for his third party," he said.

The Minister of Transport, Mr Hendrik Schoeman, said later that the Cabinet had already decided in principle to amend legislation to this effect but many details had still to be worked out.

Mr Steyn also received approval for his proposal that, instead of reducing the petrol price when it became possible, the lead content of fuel be reduced.

He said that about 4 400 tons of lead were being released into the atmosphere annually, mostly in metropolitan areas. This was unacceptable in view of the danger of lead poisoning. — Sapa.

Nuclear power sites: the criteria

(55)

23/09/85 DISPATCH

You have read the news releases about the second nuclear power plant which could be built near the sea in the vicinity of Port Elizabeth, and your interest must have been awakened.

Escom and the Atomic Energy Corporation, profiting from the experiences of other thermo-nuclear power plants throughout the world, and their own past mistakes, are taking a much more open stance in relation to the public perception of their plans and activities.

The Region D Advisory Committee executive have been well briefed about intentions, justifications and methods and have been asked to act as a liaison link between the public and the nuclear power development team.

We are not talking of today or even tomorrow. It takes 12 or 13 years to plan, develop and erect a power station — probably nearer 15 years. That takes us to 2000 AD and beyond. So it's about 2000 to 2005 we are talking about now.

The siting of a nuclear power plant is a decision which politicians are neither inclined nor able to make. I think they are happy to leave that to the chosen team of scientists and engineers. Not even the brashest and most ambitious of them would care to match argument with the team of accommodating but single-minded scientists. The politicians would lose out.

The basis of the decision is a close relative of a business-style cost benefit analysis. They list a number of criteria which must be critically examined, analysed and graded.

Before I list the criteria I would like to sketch a quick profile of an atomic power plant. I have visited three of them and they are remarkably similar.

- It must be isolated; by which is meant that there should not be more than 10 000 people living within 16 km of the plant.
- The total personnel amount to something like 4 000 bodies, so the project as a whole has economic significance.
- It has to be close to a large supply of water — like the sea.
- There are no perfect sites. Some are better than others.

The criteria are perfectly logical:

1. Demographic: The danger of explosion is ruled out and the threat of radio-active leakage is negligible. Nevertheless, because nuclear fission is a sensitive subject still enshrouded in mystique, the power generators are established in a low population-density area, economically close enough to the metropolitan users.

2. Geophysical and stratigraphic: There can be no cracked walls from insecure foundations, therefore the most stable land areas must be minutely examined by qualified geologists and other geo-technical experts using an array of scientific apparatus — magnetic field surveys, infra-red photography of sub-structures and satellite scans. Any subterranean fault which could affect the structure must be detected.

3. Seismic: It stands to reason that it would be unwise to have an atomic powered plant in a known earthquake area, therefore a careful seismic survey is done.

THE BUSINESS SCENE

By Max Phillips

4. Land and sea usage: The geographic, geophysical and marine characteristiscs must be compatible with the use to which it will be put. If a deep sea water intake system is required then one cannot establish near a gently shelving beach.

5. Infrastructure: The road, rail and communications network must be sufficiently developed to obviate the need for expensive construction programmes. The selected area must obviously have a good, reliable supply of potable water at hand to supply the domestic and gardening needs for 4 000 people.

6. Security: It goes without saying that it would be unwise to build on the Zimbabwe border. The site must be readily capable of being made fully secure.

7. Transmission: The electricity which is generated must be carried to the place where it will be consumed. The lower the cost of transmission the more acceptable the site would be.

8. Ecology: Both Escom and the Atomic Energy Corporation insist on extraordinary measures with regard to prevention of environmental damage. Flora and fauna must be protected and tourism potential must not be inhibited. It would, for instance, be an iniquity to have an atomic power station to mar the magnificent tourist potential of the Wild Coast.

9. Economic: These nuclear installations are tremendously expensive and the economic burden on the taxpayer and consumer must be carefully watched. On the other hand, the economic impact of an added community of 4 000 souls is considerable and could greatly benefit an impoverished area.

I spent five hours with the atomic team and I think it would be a brave politician who tries to over-ride the recommendations made by them. I believe too that they would arrive at a sound multi-disciplinary decision.

