66-hour fuel blackout at weekends

SA petroleum bill rose to R1 015-m

Petrol filling stations all over South Africa will be closed from noon on Friday to 6 am on Monday in terms of the new emergency fuel measures announced by the Government today. But the open road speed limit of 90 km/h will not be lowered.

The storage of petrol in containers of more than five litres by all people has been forbidden. And a general ban has been placed on the transport of petrol in contact with other than in the standard tank originally installed by the manufacturer in a motor vehicle.

It is now illegal to transfer petrol from the tank of one vehicle to another or from a vehicle's tank to a container.

The storage of petrol in containers of more than five litres by all people is forbidden, with the exception that farmers and farmers' organisations need petrol for production purposes and which usually buy petrol in bulk are allowed to keep a maximum of 210 litres.

Special permits

Special permits will be issued to those people who need petrol in emergencies for genuine productive purposes in greater quantities.

A general ban is placed on the transport of petrol in containers other than in the standard tank of a motor vehicle as originally installed by the manufacturer of that vehicle.

People having their own petrol pump (facilities such as filling stations, are forbidden to supply petrol) from those pumps to another motor vehicle, including closing hours other than those authorized to obtain fuel for their production purposes. They will also be required to keep a record of all petrol supplied during closing hours.

The statement also said the Government had also given close consideration to a reduction in the existing maximum speed limits of 90 km/h.

In the past, there had been difficulty in applying speed limits effectively because of technical problems with speed-measuring apparatus but it had become obvious that the public was prepared to exceed the limits. However, the introduction of speed-measuring apparatus by the Bureau of Standards and the introduction of new regulations by the Minister of Justice had been expected and that the public was prepared to exceed the limits.

The statement also said that in the light of consistent increase in the cost of imported petroleum products, and because of the rapid growth in the use of motor vehicles in South Africa, it was an urgent necessity to carry out fuel conservation measures on a permanent basis.

Fuel economy

Motor manufacturers would have to give attention to the manufacture of vehicles in which more emphasis was placed on fuel economy.

Commerce and industry, as well as the agricultural sector, must do everything in their power to rationalise their production and distribution.
PETROL GOES UP 3.1c A LITRE

24/10/76
Cape Times
Correspondent (287)

PRETORIA. — The price of petrol has been increased from today by 3.1c a litre — the fifth increase since October 1973.

Announcing this in Pretoria last night the Minister of Economic Affairs, Mr Chris Heunis, said he had rejected representations from filling stations for increased margins after an investigation by the Price Controller failed to show justification.

Price rises in gas and lubricants would be higher than the petrol price increase.

The Minister appealed to motorists to continue to conserve fuel to relieve pressure on the country's balance of payments.

The Minister said he was fully aware of the impact the "unavoidable" increase in the petrol price would inevitably have on the costs of motor transport.

He was also concerned about the implications of the latest increase in the landed cost of crude oil for the country's balance of payments.

This will be the third petrol and oil price increase in less than a year. In October last year motorists were paying 13.1c and 13.8c a litre for 93 and 98 octane respectively.

November last year saw a rise of 0.3c a litre.

By April this year motorists were paying more than 16c a litre for 98 octane.

None of the previous increases has been as severe as this one.

Part of the statement released by the Minister said: "An agreement exists between the Government and the oil companies in terms of which the prices of petroleum products are adjusted from time to time according to a formula which is based on the calculated landed cost of petrol imported from the Middle East from which South Africa obtains its crude oil.

"However, such price adjustments are intended only to take account of periodic fluctuations in the landed cost of crude oil supplies, and do not provide for the recovery of other cost increases or for any increase in the unit profit margin which the Government allows the oil companies to realize on the local sales of their products."
Planning of second Sasol

39. Mr. T. ARONSON asked the
Minister of Economic Affairs:

1. (a) On what date is it anticipated
that (i) the planning of the second
Sasol will be completed and (ii)
building operations (aa) will com-
mence and (bb) be concluded and
(b) what is the anticipated cost of
the project;

(2) whether it has finally been decided
where the project is to be located;
if so, by what method will the pro-
prieties be acquired;

(3) whether any properties have been
acquired; if so, (a) by what method
were they acquired, (b) what is their
area and (c) what is the total pur-
chase price.

8The MINISTER OF ECONOMIC AF-
FAIRS:

(1) (a) (i) In view of the manifold
facets of the project and the
fact that the planning in
some cases will continue
until long after a start has
been made with actual con-
struction, it is hardly possi-
bile to furnish a specific
date.

(ii) (aa) The preparatory work
on the site towards the
middle of 1976 and the
foundations and civil
engineering work to-
wards April 1977.

(bb) According to expecta-
tions the project may
be put into operation
early in 1981, although
certain construction
work will not yet be
completed by then.

(b) Based on the cost levels during
May 1974 it is estimated at
R1021 million, excluding work-
ing capital, interest during con-
struction, townships and housing.

(2) No, the rest of the question falls
away.

(3) No, the rest of the question falls
away.
Price of diesel oil

129. Mr. G. N. OLDFIELD asked the Minister of Economic Affairs:

(1) What is the present price of diesel oil to (a) transport companies and (b) garages;

(2) whether transport companies receive any special discount or other concessions in regard to the price of diesel oil; if so, what is the nature of such discount or concessions.

The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) The price of diesel oil is not determined by the Government. The price paid by transport companies, which transport passengers, to oil companies at the coast for diesel oil is 9.16 cents per litre.

Transport companies which do not transport passengers presently pay 11.96 cents per litre for diesel oil at the coast.

(b) Garages presently pay 11.96 cents per litre at the coast to oil companies for diesel oil.

In inland areas rail charges, which are determined by the distance from the nearest harbour, are added to the prices mentioned in (a) and (b).

(2) Yes. Transport companies which transport passengers receive a rebate of 2.80 cent per litre on the excise duty in respect of diesel oil.
Shortage of coal/anthracite

25. Mr. T. HICKMAN asked the Minister of Economic Affairs:

Whether a shortage of (a) coal and (b) anthracite for local consumption is being experienced at present; if so, what is the cause of the shortage in each case.

The MINISTER OF ECONOMIC AFFAIRS:

In recent times a number of problems have been experienced with the supply and distribution of coal and anthracite. These problems have been due to various factors of which the following are the most important:

1. The increased demand for coal and anthracite as alternative sources of energy which has been generated by the international oil crisis, has exerted a considerable amount of pressure on the existing production capacity of our coal and anthracite mines.

2. The problems encountered by the mining sector in general, and more particularly by the coal and anthracite producers, in recruiting sufficient numbers of non-European labourers, have also had an adverse effect on the output of the coal and anthracite mines.

3. The high economic growth rate achieved by our country during 1974, and particularly the exceptionally favourable agricultural crop season which South Africa experienced last year, has inevitably exerted considerable pressure on the existing railway facilities with the result that problems have been encountered at times during the year with the railage of coal and anthracite to various parts of the country.

4. Moreover, the disruption of transport facilities which has been brought about by the floods which have occurred in certain parts of the country during March and April 1974 has also hampered the normal accumulation of stocks by consumers in order to provide for their increased consumption during the winter months, with the result that they have been obliged during the winter months to draw heavily on their reserve supplies to the point where these supplies have been virtually exhausted.

5. Because of the coincidence of these circumstances there has been a tendency amongst consumers since the end of the winter season to order considerably more coal and anthracite than their normal requirements in order to build up their stocks so as to avoid a possible disruption of their production activities. This tendency has likewise contributed to the additional pressure which has been exerted on the production capacity of our coal and anthracite mines and on the country's available transport facilities.

However, the Government has already for some considerable time been giving attention to this matter in consultation with the local producers and distributors of coal and anthracite, and everything possible is being done to satisfy the normal requirements of the consumers of these two commodities. In the course of these efforts the Government naturally tries to ensure that, if and when bottlenecks should occur in respect of our production and transport capacity, the satisfaction of consumers' needs is carried out on a priority basis.
Shortage of coal/anthracite in Eastern Cape

Mr. T. G. HUGHES (for Mr. C. J. S. Wainwright) asked the Minister of Economic Affairs:

What is the reason for the shortage of coal and anthracite for domestic use in the Border area of the Eastern Cape.

The MINISTER OF ECONOMIC AFFAIRS:

These shortages are due to a variety of factors. The most important of these are:

(i) The sharp upsurge in the demand for coal and anthracite from industrial and other essential consumers compared with the available production capacity of the coal and anthracite mines.

(ii) A serious decrease in the stocks of large consumers and merchants which resulted from the problems which were experienced during a large part of last year with the transportation of, among others, coal and anthracite.

According to information supplied by the coal producers, substantial quantities of coal are, however, at present being despatched to this area. The anthracite producers have also made special arrangements to expedite railings of anthracite nuts to merchants in this area.

Mr. T. G. HUGHES: Arising out of the hon. the Minister's reply, may I ask him whether anthracite is being exported at present?

The MINISTER: The reply is that the total consumption of coal in the Transvaal is 21.5 million tons; and the total export is 0.8 million tons, and it is coal dust, not anthracite.

Mr. T. G. HUGHES: Further arising out of the hon. the Minister's reply, is the shortage on the Border due to the export of anthracite?

The MINISTER: Mr. Speaker, I have already explained today and previously that the export has no affect on the local shortage.
Border/North Eastern Cape areas: Coal resources for production of petroleum

*19. Dr. E. L. FISHER (for Mr. C. J. S. Waitwright) asked the Minister of Economic Affairs:

Whether any investigation has been made into the feasibility of using the coal resources in the Border and North Eastern Cape areas for the production of petroleum; if so, what was the outcome of the investigation; if not, why not.

The MINISTER OF ECONOMIC AFFAIRS:

All known coal-bearing areas in the Republic were considered by the South African Coal, Oil and Gas Corporation Limited over a long period of time and the Border and North Eastern Cape areas were visited several times. Although very little knowledge of extractable reserves in those areas exists the available figures of in situ reserves indicate that the available coal is hopelessly inadequate for an oil from coal plant.
Domestic consumption of coal

44. Mr. G. H. WADDELL asked the Minister of Economic Affairs:

(1) What was the total domestic consumption of coal in 1974;

(2) how much of this amount was used by (a) private consumers and (b) public bodies;

(3) whether his Department has any estimate of the amount of coal consumed by White and non-White private consumers, respectively; if so, what were the amounts in 1974.

†The MINISTER OF ECONOMIC AFFAIRS (Reply laid upon Table with leave of House):

(1) 61 771 018 metric tons.

(2) (a) 12 356 000 metric tons.
   (b) 48 915 018 metric tons.