The limited insight I have been given into the criteria and methodology of nuclear electricity generation stations does not entitle me to take a stance but I am prepared to say now that, in my opinion, the criteria briefly described above, exclude the coastline from Durban to Kenton-on-Sea.

One issue has not been addressed. Is there a need for a second nuclear power plant?

The answer is no, not in the next 15 years; but from 2005 onwards our coal deposits and hydro-electric potential will not be able to supply the electricity needs of our growing population coupled with growing quality of life.

If we are to be ready by 2005, we must start now.

Overberg

For many months I have been listening to the weather forecasts which refer to Overberg. I did not know where that was so I started questioning people from the Cape. Nobody could tell me and I could not find the name on any of my maps.

Then, suddenly and unexpectedly, I found the answer in a book on the wine making industry of the Cape. It is the districts of Caledon, Villiersdorp and Greyton.

Now all I need to know is the exact boundaries of the "Boland". Can anyone help?

SA debt

A friend writes in to express dismay at South Africa's R55 billion debt. He also asks what the interest rate is on that debt.

I don't know Tony because the rates are not published. Some of that debt is incurred by the public sector and some by commercial banks and other private sector organisations. I would guess that the interest rate is at BA rate or lower, say 7 to 8 per cent. It will have been borrowed in US dollars, Eurodollars, German Marks and Swiss Francs mainly.

South Africa's problem is the rapid depreciation of the rand which means more rands must be used to repay loans; the refusal of some American banks to renew credit facilities; the low bullion price; inadequate controls over public expenditure and disproportionately large short term borrowings.

Now South Africa is showing a healthy balance of trade and can soon start reducing the outstanding loans on capital account. The stronger the rand is, the greater the proportion of the loan redemption is.

It does not appear to be an economic issue so much as a political image mirrored in the strength of the rand.

By the way, if you study the Reserve Bank's quarterly review you will note that R55 billion is only marginally larger than the usual capital borrowings.

Someone wrote in a financial journal that South Africa's problem was not its inherent condition, which is fairly sound, but the perception by an often misguided naive sector of the world's politically dominated financial institutions.

Definitions

There is greater awareness of financial and investment terminology as our stock exchange participation develops. These definitions of frequently used terms may be of use to you:

Market capitalisation — The number of ordinary and convertable preference shares multiplied by the latest market price.

Cover — Earnings attributable to ordinary shares, divided by ordinary dividends paid.

Return on equity — Earnings per share as a percentage of net asset value.

Quid pro quo

A large UK-owned company in East London has been inundated with questions about riots and revolutions from their UK parent company.

A few weeks ago the South African managing director sent a cable to the UK head office expressing concern about the safety of life and property in the Birmingham area and asking whether revolutionary conditions would spread to other parts of the UK.

The chairman cabled back one word ("Touche").

Tailpiece

Economic forecasting houses have successfully predicted 14 of the last five recessions — David Fehr of Harvard.

Fuel levy insurance system welcomed

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Transport Reporter

The Automobile Association has welcomed an announcement by the Minister of Transport, Mr Hendrik Schoeman, that the third party insurance disc is to be scrapped and replaced by a 2 c/litre levy on fuel.

STAR

Mr Schoeman said at the weekend that the Third Party Insurance Act would be amended at the next session of Parliament. The fuel levy, he said, would generate R180 million each year and this would automatically cover all motorists.

The AA deputy director-general, Mr Peter Elliot, said the association had supported the fuel levy system in principle because of the ease of collection. About R14 million a year would be saved in administration costs.

24/9/85

Insurance cover, he said, would be universal. It would, for example, cover motorists from the independent homelands using South African roads.

"It is on a user-pays basis. Motorists who use the roads more, and thus have a greater risk of being involved in accidents, will pay more."

The AA would be opposed to a workmen's compensation-type scheme in which set sums would be computed for injury or death. "If we are going to establish a large bureaucracy to handle claims the savings in administration costs will disappear like Irish mist."

Mr Elliot said the AA favoured the legal award system.