(3) White private consumers 1 096 000 metric tons. Non-White private consumers 673 000 metric tons.
Shortage of coal in Western Cape

*20. Mr. W. V. RAW asked the Minister of Economic Affairs:

Whether a shortage of coal required by power stations in the Western Cape is expected during the forthcoming winter months; if so, what (a) is the estimated extent of and (b) are the reasons for the expected shortage.

The MINISTER OF ECONOMIC AFFAIRS (Reply laid upon Table with leave of House):

The Government has recently become aware of the fact that certain consumers of coal and anthracite, including consumers in the Western Cape, were experiencing difficulties in obtaining sufficient supplies of these commodities for their current consumption needs, and also to enable them to build up sufficient stocks of coal and anthracite for the winter months when the demand is usually higher than during the summer months.

The Government has, in co-operation with the coal and anthracite producers as well as with the South African Railway Administration, given full consideration to the present supply position of coal and anthracite, and consumers may rest assured that there is no reason for them to resort to panic buying and, therefore, to the placing of orders in excess of their normal requirements.

The present difficult supply position is attributed to several factors. As a result of the international oil crisis, which resulted in an increased local as well as foreign demand for coal and anthracite as alternative sources of energy, considerable pressure is at present being exerted on the production capacity and transport facilities in the Republic in as far as these commodities are concerned.

The high economic growth rate experienced during 1974, and in particular the exceptionally high level of imports and favourable agricultural production year, inevitably exerted considerable pressure on the available railway transport facilities with the result that problems were sometimes experienced with the transport of coal and anthracite supplies to certain areas of the country. Moreover, the disruption of rail transport facilities as a result of the washaways which occurred in certain parts of the country during March and April, 1974, led to the curtailment of the normal accumulation of supplies to meet the increased consumption needs of the winter months, with the result that consumers had to deplete their reserve stocks to a considerable extent.

Everything possible is at present being done to ensure that the normal requirements of all consumers are being satisfied. In particular, the maximum possible use is being made of road transport to alleviate the pressure on the transport of coal and anthracite by rail. Moreover, the Railways are giving the highest priority to the supply of trucks for the transport of coal and anthracite.

Although South Africa has certain firm contractual obligations in respect of the export of coal and anthracite, the Government also exercises control over the export of coal in order to ensure that such exports will not take place at the expense of local needs.

All consumers of coal and anthracite are requested to use these commodities as sparingly as possible, particularly during the coming winter months, so as to contribute to the alleviation of the present difficult supply position.
The oil conundrum

We can squeeze more petrol out of the barrel if the oil companies spend R30m on refinery adjustments. But is it fair to ask them if Sasol 2 will knock their market share?

Government is up against some awkward decisions on oil policy. How much should it depend on Sasol technology, or should it continue to entrust 90% of the problem of supply to the hitherto deft handling of the international oil majors operating here?

The conundrum amounts to a clash of wills between the authorities, who are showing increasingly that they are developing a siege mentality, and the rightfeful profit expectations of the oil majors who, in order to continue to cope with a tricky situation, have been forced to consider important investment decisions.

Though the consuming public has long worried of official exhortations to use oil sparingly, Petroleum Controller Joop Steyn is not kidding when he implores the nation to economise. The fact that an oil glut approaching 4m barrels a day (one barrel = 160 litres) has developed on world markets has in no way softened the resolve of oil producing nations who impose a destination embargo on SA.

Top oil sources confirmed this week that, if anything, the supply position has become a great deal more problematical in recent months.

With all the offending nations except SA and Rhodesia off the Afro-Arab blacklist, surveillance and enforcement of the boycott is a great deal easier -- and the weight of disapproval of those who boycott SA against those producers who do not, is becoming increasingly difficult to ignore.

Industry sources confirm that SA is now overwhelmingly (about 90%) at the mercy of Iran for its crude oil supplies, with the balance of total requirements coming largely from Iraq's Basrah fields and from Indonesia.

Official sources recently told the FM that Iran has made it clear it cannot support increments in SA demand indefinitely because:

- Reserves at the present rate of cutbacks of 7m bpd at the utmost will not last much longer than 12-14 years;
- The lion's share of current production is earmarked for major consuming nations such as France, Germany, Japan and Britain under the rash of bilateral deals which followed in the initial flush of panic arising from production cut backs and the five-fold increase in the price of oil up to the middle of last year;
- Much of Iran's production will be required to fuel her ambitious industrialisation drive at home; and
- SA is a bit of a political embarrassment, more so because of her Rhodesian connection.

In view of these factors, Iran is understood to have informed SA in unambiguous terms that a ceiling (the level of which is known only to a few highly placed people in government) is to be imposed on SA demand.

This need not be disastrous, provided government does not ignore the position of SA oil refiners, which can be substantially affected by Sasol 2 -- scheduled to come on stream in 1982.

Over to Opec

Total SA refining capacity at present is about 17.2m tons a year, including production from Sasol's oil-from-coal technology. Sasol looks like putting an additional 1.5m 2m tons of middle to high distillate fuels on the market annually.

Sasol is an important consideration for crude oil refiners' future development plans. Under existing market arrangements, oil marketing companies are obliged to stock and sell Sasol petrol, whether oil from coal or from the Natref refinery, to the full extent of its production.

A further 2m tons of product to be foisted on them in 1982 could seriously affect oil companies' refinery expansion plans, since the real profits in the oil business lie not in marketing but in refining.

There are three ways in which SA crude refining companies (Natref excluded) can deal with the present supply situation:

- In the first place they can rely, precariously perhaps, on the current surplus production situation opening up cracks in Opec solidarity. Already there is evidence that Saudi Arabia and Abu Dhabi, to name but two producers, are resentful of moves to make downward adjustments to production to keep prices at current levels.
- Should the situation get out of hand and producer unity break down, any number of interesting supply opportunities may arise for SA.
- Secondly, should Opec and, more specifically, the Afro-Arab producers manage to preserve the status quo, SA's refining industry will have to seriously consider (as at least one of them is doing) costly investment. This would adjust refinery output to raise by 10%-15% production of white product, while reducing runoff from the lower end of the barrel.

This is a R30m decision which cannot be taken unless certain guarantees exist that production will not be swamped by competitive offerings from the Sasol group.

Or unless guarantees are given that Sasol will not come on-stream before conventional refineries have been given sufficient time to recoup at least part of their investment.

Thirdly, SA crude oil refiners could decide that, because Sasol poses a serious threat to their long-term growth expectations, it would be in the wider interest of the international groups of which they are subsidiaries to leave refineries as they are and meet future market growth requirements by imports of refined product from any number of refineries within short-haul sailing distance of Durban (Abadan, Aden or even the west coast of India), a move that would play havoc with our balance of payments.

It is all very well to spend millions on Sasols and the like to reduce our reliance on foreign energy sources, but at the same time it would be foolhardy in the extreme to ignore the legitimate expectations of the oil companies which have so far seen the country through some difficult times.

The aspirations of government's oil industry and the international majors can be gratified without any problems. All that's needed is some co-ordination.
Germans may get uranium from SA

Owen Correspondent
HAMBURG — South Africa has offered West Germany supplies of uranium to help the Germans over any shortage that may arise in their stocks of fissile material.

The Minister of Mines, Dr Koornhof, in talks with West German Economic Affairs Minister, Dr Hans Friederichs at the Hanover Fair, discussed South Africa's new uranium enrichment process.

Dr Koornhof stressed the importance of South Africa as a future exporter of fissile material in an interview with the West German Press in Hanover.

There were no legal restrictions on foreign participation in prospecting for uranium and mining of it in South Africa, Dr Koornhof emphasised, and no protectionist trade barriers were planned by the Government.

A view of part of the interior of the pilot plant — one of the cascade blocks in operation.

Big nuclear plant is planned

PARIS — The South African Government will shortly announce plans to build a 5 000-ton uranium enrichment plant for nuclear fuel manufacture at an estimated cost of R910 million (at October 1974 prices), Dr A J Roux, chairman of the Uranium Enrichment Corporation of South Africa (UCOR), disclosed here.

He also revealed that the process was an aerodynamic one, of the same basic type as the tritium
URANIUM ENRICHMENT
Roux’s teaser

Uranium Enrichment Corporation chairman, Dr “Ampie” Roux, went to Europe this week and did some courting, some teasing and some instructing.

In Paris to address the European Nuclear Conference, he lifted some of the heavy security wraps surrounding SA’s uranium enrichment process. Most tantalising were the forbiddingly technical glimpses of the actual process.

There are two aspects to the SA process which, according to Roux, make it unique and competitive:

- Separation is achieved by a centrifuge of which the outside wall is stationary.

The centrifugal field is obtained, unlike the European method, by aerodynamics. The European centrifugal method incorporates spinning walls, with dangers of explosions and problems of maintenance. The use of aerodynamics can be compared with another European method, the “nozzle process”. But the European process doesn’t create a full centrifugal field, and may consequently be a less efficient separator.

Financial Mail April 25 1975
SA to drill 8 oil wells off Cape

Dr. K. W. T. Graham, deputy technical manager, told delegates to the country's first National Energy Conference: "Perhaps it is a bit of an exaggeration to speak of a breakthrough, but since December things have really started to clarify." For the first time, he said, Soekor had an accurate and detailed knowledge of the geology of the offshore St. Francis Basin area, and the company "feels a lot better than before" about further exploration there.

Though consultation with the best people in the world, Soekor was now optimistic of oil finds, and while the number of possible locations was crystallising every day, there were eight pinpointed at present.

REASONABLE
The offshore rig Solco K, commissioned for drilling the site, was scheduled to arrive in January next year for a minimum two-year contract.

"I think that the chances are reasonable of finding some oil there," Dr. Graham said.

In a paper outlining the search for oil in South Africa, Dr. Graham said: "Soekor was no longer afraid of offshore exploration."

Expert teams assisted by oil industry experts were involved in the exploration.

Dr. Graham also said more offshore drilling would probably be made off the west coast.

Speaking about an offshore gas find referred to recently by Dr. P. Koornhof, Minster of Mines, Dr. Graham said the site was in a "generally hostile environment." The cost would probably be "rather high."
Search for oil/fuel discoveries

*17. Mr. G. H. WADDELL asked the Minister of Mines:

(1) What amount was spent to the end of 1974 on the search for oil (a) on land and (b) at sea;

(2) (a) what fuel discoveries were made (i) on land and (ii) at sea and (b) what is the estimated quantity of fuel to be derived from each discovery;

(3) whether any discoveries are being exploited; if so, (a) which discoveries and (b) what quantities of fuel were derived from each as at the end of 1974.