What oil sanctions cost SA annually: R5 billion

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W. Mail 26/9/85

By PAT SIDLEY

THE international oil embargo costs South Africa R5 billion a year.

This was the figure presented to a conference on apartheid last weekend in Amsterdam.

According to a paper compiled by the Amsterdam-based Shipping Research Bureau, South Africa pays R3-billion a year in crude oil imports, and spends another R2-billion annually to circumvent the existing embargo.

The paper, called "West European Companies Breaking the Oil Embargo against South Africa", says the money is spent on premiums to companies and middlemen, on a vast stockpile, on oil exploration and on Sasol installation and production costs.

The costs annually are broken down as follows:

- Sasol — R2 250-million in "extra costs of oil products manufactured"
- Stockpile — R125-million preparing old mines and R1 325-million in lost interest on the stock
- Off-shore exploration for oil (Soekor) — R5-million
- Premiums to companies and middlemen —R7,5-million
- Other costs not estimated include the loss of potential export earnings of coal used by Sasol (about 32-million tons a year), pollution costs and ecological damage, the cost of under-utilisation of conventional refineries, compensation costs to oil companies, costs of production loss, repairs and security of energy installations because of sabotage.

To be able to pay these extra costs, the South African government has set up a complex system of special funds, the paper says.

The main ones are the newly-transformed Central Energy Fund, the Strategic Fuel Fund and the Equalisation Fund.

● To PAGE 2

What oil sanctions cost SA

55

26/9/85

● From PAGE 1

The paper says the funds have been kept secret, although they will now be scrutinised by parliament.

The funds are raised by taxpayers' and consumers' money and financed by various levies on liquid fuel consumption.

The paper reports a number of "oil scandals" reported in the South African press on the Salem affair, on allegations of misspendings and corruption, on mysterious court cases in which large sums for commission are claimed, on premiums paid to oil traders and on alleged "irregularities" by officials involved in management of these funds.

The Equalisation Fund, the paper says, was established to compensate the subsidiaries of Western oil companies refining oil in South Africa (Mobil, Caltex, Shell, BP and Total) for their abnormal costs of crude oil purchases. "The fund acts as a buffer levelling prices of crude oil purchases from abroad," says the paper.

In 1984, according to the paper, R1 000-million of the Equalisation Fund was spent to pay the increase of crude oil import prices.

The paper says the costs of the three Sasol plants so far are estimated at R25-billion. Crude oil imports have been reduced by Sasol by 35 percent. It comments: "This partial self-sufficiency, however, tends to decrease rather than to increase, as was recognized by the South African Director-General of Mineral and Energy Affairs, Louw Alberts (who noted that) 'this reduction of crude oil imports is less than the quantity of crude oil replaced by the Sasol production of fuels because of growth in market demand'." The paper says another investment of up to R50-billion by 1995 would be needed to bring about 70 percent self-sufficiency, and after that one new plant would have to be built every three years.

Soekor has spent more than R500-million so far looking for oil. The recent Mossel Bay gas find, the paper says, would cost R2,5-billion to develop.

The paper comments on the secrecy surrounding South Africa's oil purchase in a section entitled "Secrecy is Essential".

It quotes Minister F W de Klerk saying to parliament in 1983: "The struggle against boycotts is by no means over. U N attempts to prevent crude oil deliveries to South Africa continue. Any relaxation in respect of secrecy can help to spotlight the target and enable our enemies to identify our friends and partners who deliver to us."

The paper describes the legislation requiring secrecy and says as a result the oil trade with South Africa is probably "the largest secret trade in history. Annually about 15-million tons of crude oil with a value of about $3-billion disappear from world statistics. The reason is: this volume is sold and shipped to South Africa."

These deliveries are surrounded by "malpractices and fraud" like false destinations, forged certificates, bribes, false sets of logbooks.

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Call for nuclear sanctions

The Star's Foreign News Service

VIENNA — Black African states are to call for tough new sanctions against South Africa at the International Atomic Energy Agency (IAEA) conference here.

A draft resolution on this was discussed yesterday by representatives of the African states.

It includes calls for South Africa to open all its nuclear installations to agency safety inspections, a halt to nuclear cooperation between IAEA and South Africa and for the exclusion of Pretoria from all agency conferences which could help it exploit Nambia's uranium.

STAR

By focusing on Namibian uranium, the resolution reflects an attempt by the African states to gain maximum support from countries which might object to an outright ban on South Africa.

The resolution will embarrass the US and Britain as they oppose moves to curtail the rights of member organisations.

A senior US official said yesterday if such a resolution were proposed his delegation would have to seek instructions from Washington.

26/9/85

A British official said Britain would not oppose calls on South Africa to open nuclear installations for inspection or for an end to nuclear cooperation with South Africa.

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4 Cape Times, Saturday, September 28

Nuclear sanctions against SA

VIENNA. — The International Atomic Energy Agency yesterday voted to impose sanctions against South Africa, calling on members to suspend any nuclear co-operation with the country.

The vote was 88-0 with 19 abstentions, including the United States, Britain, West Germany, Canada, Switzerland, Italy and Japan.

The US opposed a section of the resolution demanding a halt to all purchases of South African uranium on the grounds that it would hurt the black majority by undermining the country's economy.

"My government opposes sanctions directed at undercutting the economy of South Africa," said the US delegate, Mr Danny J Boggs.

Talks

Mr Boggs also said the paragraph, in calling for a complete cutoff of nuclear co-operation with South Africa, could also hamper any future talks with the South Africans on stopping the spread of nuclear weapons.

A similar resolution was adopted at the agency's annual conference last year.

The British Ambassador, Mr M J Wilmshurst, said his country's abstention should not be interpreted as condoning apartheid.

He said Britain did not agree with a provision condemning South African uranium mining in SWA/Namibia, even though his country opposed South African administration of the disputed territory.

Nigeria

The resolution, submitted by Nigeria on behalf of other African nations, condemned not only apartheid, but South African occupation of SWA/Namibia. It also said South Africa had the ability to produce fissionable material for nuclear weapons because all its nuclear plants were not open to agency inspections.

It called on the agency's 120 members not to buy any uranium from South Africa and to prevent transfer of nuclear fuel and technology to the country.

South Africa was also excluded from any conferences or meetings of experts which would help it exploit uranium from SWA/Namibia.

Peaceful

The action came on the final day of the agency's week-long annual conference. The agency's aims are to promote peaceful uses of nuclear energy and safeguard against nuclear fuel being diverted into weapons manufacture.

South African delegates' credentials were rejected at a conference here in 1979 and the country has not attended an annual meeting since then.

The agency still conducts inspections at one South African nuclear-power plant and one reactor, but is not allowed into the country's other nuclear facilities. — Sapa-AP

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Mercury 28/9/85

Call for nuclear sanctions against S A

Mercury Correspondent

VIENNA—The general conference of the International Atomic Energy Agency (IAEA) has unanimously adopted a resolution calling on member countries to halt all nuclear co-operation with South Africa.

The 108 member countries have demanded a total halt to the transfer of nuclear materials from and to South Africa, including the purchase of uranium.

The resolution demands that all non-South African companies exploiting uranium in South West Africa should immediately stop operations.

South Africa is one of the world's largest uranium producers and Atomic Energy Agency experts here point out that if the resolution is actually applied, some Western countries will have problems in operating their atomic power stations and reactors. Also, the price of uranium would increase considerably on the world market.

Also at the IAEA session here, the United States is threatening to walk out of the organisation and stop its financial contributions if an Iraqi resolution is adopted calling for a halt of all nuclear co-operation between the agency and its members and Israel.

In 1981 Israeli aircraft damaged an Iraqi reactor which was about to go into operation, claiming that it was destined to produce atomic weapons. Iraq has denied this and at each general conference since, it has demanded a formal declaration from Israel that it would in future refrain from such attacks.

At this conference Iraq has rejected a letter from Israel to the agency's director-general in which it states it will not attack peaceful nuclear reactors.

At the general conference of 1982, Israel was expelled from the meeting, whereupon the U S and several other Western countries also walked out.