The MINISTER OF MINES:

(1) (a) R45 740 175.

(b) R49 406 225.

(2) (a) No discovery in economic quantities of oil or gas has been made on land. A small quantity of oil at Colchester, District of Kirkwood, and a number of non-productible oil occurrences in North-west Free State and North Natal have, however, been discovered.

(ii) Gas has been discovered at sea opposite Plettenberg Bay and also opposite the mouth of the Orange River.

(b) (i) The estimated reserve of the gas discovery opposite Plettenberg Bay is five hundred thousand million cubic feet.

(ii) Only one borehole has been drilled opposite the mouth of the Orange River and it can deliver gas at a high rate of probably fifty million cubic feet per day.

(3) No.
Oil explorers head south

NEW YORK — At least one oil exploration company has abandoned its ventures in the North Sea and will search for petroleum offshore from South Africa. Others may follow.

United Canso Oil and Gas Co., a Canadian-based exploration and leasing firm, will conclude agreements next week for a 12.5 per cent interest in an offshore lease on the west coast of South Africa.

In March the firm sold its share of a lease on a North Sea development area for $48 million to a West German consortium.

This week, another drilling firm, Union Oil of California, announced that it too was pulling out of the North Sea.

A third, smaller firm, TricornCorp., has had to appeal to the British Government for relief from the heavy tax and 31 per cent participation demands London is making on the development companies.

John Buckley, United Canso's chairman, said his decision to switch from the North Sea to South Africa was mainly due to the difference in energy policies followed by the British and South African Governments.

"We could not raise our share of the financing for the North Sea deal under such hostile conditions. No banker would lend to us when faced with the uncertainties of the British tax and participation demands."

"In South Africa we have confidence we will be treated fairly if we find something of value. And if it's gas, we are near enough to Cape Town for a ready market," he said.

Mr Buckley said United Canso will be a "sub-tenant" on offshore leases already held by the French company, Societe Nationale des Petroles d'Equita.

Final terms of the lease agreement will be settled in Paris on May 18. Approval of the deal by the South African Government won't be a problem," Mr Buckley said.

The lease is a 5,5 million ha tract in shallow water just south of the territorial borders of South West Africa. Seismic exploration will continue this year with the first test wells scheduled for 1976.

Mr Buckley declined to estimate the cost of the exploration programme to United Canso. But, he noted that the working capital to operate a drilling rig offshore in the North Sea was nearly $50 000 a day.
Canadian coal men to visit SA

Business Reporter

A top-level 16-man coal technology mission, organised by the Canadian Government, will visit the Transvaal from today until May 21.

The mission will include representatives from Government, provinces and from private firms interested in coal, oil and gas, pipelines and engineering.

Mr P J Read, Chief Marketing and Transportation, Coal, in the Department of Energy, Mines and Resources in Ottawa, Ontario will convene the mission.

The mission will hold discussions with the Transvaal Coal Owners' Association and visit Sasol, coal gasification plants, steelworks, coal mines, the Fuel Research Institute and the Council for Scientific and Industrial Research.

Among discussion subjects will be conversion of coal to liquid or gaseous hydrocarbons with specific reference to Canadian coals, the direct reduction of steel, production of ammonia from coal, the transport of coal slurry by pipeline, metallurgical and other process uses for coal, coal pricing policies and the extraction of oil from tar sands of northern Canada.
Coal reserves

302. Mr. T. ARONSON asked the Minister of Mines:

(1) (a) What were the estimated South African coal reserves at the latest date for which figures are available and (b), for what date are these figures given;

(2) what is the estimated (a) local consumption and (b) production of coal, for each year from 1975 to 1980.

The MINISTER OF MINES:

The latest estimates of the South African coal reserves and the estimated future consumption and production are contained in the report of the Commission of Inquiry into the Coal Resources of the Republic of South Africa. The Cabinet has already received the report for perusal and has approved that it be tabled.

The report has just been submitted to the State President. In the meantime the contents of the report are confidential and it is not deemed advisable to furnish other, obsolete, figures.

The report, which is a voluminous document, must still be translated and printed and will be released as soon as it is available in printed form.
Uranium has R400-m boost for industry

By ADAM PAYNE

A BOOST of about R400-million will be given to the South African engineering and construction industries when the Uranium Enrichment Corporation builds its commercial plant in the Transvaal.

Dr A. J. A. (Annie) Roux, president of the Atomic Energy Board and chairman of the Uranium Enrichment Corporation, said this in a special interview on the construction and staffing aspects of the planned plant.

His replies to questions were based on the results of feasibility studies and he said they should not be interpreted as in any way implying that a decision to construct a commercial uranium enrichment plant had been taken.

However, plans for the plant are going ahead, and, because of the success of the pilot plant in producing enriched uranium by a South African process, a decision to go ahead with the commercial plant is expected, although Dr Roux did not say so.

Points made in the interview were:

- As the plant will be dependent on low-cost electricity its siting would be in the vicinity of a pithead coal-fired power station.
- Only a small proportion of the materials needed for manufacture of the equipment here is not locally available.

Dr Annie Roux ...

There's gold in uranium.

Q: About R400-million — at 1974 money values — will be spent directly on plant and equipment in South Africa over 10 years.

A: Assuming the 60 per cent figure given in the reply to your first question, an amount of about R400-million will be spent directly on plant and equipment in South Africa over about 10 years. This is not a very approximate figure.

Q: Presumably the heavy engineering, construction industries and Iscor will benefit most?

A: If the 60 per cent figure is correct, and tenders can be opened for the construction and equipment.

Q: I assume construction of the pilot plant will begin about 1978.

A: The skilled labor needed to build the pilot plant would have to be trained in the meantime.

Q: The contract for the pilot plant will have to be awarded by the time the pilot plant begins to operate.

A: The contract for the pilot plant will have to be awarded by the time the pilot plant begins to operate.

Q: Will this large undertaking slow down industry, which has been operating for the past 14 years.

A: This experience has been gained over 14 years.
Uranium has
R400-m boost

Continued from
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contracts will be placed with various firms after tenders have been called for. When do you expect the first orders to be placed for plant and equipment?
A: Your assumption is correct. Some orders for equipment needed for the development phase of the commercial plant have already been placed. The first orders for the commercial plant itself will, however, only be placed in 1978.
Q: Will this large undertaking in the nuclear industry be able to cope without difficulty?
A: Experience gained during the construction of the pilot enrichment plant enables us to think that South African industry is fully capable of coping with the project and that it will have a stimulating effect on industry.
Q: Will the materials from which equipment is locally fabricated be imported or are they available locally? Presumably instrumentation will form a large part of the equipment. Will this equipment have to be imported?
A: Only a small proportion of the materials needed for the local manufacture of equipment is not locally available. Instrumentation is technically important but only makes up a minor part of the costs.
It is envisaged that, depending on price, just over half of the instrumentation will be imported.
Q: What sort of employment will the plant provide? Presumably there will be a fair number of highly-qualified scientists. Will they have to be imported?
A: The plant will be characterized by low labour-intensity. As the plant will not be research-orientated but will be a commercial plant, it will have the normal balance of engineers, scientists and technicians one finds in any modern technically advanced industry.
The pilot plant project was undertaken and executed exclusively by South Africans and while it is not mandatory that the commercial plant should also be manned exclusively by South Africans, it is believed that the necessary qualified manpower will be available in South Africa.
The skills required for the local fabrication of plant and equipment already exist in the country.
During the construction of the pilot plant, South African welders proved they could equal the most exacting international standards.
Q: The construction of the plant will generate secondary industry activity. Presumably it will be linked conveniently to sources of equipment and materials, as well as power?
A: During the construction stage it would be convenient to have the plant at an Eisenraum plant, which is also an enrichment plant.
Q: Is it correct that large numbers of pressure vessels and kilometres of steel piping with flanges and other fittings will have to be used?
A: Yes.
Q: Are you able to discuss the financing of the construction?
A: Although exploratory investigations have shown that financing the plant is likely to be a crucial factor, it would be premature to go into details at this time.
Comment: Following the boost to local industry which will be provided by a decision to go ahead with the uranium enrichment commercial plant, the long-term effects would be notable.
The plant will provide an assured market for uranium oxide sold by South African gold mines as a by-product.
The enriched uranium will be sold at two to three times the price of the uranium oxide now being exported.
Foreign earnings should be at least R255-million a year — and presumably more as inflation raises the prices of uranium oxide and enriched uranium.
Provided a decision is taken shortly to go ahead with the commercial plant, it should be in full production by 1986.
Last, but not least, the Atomic Energy Board in its annual report said the winter of uranium oxide oversupply had ended and predicted that demand would continue to rise more steeply.
This augers well for gold mines with significant uranium oxide production, such as Buffels, Vaal Reefs, Blyvoor, Harmony, Harties and Western Deep Levels.
Future producers on a large scale will include President Brand in a joint scheme with its neighbours, Welkom and President Steyn, West Rand Consolidated, Afrikander Leases and probably Randfontein.
E Transvaal will get second Sasol

THE SITE for South Africa's second Sasol undertaking will be in the Eastern Transvaal highveld, about 15 km from both Evander and Trichardt, the chairman of Sasol, Dr P. E. Rousseau, announced in Johannesburg yesterday. The plant is scheduled to come into commission in 1987.

Dr Rousseau said:

SUNDAY TIMES Reporter and Sapa coal mine shafts would be sited on the farms Brandspuit and Bosjespruit or in their immediate vicinity.

"The intention is to site the industrial complex on the farms Twistdraai and Goedeboom, to the north of the mine shafts.

"With the exception of a few farms, about which negotiations are still being conducted with the owners, Sasol has acquired options on all land required for mining, industrial and residential purposes.

"The sinking of shafts for the coal mines and building of the first houses will begin in the first quarter of 1976, and preparation of the site for the Sasol II factory will begin towards the middle of 1976.

"Landowners in the area of the Sasol II take-over told the SUNDAY TIMES yesterday they were "unhappy" with the offers of R200 to R300 a morgen.

"Mr Paul de Vos, who farms on 250 ha in the Goedeboom area, said that he was dissatisfied with an offer of R265 per ha.

"I had hoped for at least R350 per ha, I intend to fight for my price," he said.

Mr Brian Allen, a member of a syndicate which owns the 856.5 ha farm Allendale in the Goedeboom area, said he considered the offer made to him of R250 per ha was "reasonable."

"The offer was for the land, and the Government is paying out for our farm improvements. The negotiations were amicable."

Mr Carel Cronje, 68, who owns a 35.6 ha farm, Driefontein, said he was "disgusted" with the R35,000 he had been offered.

"When I move, it will cost me that R35,000 to buy a house in Trichardt. I will fight for a decent offer."

Mr H. Kielmeier, owner of Trichardt Property Developments, said: "The property market has gone mad. The biggest demands are for housing, flat buildings and administration buildings for Sasol and the by-product factories."
New Sasol will go up on highveld farms

THE SITE for South Africa’s second Sasol — oil from coal — undertaking will be in the Eastern Transvaal highveld, about 15 km from both Evander and Trichardt, the chairman of Sasol, Dr P. E. Rousseau, announced at the weekend.

The plant is scheduled to come into commission in 1981, Dr Rousseau said in a statement.

"When the Minister of Economic Affairs announced on December 5, 1974, that the Cabinet had decided a second Sasol was to be built, he said that the exact siting of the plant and the associated township would be decided on as soon as certain geological studies, which by then were already in progress, had been completed.

"He said that the complex would be established on coalfields of the Eastern Transvaal highveld, where Sasol had over the years acquired coal-mining rights.

Since then geological surveys, including seismographical studies, have been conducted over a large area of the Eastern Transvaal highveld.

"Based on these surveys and taking the long-term requirements for Sasol II of economically mineable coal reserves into account, it has been determined that the most suitable siting of mineshafs would be on the farms Brandspuit and Bosjespruit, or in their immediate vicinity.

"These farms are approximately 15 kilometres from both Evander and Trichardt in a southerly direction.

"The intention is to site the industrial complex on the farms Twisdraal and Goedehoop, to the north of the mineshafs, where the coal deposits have been partially burnt out as a result of dolerite intrusions and are therefore not economically exploitable.

"The residential area will be laid out on a site about four kilometres to the north of the factory complex.

"With the exception of a few farms, about which negotiations are still being conducted with the owners, Sasol has already acquired options on all the land required for mining, industrial and residential purposes.

"As is normal practice in such cases, Sasol’s negotiations with individual landowners have been conducted on a confidential basis, and we do not intend making public the particulars of individual transactions.

"In accordance with the grazing and agricultural value of the land, the basic price per morgen has varied between R200 and R300.

In respect of mineral rights and special improvements, price adjustments have been effected.

"Although the planning required to meet all the needs of the project will be undertaken by Sasol itself in collaboration with the authorities concerned, the intention is to actively involve the private sector in the establishment of the infrastructure as well as in the erection of homes and other buildings.

"The first houses will be built in the first quarter of 1976.

"The sinking of shafts for the coal mines will also start in the first quarter of 1976, while preparation of the site for the Sasol II factory will commence towards the middle of 1976.

"Work on the foundations and other civil engineering work should start by April 1977.

"In the meantime planning and design work for the whole project is being continued without interruption.

"Commission of the Sasol II factory is scheduled for 1981.” Dr Rousseau’s statement said. — Sapa.
Cool it, Sasol warns Trichardt

By JOHAN BUYTS

FOR THE 600 inhabitants of the Eastern Transvaal Highveld hamlet of Trichardt, it was within reach one minute—the pot of gold at the end of the rainbow—and gone the next.

The village, which has been more or less stagnant since its birth in the days of the Vorsterker, had visions of undreamt wealth and prosperity with the announcement that the R1.6 billion Sasol project would be sited on four farms close by.

Land prices rocketed and speculators overran the area for the "gold" in property deals. The village council had urgent meetings to discuss future planning and development to meet the demands the Sasol project would bring with it.

RETIRED

Trichardt was getting ready for boom, and neighbouring towns looked edgy with envy.

Then, the Mayor Mr Jan Schalij and his town clerk Mr Thys van der Merwe, were summoned to Sasolburg to confer with Sasol's management.

They returned to Trichardt somewhat disheartened.

The message from Sasol was: "Play it cool. Do not rush into grandiose projects. We are doing all our developing for the project ourselves."

The warning by Sasol's managing director, Mr David de Villiers, that speculators out for a quick kill in the property market would burn their fingers. Since the Sasol announcement, property prices have rocketed by 1000 percent.

ONE THING you don't do in Trichardt, as I found out on Monday, is to suggest that they have all become millionaires overnight.

The locals are not exactly throwing their hats in the ring over the second coming of Sasol, but they have enough trouble keeping pace with the present cost of living as it is. And all they can see of the horizon are more price hikes coming their way.

Ground has already shot up in value and as more people pour into the tiny town, the price of everyday things will increase...
14. Mr. C. W. EGLIN asked the Minister of Economic Affairs:

(1) (a) How many hectares of land have been purchased for the site of the nuclear power station at Duynefontein and (b) at what cost;

(2) whether the power station is to be heavy water moderated; if so, from what country will the heavy water be obtained;

(3) whether guarantees have been obtained for the continued supply of heavy water for the duration of the life of the station; if not, what fuel cycle is envisaged;

(4) (a) what megawatt capacity is planned for the (i) first and (ii) second phase of operation, (b) what is the estimated cost of each phase and (c) when will each phase become operative;

(5) what provision is being made for (a) re-processing of spent fuel elements and (b) storing of radio-active poisons.

The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) 2 931 ha and 30 erven.
   (b) R771 000.

(2) No.

(3) No, enriched uranium-oxide will be used as fuel.

(4) (a) (i) 900 to 1 000 megawatt.
   (ii) A further 900 to 1 000 megawatt.

(b) The total estimated contract value in 1975 monetary values is R600 million.

(c) Approximately September 1982 and September 1983, respectively.

(5) (a) As a need for re-processing will only arise in 1983 suitable arrangements in this connection will be made in the course of time.

(b) The major part of the spent fuel elements will be suitable for re-processing, while the small quantities of solid wastes which will contain minimal quantities of radio-active material will be stored safely in special bunkers at faraway localities on the extensive power station site. An extremely high measure of security will be maintained and the area will be monitored regularly in order to ensure that no pollution of the environment takes place.

Mr. W. H. D. DEACON: Mr. Speaker, arising out of the hon. the Minister's reply, I wonder whether he knows that the hon. member who asked the question is a quantity surveyor?
Foreign firms can invest in uranium plant

John Patten,
Political Correspondent
CAPE TOWN — The Government has opened the way for overseas and private enterprise participation in South Africa’s planned new uranium enrichment plant.

In a statement in the Assembly yesterday afternoon and a subsequent interview, the Minister of Mines, Dr Koornhof, gave details of the decision of the Uranium Enrichment Corporation to establish a subsidiary company in which potential shareholders from private enterprise will be invited to participate, and which will have a stake in the new plant.

Negotiations with unnamed organisations over foreign participation were in progress.

SUBSIDIARY
If successful, a locally registered company with international shareholding would be established to build and run the enrichment plant.

The Ucor subsidiary, named ISASA (Pty) Ltd, would be the South Afri-
LAST LAUGH FOR SUN POWER MEN

NEW YORK. — Suddenly, as the United States begins to wake up to the harsh realities of its energy crisis, the solar power buffs are becoming respectable.

No longer are their ideas for harnessing the limitless energy of the sun relegated to the lunatic fringe of technology. And so a weird array of devices and structures, seemingly copied from the Buck Rogers’ space fiction comics are taking shape on the drawing boards. Some are actually being built.

It will be a long time, however, before much use is made of the sun’s rays to heat the water, cook meals, light streets, freeze the fruits and power factories.

This potential has been ignored for so long in a spendthrift era of relatively cheap and plentiful oil that solar energy technology is still very much experimental.

MARKET

But it has at last been recognized, not only by scientists, but also by commerce. A few modest solar energy converters are being offered on the market, and there is a visible nucleus of what will undoubtedly become a major industry.

A powerful thrust has been provided by the Federal Government, which, supported by the Ford administration’s program to make the U.S. independent of foreign energy resources within 10 years.

In fiscal 1976, the Federal Government will spend up to $500 million dollars (about $300 million) on solar power research and development. This is small compared to the $400 million dollars (about $150 million) earmarked in the same year for the development of a nuclear breeder reactor, but it is a lot more than the $1.3 billion dollars (about $300 million) allotted to solar energy work in 1974 and vastly more than the total of $100 million dollars (about $50 million) spent from 1960 to 1970.

With greater expenditure, is proposed for nuclear research under two acts of Congress of 1974. The Solar Energy Research, Development, and Demonstration Act provides for 4.0 million dollars (about 3.0 million dollars) to be spent in 1978, and the Solar Heating and Cooling Demonstration Act calls for 60 million dollars (about 42.0 million dollars) to be spent over the next five years.

Theoretically, the sun’s potential to supply the world’s energy needs is enormous. The amount of sunlight that filters through the earth’s atmosphere carries enough latent energy to provide 18,000 times the energy now needed in the world for power and heating.

Out in space, beyond the earth’s atmosphere, the sunshine packs a far bigger wallop. And it is no longer regarded as idle to envisage huge power stations on the earth, converting sunlight into usable energy and sending it, by microwave, to receiving stations on earth.

One respected solar energy technologist says, “The scope of assembling giant solar collectors in space...

But first scientists will have to develop the entire system needed to construct the structures and materials...

DESERT

According to a recent study by the Department of Defense, the solar energy that falls on the Sahara desert each year is about equal to the world’s entire coal, oil, and gas reserves.

In the United States alone, the potential is enormous. It is estimated that if solar thermal converters were installed, in only 10 percent of the California desert they could, produce, more than the electricity generated in the United States today.

The solar-thermal converter, which uses the steam to turn turbines, is one of several ways in which solar energy can be exploited.

Another proven method is photovoltaics, the system used to generate electricity for the Apollo spacecraft in the moon. It involves using semiconductor materials specially treated to create a voltage when struck by sunlight. More esoteric methods are also being investigated under a wider definition of solar energy. This includes wind and water currents, since they are created by the sun’s heat and the growing of special crops (which also depend on the sun’s energy) to convert energy into energy in a variety of ways.

But scientists are concentrating first on the more direct ways of harnessing sunshine.

COOLING

The solar Heating and Cooling of buildings will be the first of the solar research and development programmes. If it’s not an impact on the U.S. energy situation, says Dr. Gray, director of the National Science Foundation.

According to him a recent survey listed 300 solar-heated buildings completed or due to be completed in the United States.

Completed projects include large residential buildings in Minnesota, Boston, and Baltimore. Some frame is already marketing solar-heating equipment for houses.

Nevertheless, it is estimated that only 1.3 percent of America’s buildings will be heated and cooled by the sun by the year 2000.

COMPETITIVE

But, Dr. Gray points out that heating and cooling of buildings represents about 30 percent of all United States energy consumption. It’s only 10 percent that could be supplied by solar energy by 1980, the United States could save the equivalent of one sixth barrel of oil a day.

It will be widespread, commercial, of that which will determine how fast and how much of an impact solar heating and cooling will make, easy Dr. Gray.

On average, it would need more than a square kilometre of land covered with mirrors or other collectors for every 25,000 kilowatts of electricity produced.

Dr. Gray estimates that by the year 2000 solar thermal conversion could provide about one percent of the country’s projected energy needs, but a far higher proportion in the southwestern states.

LARGE CAPITAL

The future is less certain for photovoltaic conversion. The best guess is that this system will not be able to provide large amounts of electric power until the late 1980s.

It will probably be well into the next century before this technology has any large national impact, says Dr. Gray.

There are several reasons why solar energy will not be providing plentiful and cheap power for many years. One is that it will take vast capital expenditure before solar energy can compete with conventional power sources.

Another is technological. Even though some systems have been proven, they still have to be developed and adapted.

In the meanwhile much time and money will be spent instead on finding a more efficient way to exploit conventional energy sources.

There are also aesthetic considerations — how would you like several square kilometres of mirrors outside your town? — and society’s tendency to cling to what is customary.

But solar energy has two enormous advantages — it is clean and its source is inexhaustible. It is also above international politics.

SPACE scientists are planning the development of a giant satellite solar power station. The massive unit, measuring 4.4 km high by 1.1 km long, would weigh 90 million kilograms. The station would beam solar energy to Earth where it would be converted to electric power.
3 problems for Sasol II planners

By JOHAN BUYS

WITH the turning of the first sod in the Giant Sasol II on the Eastern Transvaal highveld only months away, three major problems are facing the oil-from-coal project even before its planners have moved into the area.

They are: inadequate road and rail links to the site between Evander and Trichardt 144 km from Johannesburg and the moving of a 'whole African township.

Construction on Sasol II, the biggest project ever to be tackled in this country, is expected to start between October and January next year and massive loads of equipment and material will have to be transported to the area.

The road linking Evander, Trichardt and the Sasol project with the Reef, source of most of the equipment and material, is in a poor condition from Springs to Leslie.

It would not be able to withstand the weight of the heavy lorries transporting the equipment between the Reef and the new Sasol site over the next four to five years.

In addition Trichardt is served by a single railway line from Springs, one from Louros and one from Durban through Volksrust.

To convey the equipment and material for the new Sasol town and industrial complex that will rise on the virgin Eastern Transvaal soil, marshalling yards or new sidings will have to be built.

These transport problems will have to be sorted out by the time the R1000-million project is tackled.

To add to the initial planning problems, the Driefontein African township with its 5800 inhabitants lies in the area where the White town for the Sasol construction workers is to be built.

These African families will have to be resettled elsewhere. The Bantu Affairs Administration Board has bought land in Devon nearby for African housing. It is estimated that the new African township to accommodate the vast Black labour force for the Sasol project will be second in size only to Soweto.

Meanwhile the demand for housing in Evander and Trichardt has soared. Sasol has taken 160 houses in Evander and options on stands at Trichardt for its new office complex.

Private people are finding it difficult to get housing at Evander since the announcing of the Sasol project.

Sasol planners will initially move into the house of Mr Graham Allen, on the 1074 morgen farm "Goede Hoop" it has bought from Mr Hilton Allen and his two sons.

The Evander Town Council which is to provide essential services, has already held meetings to plan for the demand the Sasol project will make on the town.

At Trichardt land prices have soared to such an extent that a stand which was valued at between R250 and R350 was auctioned for R1 500. Its owner, Mr J. van Onselen, Town Clerk of Evander, has already received offers of R4 000 for it.
Africa
Investment in Southern
Shell Conference Room
17/7/49
THE Shell Oil Company plans to spend about R500-million in Southern Africa over the next 10 years, and of this amount R75-million will be spent in Durban.

It was disclosed at a Durban banquet last night marking the company's 75th year of operation in Southern Africa that a two-stage expansion of the group's refining facility and the building of a polypropylene plant would be undertaken in the city.

Mr. A. C. G. Geeling, the company chairman, said in a speech read on his behalf that the two-stage expansion programme would cost R165-million, and the new plant R50-million.

Refiners were asked and able to be produced from available crude oil, the catalytic cracking plant is being expanded, and a new complex is being developed to make polypropylene on a large scale from fuel oil.

This project enables the company's needs to be met with less imported crude oil, and improves flexibility. In addition, a new feedstock preparation unit is on the drawing board, he said.

Mr. Geeling said the polypropylene plant would probably be in production by mid-1979, and would have a design capacity of 30,000 tons a year, which would make South Africa self-sufficient at that time and open up significant possibilities for polypropylene.

Other projects for Shell over the next 10 years included the development of an ethylene cracker for the production of feedstock for the plastics industry.

Mr. Geeling also announced that the company's local oil interests would become independent from June 28, thus joining the existing 35% percent-owned chemicals, coal and metals companies in the group in Southern Africa.

We aspire to play a continuing and developing role in the economy of Southern African countries and are at present evaluating new major projects which may well involve capital expenditure of up to R500-million over the next 10 years.

By the end of the period, therefore, the total cost of our asset investment in Southern Africa could be some R500-million.
SHELL TO COMprise
12 FIRMS IN S.A.

Cape Town — When Shell in Southern Africa becomes an independent oil, chemical, coal, metals and nuclear group within the worldwide Royal Shell Group on June 26, 1976, it will consist of 12 companies in South Africa, South West Africa, Botswana, Swaziland and Lesotho.

Shell (Petroleum) South Africa (Pty) Ltd., will be the new company. A new company, Shell Southern Africa (Pty) Ltd., will provide financial control and corporate planning. Personnel and trade services for the new group will be handled by Shell Chemical South Africa (Pty) Ltd.; Shell Coal South Africa (Pty) Ltd.; Shell Transport (South West Africa) (Pty) Ltd.; Shell Oil, Botswana; Shell Oil, South West Africa; Shell Oil, South Africa (Pty) Ltd.; Shell Coal, South Africa (Pty) Ltd.; Shell Chemical, Swaziland; Shell Chemical, Botswana, South West Africa, Swaziland, Lesotho; Shell Oil, Lesotho; Shell Coal, Lesotho; Shell Coal, Swaziland; and Shell Transport, South Africa (Pty) Ltd., will be responsible for the group's nuclear activities.

In addition, the Shell group will retain 50 percent interest in Sappi, the Durban Valley, which has operated under a service agreement with Shell International Petroleum Markets, The Hague; 40 percent interest in African Refining, Mabalingwe (Pty) Ltd., 25 percent interest in South African Lubricants Manufacturing Company (Pty) Ltd., manufacturers of base oils for lubricants; a 40 percent interest in Cycle Refineries Ltd., and a 33 percent interest in Lucas (South Africa) Ltd.
BP staying out of oil hunt

By: JON ARBOTT

BRITISH PETROLEUM, the international oil company that has made some of the most substantial oil finds in the North Sea, does not want the country of finding oil in South Africa very highly. Wayne Temple, the new chairman of the BP group in South Africa, said in Johannesburg yesterday:

"We are unlikely to resume the search for oil in South Africa, because the experts were not very encouraging."

But, he added, oil had been found where the experts had predicted it could be found on the coast of South Africa, and oil was found in the UK in 1972.

"We exercised our right to withdraw after one hole had been drilled," said Mr. Temple.

"And they did this because they had better prospects in the North Sea of the British coast of Florida."

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"If BP was wrong, South Africa's oil, he said, he felt BP's main objective was to spend on drilling. What was spent so far may go to the South African government."

"BP is expected to produce about 100 million for operations here, but the government received a payment of 100 million for starting operations."

"This means that the BP was to some extent partly public already in South Africa."

"This will take two or three years for our new organisation to receive its share," he said.

"He said that South Africa preferred the new arrangement, with Shell and Total, which has been a consortium with Shell, Mobil and Total, which has been a consortium with Shell, Mobil and Total, which competed off the coast in the north-eastern area in 1972."

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They’re Shelling out R500 million with emphasis on coal

Financial Editor

QUITE obviously, from the announcement made by Shell this week that it is to invest R500 million in South Africa over the next ten years, the emphasis is going to be on coal.

For, although oil will continue to dominate the energy arena for some years it is certain that Shell views coal potential with the greatest optimism. Figures from the World Energy Conference last year show that economically recoverable coal reserves total an equivalent of 3,000 billion barrels of oil whereas economically recoverable oil totals only 550 billion barrels. So the emphasis is on coal and, of course, nuclear energy. And in both these fields Shell is making a powerful push.

The group makes the point that in searching for oil over a long period of time it has built up a “vast bank of information” on the world’s geological structures and, as such, places it in a strong position for the exploitation of oil-alternate energy reserves.

Already Shell has located “significant” reserves of coal in South Africa and is currently involved in a feasibility study for mining, transporting and marketing coal from a new mine in the Witbank/Bethal area in equal partnership with Transvaal Consolidated Lands.

The group has an export permit for 150 million tons of coal over 20 years and is also involved in negotiations on a coal slurry pipeline between Witbank and Richards Bay. The cost of this pipeline could be around R300 million — an amount which, depending on the negotiations, could be spread out among several users.

Shell is developing the technology of slurry transportation. The slurry is a mixture of coal particles and water with the coal having been ground to particles smaller than 1 millimetre in diameter. The mixture is about 50 percent coal and 50 percent water — by mass.

Solved

Preliminary designs for the Richards Bay pipeline cater for around 20 million tons of coal to be moved a year.

Shell claims that one of the main problems of slurry transportation — dewatering — has now been solved.

The group is also involved in the nuclear energy field and feels that, in this area, there is considerable potential for South Africa.

Shell has a 50 percent interest in General Atomic whose main business is the design, development, marketing of high temperature gas reactors and their associated nuclear fuel.

It is claimed that the HTGR is the most advanced nuclear power system commercially available today and is considered to have definite advantages on safety environmental and operating grounds.

According to Mr K. L. G. Geeling, Shell’s South African chairman the HTGR is considered to be particularly suitable to South African conditions and preliminary studies now in progress could lead to the introduction of this reactor in the late 1980s.
The Argus Financial Editor

AS a result of the world energy crisis South Africa is heading for a coal export boom which will boost its foreign exchange earnings by hundreds of millions of rupees over the next decade and make coal the country's second most important export after gold.

Current estimates indicate that the opening of the new harbour at Richards Bay next April could immediately result in coal exports worth about R200 million a year.

And coal export worth about R1,000 million a year by the middle of the next decade it's a strong prospect.

This figure may appear large in relation to the South African economy, but it is not unduly big in terms of energy costs. The sixfold increase in the oil price, for example, is equal to South Africa an extra 4,000 million a year, a Government spokesman announced recently.

Higher price

Catching attention on South Africa's coal export boom is the announcement by several coal mines in the Anglo American group that the price of coal exported to Japan has been raised from 26,70 dollars to 26 dollars (1963/64) a ton at the port of Lourenco Marques.

They say further negotiations will be required for the establishment of prices to apply from April next year when deliveries will start through Richards's Bay. They add that 26 dollars will represent the floor price for negotiations.

It is a measure of the changed outlook for coal that, when the Japanese contract was first negotiated in 1973, the top price was fixed at 18.48 a ton, rising to 20.61 a ton by 1975.

With the coal industry having firm contracts to export 8 million tons a year from next June and the possibility being called on to supply a further 4 million tons a year, export earnings from coal could rise to between R200 million and R1,000 million a year.

EXTRA SPEC
AMERICAN Central Intelligence Agency spies are suspected of operating in South Africa in an attempt to discover the secrets of the country's unique uranium enrichment process.

Informed sources close to the Government told me yesterday that South African suspicions were aroused when two Americans with PhDs in physics were appointed to "innocent departments" at the US embassy.

The startling information that the CIA is after South African uranium secrets followed Washington reports that South African officials had uncovered strong evidence that the CIA has been sending in agents under false cover — and in numbers never before suspected.

And the disclosures come at an awkward time when South Africa has been forging unofficial links with highly placed Americans, partly in the hope that the US Navy will use Simonstown.

It is understood that South Africa has been looking out for foreign spies ever since the uranium enrichment breach, though it was announced in 1971 in the face of a sceptical world.

But since then, South Africa has been able to give top scientists a glimpse of how the new and cheaper process works.

**Interest**

The Government has also made known that the uranium-enrichment process could earn South Africa about R5 million a year in foreign exchange, once the plant reaches full output.

West Germany and Japan have shown particular interest in the enrichment process — but on an unofficial level.

Now it is suspected that at least 12 agents have been identified in an investigation into American official visits to South Africa in recent years.

All were granted visas at the request of the State Department, which identified them as technicians, administrative experts, computer programmers or other harmless categories of officials.

But none of them can be traced in any Government post, nor can any explanation be extended from American sources.

**Posing**

This leaves the inescapable conclusion that the visitors were CIA agents posing temporarily as officials of other Government departments.

The investigation was prompted by the discovery that a CIA agent, Mr. Robert Jastor, visited South Africa under false pretences. He used a diplomatic passport issued by the State Department.

The disclosures about the CIA's South African operation also comes when the organisation is in hot water for its sometimes outrageous activities throughout the world. And it is not impossible that this could develop into South Africa's second major spy scandal.

The first was in 1961, when Russian spy Losnov was captured by security police under General H. J. van den Bregga, the

By EUGENE HUGO

Secretary for State Security.

I understand the story about CIA activities in South Africa has been doing the rounds in the highest Government circles in Pretoria. But so far no serious departures of US embassy officials have been noted.

The South African Government has been very conscious of the possibility of attempts being made to discover details of the top-secret uranium process.

Soon after the announcement that the process had been discovered, legislation was introduced carrying penalties of up to 10 years' imprisonment for anyone leaking information.

Meanwhile, no official statement was forthcoming from Pretoria yesterday.

The Minister of Foreign Affairs, Mr. Hilary Mul- len, said: "I am sorry, I can't help you."

**Silence**

The American Embassy, for Mr. William Bowler, would not comment. "I don't know where this information came from, but I don't have any connection with all the stuff like that," he said.

In 1972, Mr. Ed Holmes, American Consul General in Durban, who left South Africa last month on transfer, was named as "one of the most senior CIA officials in Africa.

"A report in London's Daily Telegraph said Mr. Holmes, among his various exploits, initiated the first contacts between the South African Government and President Randi of Malawi. Mr. Holmes, however, denied he had ever been a CIA agent."
Huge cut in uranium costs on the cards

BY ADAM PAYNE / Mining Editor

Advances in the mining of uranium and other nuclear materials are expected to reduce costs to a fraction of current levels.

A recent report by the International Atomic Energy Agency (IAEA) highlights the potential for significant cost reductions in uranium mining and processing.

"Recent advances in mining technology, particularly in the areas of in situ leaching and hydraulic fracturing, have the potential to reduce uranium mining costs by up to 70%," said IAEA Director General, Yukiya Amano.

The report also notes that the use of deep boreholes for in situ leaching can significantly reduce the costs associated with surface mining, while improving safety and environmental outcomes.

In addition, the report highlights the potential for significant cost reductions in uranium processing, with new technologies such as ion exchange and reverse osmosis expected to reduce processing costs by up to 50%.

The IAEA report also notes that the growing interest in nuclear energy is driving investment in uranium exploration and development, which is expected to further reduce costs in the coming years.

"With the growing demand for nuclear energy, we expect to see continued investment in uranium projects, leading to further cost reductions in the future," said Amano.

Meanwhile, many uranium producers are looking to expand their operations to take advantage of these opportunities, with several new projects under development in countries such as Canada, Australia, and the United States.

The report concludes that significant cost reductions are possible, with the potential for uranium mining and processing costs to be reduced to levels comparable to other mineral resources.

"With the right investment and technology, it is possible to reduce uranium costs to a level that is competitive with other mineral resources," said Amano. "This will require continued investment in research and development to improve mining techniques and processing technologies."
EXCITEMENT is mounting in the Karoo towns of Beaufort West, Graaff-Reinet and Aberdeen about the district's uranium prospects after reports that an American company is to start drilling on a 200-morgen kopje.

An oil company, as yet unnamed, is understood to have agreed to pay R1 million to a Cape Town businessman if uranium is found on the property.

The company is expected to start operations in the next two months, as long as it can obtain permission from the other world.

Satellite

An American satellite that has been pining for the Cape Town region has been electrically excited at a distance of over 10,000 miles. It has indicated that a large deposit of uranium has been found during drilling for oil in the kopje area.

The 200-morgen site is near a farm sold years ago, and the oil company offered R500,000 for the mining rights. The bid was later raised to R1 million and at that amount the owner signed the contract.

Oil search

The Karoo's uranium rush is under way two weeks ago when a Natureparks oil exploration company reported extensive uranium deposits under the area.

Drilling for oil is a by-product of the uranium find, which measured 32,000,000 lbs. If payable values could be found over 1,000km, the reserves would be greater than the total reserves of the United States, geologists say.

Considerable prospecting and buying of mineral rights was going on in the Beaufort West and Prince Alfred areas, an official of the Department of Mines in Pretoria said today.

The company has not yet been picked to start mining, he said, several prospects.

(Continued on Page 2, col 2)
SOUTH AFRICA is poised to enter the 1980s on the back of a R10 000 million capital spending spree that will entrench the country as the industrial powerhouse of Africa.

And to underline the urgency of this massive capital generation, Minister of Finance Horwitz this week encouraged big business to borrow abroad.

For it is obvious the vast amounts required to finance the ambitious projects either under way on the drawing board cannot be raised locally.

However, a prerequisite for large cash inflow from overseas is investor-confidence in the future of South Africa.

For this reason, detente moves are as important economically as they are politically.

The fruits of an improving image on foreign capital markets are already being reaped. Escom, which will need R915 million before the end of 1977, found no difficulty in raising R27 million from German investors last month.

At home, Senator Horwood made it easier for the private sector in its bid to borrow on foreign markets by relaxing previous restrictions on borrowing abroad and also improving facilities for forward cover.

Such moves will help finance the huge developments planned here. They include:

SASOL 2. This is expected to come on stream in 1980-1981 at a cost estimated at R1 650 million.

ISCOR: Long-term plans for expansion and modernisation of its three steelworks and seven mining centres have been estimated at R3.240 million. This does not include capital requirements for the ore export scheme or the proposed smelting works at Saldanha.

IMPROVEMENTS to the Durban refinery: Shell and BP are planning to spend R50 million in the next three years.

ETHYLENE cracker at Durban: This will cost Supercracker R60 million between 1978 and 1979.

POLYPROPYLENE plant at Durban: Shell is to spend R30 million on this by 1980.

PHOSPHORIC acid plant at Richards Bay: Termit is to build this for R70 million.

COAL-BASED chemical plant at Sasolburg: AE & C1 has received Government go-ahead to spend R220 million on this plant which is planned to come into operation in 1977.

TUGELA-VAAL water scheme: Estimated cost R175 million.

The list goes on: Sentrachem's polyvinyl chloride plant (R75 million), Safripol's coal-based acetylene plant (R100 million), Foskor's Phalaborwa plant (R40 million), oil exploration (R20 million).

Then there are the development programmes planned by the railways and harbours; tentative capital expenditure needs have been put at R870 million for this year alone, including the new oil pipeline from Durban to Johannesburg (R22 million).

Containerisation will involve huge sums. It entails buying 10 large and four small ships and upwards of 5000 containers plus handling equipment. Saldanha Bay's dock complex is estimated at
Cost of oil worries SA says Heunis

The Argus Correspondent

PRETORIA — The Minister of Economic Affairs, Mr J. C. Heunis, said today South Africa was not having difficulty getting oil. But the Government was concerned about the cost.

He said there were indications of more increases in the price of crude oil with resultant effect on South Africa's balance of payments position. This would in turn affect other prices.

Mr Heunis was speaking at the Transvaal National Party Congress.

He turned down a request asking for the speed restriction of 90km on freeways to be raised to 100km for light vehicles.

He said that, when the oil price rose in 1973, there were doubts about whether South Africa would be able to obtain sufficient crude oil for basic requirements.

The Government then had to decide between speed restrictions and rationing. Speed restrictions were found to be the best and South Africa's rationing would have cost R3 million a year to administer.

Mr Heunis said the question of the availability of oil supplies were not as critical as before although South Africa was still on the official boycott list of many oil-producing countries.

There was, however, the question of cost. Although South Africa, through the speed restrictions, had been able to save R7 percent on oil, the increased prices had cost the country an additional R9 million.

IMPORTING

The country's Achilles heel was its balance of payments. If gold was excluded South Africa was still importing far more than she was exporting.

Mr Heunis said it was important to keep in mind the effect economic factors and inflation could have on the country's political structure.
Caltex spending R96-m in Cape

By GORDON KLING

CALTEx OIL in South Africa is to embark on a R96-million expansion programme. It will increase the capacity of its Milnerton refinery in Cape Town by 70 per cent in the largest industrial project yet undertaken in the Western Cape.

Bill Marshall Smith, Caltex managing director, said yesterday design and engineering studies are well advanced. The expansion is necessary to meet the growing market for refined products. It will be in two stages.

Mr Marshall Smith says the expansion also reflects Caltex's optimism about the South African economy.

"Even with fuel conservation measures, the buoyancy of the economy has created corresponding growth in the petroleum industry, although now from a lower base."

Expand

"The Government has allowed us to expand our facilities to meet this growth up to 1983."

The first stage of the project is designed to improve the yield of refined products and is scheduled for completion in March 1977.

The second stage, to increase capacity, is to be completed in July 1978. A date has not been set for the start of construction.

The expansion will raise the capacity of the refinery from 61,000 barrels a day (about 3 million tons a year) to 115,000 barrels a day (5 million tons a year).

This indicates that Caltex is looking for a growth in petrol consumption of nearly 2 per cent for South Africa. The new facilities will include a crude distillation plant, a catalytic cracker for petrol and sulphur removal and recovery plants.

Mr Marshall Smith says they will double the size of the refinery.

Local content will make up one-third of the total R96-million expenditure. Mr Marshall Smith says the expansion will result in foreign exchange savings of about R30 million a year.

The project is to be financed by a combination of internal funds (Caltex), local short to medium term borrowings, and possibly some offshore loans." He was unwilling to comment further on this.

Second

The enlarged Caltex refinery will move ahead of Mobil's Durban plant into second place, behind the combined Shell-B.P., Supref, refinery, also in Durban, which is due for expansion around 1980.

Caltex, which is scheduled to move into new Cape Town headquarters towards the end of 1977, is one of the few big oil companies still active in exploration work here.

The parental exploration arm, Chevron, has leases on the West Coast south of the Orange River mouth and on the Agulhas Bank.

Mr Marshall Smith says: "It's known that offshore drilling is enormously expensive. We wouldn't be searching if we didn't have reasonable expectations."

Caltex Oil (SA) is owned directly by Caltex Petroleum, which in turn is held 50-50 by Texaco Inc., and Standard Oil of California (Socal). Socal is known outside the US as Chevron. It has been operating here since 1911.
Jobs for 800 men from homelands

EAST LONDON — There will be job opportunities for about 800 men from the homelands on the construction of a R26 million Caltex Oil refinery expansion programme in Cape Town.

This was made clear in Cape Town by the refinery project manager, Mr. Bert Hyne, who said the total manpower used on the site, including artisans, would be about 1,500 persons.

About 800 men would be recruited by contractors from the homelands, he said, and the first stage, to improve yields of refined products, is scheduled to be completed by March 1977. The anticipated completion date for the second stage, to increase capacity, is July 1978.

Mr. Hyne said Caltex Oil will also need 700 skilled artisans and 55 graduate engineers to work on the site. As there are not that many artisans in the fields needed presently employed in the whole Cape Town area, it was probable that a great number would have to be recruited from overseas.

"Mostly highly qualified coded welders and pipe fitters are needed," he said. "It involves work on miles of high pressure piping, and because of safety factors, tradesmen have to conform to high levels of quality control and rigid standards of performance."

The extensions will double the size of the refinery and increase capacity from 41,000 barrels a day (3 million tons a year) to 105,000 barrels a day (6 million tons a year). The expansion is expected to result in a foreign exchange saving of about R30 million a year. — BUSINESS EDITOR.
CAPE TOWN — The State-backed Southern Oil Exploration Corporation (Soekor), will spend at least R75 million on an intensified offshore search for oil over the next three years — R23 million more than the amount spent since the offshore probe started in 1967.

This was said yesterday by the managing director of Soekor, Dr P. J. van Zijl. He said two rigs had been contracted to drill a series of wells off the west coast and along the Agulhas Bank.

One rig — the Sedco K — was due to leave the North Sea next week and is expected to arrive on site 40km northwest of St Helena Bay by mid-December.

The Sedco K will drill three holes in the bay area and one off the mouth of the Olifants River.

Afterwards it would move to the Southern Cape coast to drill holes along the Agulhas Bank between Struisbaai and Cape St Francis.

They would have to wait until mid-1977 for the other rig.

The drilling was being viewed with far more optimism, particularly off the Southern Cape coast.

A strike yielding 50,000 barrels of oil a day would be considered a viable proposition. — SAPA.
Giant coal deal

BY ADAM PAYNE

The tonnage

The Government's coal policy is set to generate substantial benefits for the industry and the country. The policy, which aims to increase coal supplies and boost exports, is expected to boost the economy and create jobs.

The increase in coal production will enable the country to meet its energy demands and reduce its reliance on imported coal. The Government's focus on developing the coal sector will also help to create new jobs and boost the economy.

The increase in coal prices will also benefit miners and the mining industry. The higher prices will enable them to increase their profits and invest in new equipment and facilities. The Government's support for the coal sector will also help to create a more stable and sustainable industry.

The increase in coal prices will also benefit the country's economy. The higher prices will enable the country to increase its exports and generate more revenue. The increase in coal production will also help to reduce the country's dependence on imported coal and improve its energy security.

The Government's focus on developing the coal sector will also help to create new jobs and boost the economy. The increase in coal production will enable the country to meet its energy demands and reduce its reliance on imported coal. The Government's focus on developing the coal sector will also help to create new jobs and boost the economy.
It is likely that the other groups will negotiate at least two more export contracts on a similar scale. One would be signed by Anglo-American, which has a similar 'provisional' allocation to that granted to Trans-Natal. The other would be negotiated by Barlow Rand, which has a provisional allocation of 7.5-million t a year.

If these contracts are entered into, the three groups will export between 3-million and 9-million tons of coal, coal worth at least R100-million a year.

The line

The Richards Bay line has a capacity, when more loops have been added in the next two years, of up to 20-million t a year, of which the Transvaal Coal & Anthracite Producers' Association and the Transvaal Coal Producers' Association will be entitled to R12-million.

Trans-Natal, Anglo-American, and Barlow Rand are probable exporters of the remaining 8-million t.

The Trans-Natal contract is dependent on the loading appliances at Richards Bay being increased; this is now being negotiated.

The Secretary

Once this has been arranged, Trans-Natal should be able to tell the Secretary for Commerce, Joep Steyn, that it has met all the stringent conditions laid down under the preliminary allocations made by the Government.

The mine to be opened north of the reef and on the east bank of the reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank. The reserve bank will be a deposit of the reef mine, which, when the reef mine is closed, will become the reserve bank.
The Sasol story

What is Sasol? Everybody has heard the popular answer — it is South Africa’s oil-from-coal complex. But Sasol is several other things as well.

It is the main supplier of basic feedstock to the nation’s chemical industry.

It pours vast quantities of gas into the industrial heartland of the Southern Transvaal.

It is the senior partner, with the National Iranian Oil Company and Total, in a major conventional oil refinery.

It plays a major part, through its holding in Soepol, in South Africa’s hunt for oil.

It is also one of the most outstanding technical achievements in South Africa since the move away from mission farming as the basis of the economy.

Sasol has already invested R4600m in plants at Sasolburg in the Orange Free State. When Sasol II is completed in the East Transvaal, in 1981, this investment will go up by at least another R521m, based on 1974 prices.

For all this, the corporation’s activities and the economics of its operations are little known.

Many people believe that it is a strategic, but uneconomic, line of defence against a hostile world — an expensive bid to break away from dependence on imported oil and, eventually, a means of totally substituting coal for oil as South Africa’s source of motor fuels.

They are quite wrong. Sasol is the first, and only, profitable oil-from-coal project in the world.

As for commercial policy — this is how Mr D P de Villiers, managing director of Sasol, puts it: “South Africa should not arrange things to remain an attractive market for the international oil companies. It is entirely wrong to build an oil-from-coal industry that would lead to investments by the oil companies becoming superfluous.”

What about Sasol’s participation in the search thinking is confirmed by the steady stream of scientists and engineers from many countries that come to Sasol to learn — and by the fact that Sasol is now acting as consultant to several major gas corporations in the United States.

Sasol’s deputy general manager, Dr A H Stander, disclosed in London last week that, when the Sasol II plant comes on stream, its products will be only 15 percent more expensive to make than if oil were discovered off the mouth of the Orange River.

Industrial reporter IVAN PHILIP discusses Sasol and its economics.

for oil? Would an oil strike bring the development of Sasol II to a halt?

No, say the men who will build it. Sasol II would go ahead because oil is a waiting asset; because the oil-from-coal technology is too valuable and because diversity is the name of the energy game today.

And there is a more fundamental reason. Accepting one proviso, Sasol II is going to make a 10 percent return on capital invested.

The proviso is that international oil prices should approximately reflect the general rate of inflation — and that is exactly the condition that the oil-producing countries are pressing for in their negotiations with consumers.

Barring continuing world recession, they seem likely to get their way.

Sasol wants to share the South African market with the oil companies and looks neither for overt nor hidden subsidies.

“We want no favours,” is a typical comment. “That would put us out of court in the market.”

There is a commitment to operating on a businesslike basis — accepting the “discipline of market forces.”

In fact, the corporation would have been unable to raise enough funds to start Sasol II had it not committed itself to producing a top-grade product — and that would not have been possible without the international price structure.

It is tempting to assume that Sasol built up its impressive technical lead by dint of some dramatic technical breakthrough.

In fact, it is more than the end product of 20 years of patient effort to improve Sasol’s Synthol process.

“We have optimised production rather than made breakthroughs,” said deputy general manager, Dr A H Stander.

There are two established processes for the reduction of coal to fuels, chemicals and industrial gas — the Synthol process used by Sasol, and direct hydrogenation.

Both were used in Germany more than 60 years ago. “At that time,” says Dr Stander, “it was a matter of opinion as to which was the least economic.”

It is a measure of the steady technical progress at Sasol that the corporation was able to maintain its viability during the 20 years from start-up till the oil crisis, although the price of petrol at the plant gate varied hardly a cent and industrial costs soared.

This was achieved by consistently reducing unit costs.

Dramatic events overtook Sasol in 1973. In that year the corporation was warded off pressure to expand production because the international oil price was not high enough. Sasol wanted to wait for a technical breakthrough or an oil price increase.

On October 22 the chairman, Dr P E Rousseau, told the annual general meeting: “Despite all the progress, we are convinced that it would be unwise to rush into new South African oil-from-coal plants.”

But, within a week, the oil crisis had struck and Sasol was pushed from doubt into action.
UMZIMKULU—The Transkei is planning a huge hydro-electric scheme to provide electricity for the expected industrial development, says the Chief Minister of the Transkei, Paramount Chief Kaiser Matanzima.

Speaking at a public meeting yesterday, Chief Matanzima said the scheme would require all the rivers of the Transkei to be damned. He did not say whether the scheme would begin before or after independence in October next year.

"Interest shown by overseas industrialists in the Transkei is immeasurable. The Development Corporation is unable to cope with all the applications it has received from industrialists to establish industries in the Transkei," he said.

Chief Matanzima said the Transkei was assured of a future of political and economic stability and the people need have no fears.

The Transkei's high rainfall and agricultural potential were equal to that of any other country in the world, and therefore could face the food crisis at present affecting the rest of the world.

"Of course, the Transkei will be independent with all its neighbours, including South Africa."

Chief Matanzima also announced that the Transkei Government would grant old-age pensions of R30 for all men over 65 and women over 60, irrespective of their earnings.

UNSCRUPULOUS

"We have found that different categories of pension pay made it possible for certain unscrupulous officials to help themselves," he said.

Chief Matanzima said independence would not affect relations between his people and the people of the Republic of South Africa. Border posts would be established at Umzimkulu on the Natal border and Kei Bridge on the Cape border.

"On attainment of our independence, we will have nothing to do with the reference books of South Africa. We will have identity cards to signify that we are respectable citizens of a free country."

The Transkei would be a non-racial State, Chief Matanzima said. The people of the Transkei had never been party to apartheid and had never condoned the practice.

"This has been the philosophy of the colonial power. We want to be a free nation," he said. — (Sapa.)
S.A.'s oil import costs to soar

Financial Editor

The annual cost of South Africa's imports of oil will now be more than 2,066 million dollars compared with 1,680 million dollars before the rand devaluation and increase in the crude oil price.

This calculation has been made by the Financial Mail which writes that current crude oil imports are about 400,000 barrels a day. Minor quantities of refined product are imported from the Botswana refinery in Lourenco Marques, for Eastern Transvaal consumers, and further tonnages of specialised products, such as solvents and aviation gasoline, also have to be brought in.

Annual imports are estimated at 140 million barrels. The average landed cost before devaluation was 12 dollars a barrel, which gives a total oil import bill of 1,650 million dollars.

The effects of devaluation of the rand, the increase in the price of crude oil and the previous June, and devaluation of five percent would mean an increase of about 23 percent, to South African consumers.

SERIOUS IMPACT

The increase will have a serious impact on the country's balance of payments and on the cost structure of everything connected with petroleum in South Africa.

Meanwhile in Europe the dollar climbed sharply on foreign exchange markets yesterday in response to the oil-exporting countries (Opec) decision to increase prices by 10 percent.

Dealers said Opec helped the dollar's international standing by agreeing to retain the United States currency for calculating oil bills.

Opec had been considering switching to special drawing rights (Sdr), the reserve asset on the International Monetary Fund, as an accounting unit.

Because of the dollar's greatly increased strength in recent weeks, the United States is in a better position to absorb the price increase than other industrial countries whose currencies have become cheaper in dollar terms.

TRADE SURPLUS

Dealers also referred to the strong American trade surplus - 1,035 million dollars in August - and the United States' chances of achieving independence from foreign oil.

Yesterday sterling fell to 2,0325 dollars from 2,0445 on Friday. The dollar rose to 2,6750 marks from 2,6605 and 4,5775 French francs from 4,6435.

The British pound also weakened slightly against other European units. The short-term implications of the oil price increase were expected to be more severe for Britain than for other Western industrial countries.

With inflation running at nearly 27 percent over the past 12 months and its balance of payments still weak, the British economy was regarded as particularly vulnerable to the effects of the price increase. (Sapa-Reuters)
FOR IMMEDIATE RELEASE.

PRESS STATEMENT ISSUED BY THE PRICE CONTROLLER.

INCREASES IN THE PRICES OF CRUDE OIL.

The announcement by the oil producing and exporting countries that their prices of crude oil will be increased by 10 per cent as from Wednesday, 1st October, 1975, has for obvious reasons led to considerable speculation in public circles about the effect which this oil price increase could have on the prices of petroleum products in the country.

Since the announcement of the abovementioned decision various persons have given their own interpretations to the press of the possible effect which the oil price increase might have on the prices of petroleum products.

These statements are to a large extent based on speculative calculations and can safely be ignored until such time as more clarity in connection with the matter has been obtained and the Government has taken a final decision in this regard.

The prices of fuel are adjusted from time to time in accordance with changes in cost factors and in terms of an agreement which has been concluded between the oil companies and the Government. The price formula which is included in this agreement, is a complicated matter and no person who is not fully conversant with the operation thereof, could express any authoritative opinion on what the effect of the oil price increase would be on our fuel prices.

The price formula is administered by my office under the authority of the Honourable the Minister of Economic Affairs, and any decision in respect of changes in petrol prices is taken only by him and then also only after he has satisfied himself that such price adjustments are fully justified. The Minister normally also consults the Cabinet before petrol prices are increased.

The customary procedure is that the oil companies apply to the Government for an increase in the prices of petrol whenever they are of the opinion that they are entitled to a price increase in terms of the abovementioned formula. The prices of petrol are
not regularly adjusted after each change in the landed cost thereof. A record is kept of periodical overrecoveries or underrecoveries on the approved profit margin of the oil companies which stem from such cost changes. Whenever a change in the landed cost of petrol of such a magnitude occurs that a price adjustment is essential, such adjustment is introduced with due regard to the existing overrecovery or underrecovery position, as the case may be, which has arisen in the price formula during the preceding period.

If and when an application for a petrol price increase is received from the oil companies, particulars of the effect of the latest increase in the prices of crude oil, together with the effects of the preceding two devaluations of the Rand on the landed costs of petrol will be submitted to my Minister for a decision. If a price increase is approved by him, he will make a statement in connection with any increase in the price of petrol which he may regard as justified.

ISSUED BY THE DEPARTMENT OF INFORMATION
AT THE REQUEST OF THE DEPARTMENT OF COMMERCE.
PRETORIA.
29th SEPTEMBER, 1975.
French go-ahead with S.A. N-aid

Mercury Correspondent

PARIS — France has every intention of maintaining its decision to offer South Africa a 1,000-megawatt nuclear power plant, for which Pretoria offered contracts last year.

The State-run Électricité de France (EDF) company sent in a contract for the plant, and it was reliably learned here yesterday that it was still interested in the project.

In other words, France has not been affected by the recent Ralli scandal involving Bonn and Pretoria over nuclear affairs.

A nuclear expert said here: "We understand that the South Africans are studying outline tenders that have been sent in — so far as we know — from France, West Germany and Canada. We have high hopes for our tender. The cost is in the nature of R200 million."

France has just started a massive nuclear power programme to prevent dependence on Arab oil, and plans to build at least 12 similar plants over the next five years. South Africa would receive the benefits of such mass production. France has also promised to sell three nuclear power plants to Iran.

There has been speculation here that France would be happy to receive part payment for her plant in enriched uranium from South Africa, but this is a delicate subject here and few details have emerged.
Oil price not a big blow to SA

Tony Koenderman

The 10 percent increase in the price of crude oil will probably flow through to push up the overall cost of living by rather less than one percent, according to leading industrialists.

Coming so soon after the rand devaluation — with its significantly more marked effects — the crude oil price hike pales into insignificance.

Moreover, says Mr Ernest Klopper, president of the Transvaal Chamber of Industries, “if we get the benefits of falling commodity prices quickly, the effect of the oil price, and even of much of the devaluation, will not be felt.”

If the higher cost of crude oil is passed on to the consumer, together with other inflationary pressures which have been absorbed in the past year, a petrol price rise of 23c (11-17 percent) as a possibility — though in the light of the new prices restraint policy, it is not certain.

Liquid fuels account for no more than 4 percent of total industrial costs (pre-devaluation). An additional 17 percent on that cost element amounts to 6.6 percent of total industrial costs, which in turn comprise a still smaller share of the cost of living.

But for individual industries the impact can be severe. Transport compa-

nies, which use more fuel, and plastics or paint producers, which use oil as a raw material, are among those which will feel the price rise severely.

Another point is made by Mr Fred Polasek, president of the Midland Chamber of Industries. “Industry has gone past the point where it can afford to continue absorbing cost increases,” he says.

For security reasons, the exact value of oil imports is not disclosed in official statistics. But one source estimates oil accounts for 9 to 15 percent of South Africa’s import bill.

IMBALANCE

This means that last year South Africa probably spent something like R500m to R750m on crude oil; and the price rise will cost the Republic R50m to R75m — adding another 1 to 1.5 percent to the country’s import bill.

With industry switching from heavy fuel oil to coal, an imbalance has emerged in refineries capacity.

To rectify this, Shell is modifying its Durban refinery at a cost of R25m so that more of the lighter fractions and less black oil come out of the barrel.

The minimum possible offtake of black oil is about 14 percent.
Higher fuel price coming next week

Increased fuel prices by reducing its lavish pipeline profits and excise revenue duty.

Still, according to observers, the Government could well afford the sacrifice.

INFLATION

Fuel costs are common to every commodity manufactured or sold in South Africa, and by keeping the increases down to a minimum the Government would make a significant contribution to the fight against inflation.

The Government, it is understood, is seriously concerned at the still too high consumption of fuel. Payment for oil imports drains away many millions of rands a year in foreign exchange.

Authorities in Pretoria claim that unless there is a big improvement in the fuel economy before the end of the year tighter controls may be applied, and even rationing cannot be ruled out.

It is pointed out that during the Kruger Day long week-end roads were crowded, and at one stage more than 2,000 cars an hour were counted on the Durban-Johannesburg road, and the Pretoria-East Transvaal Road.
things well in this country
It looks as if we have timed
A VIEW of the Valindaba uranium-enrichment plant in the Transvaal.

N-power plans may already be old hat

EVENTS are changing the energy picture so quickly that the already ambitious nuclear power programme mapped out for South Africa may prove too conservative.
THE HAGUE — A rumpus has erupted inside the Dutch Cabinet over a Dutch firm tendering for the contract to build a South African nuclear power station.

One of the more radical political parties in the coaliion — the Revolutionary Progressive Party — threatened yesterday to withdraw from the Government if the tender is made.

The Dutch firm Rijn-Scheide-Verolme plans to tender for the contract with a consortium including General Electric and the Swiss Braun-Boveri.

However, not only radicals but factions within the Labour Party have been applying pressure on the Prime Minister, Mr Joop den Uyl, to block the Dutch tender.

The decision, according to Government sources will be left to Mr Den Uyl, the Foreign Minister Mr Max van der Stoel, The Finance Minister Mr W F Dulesneberg, the Economics Minister Mr R Lubbers, and the Social Affairs Minister Mr Jan Boersma.

Two of those five key ministers — Mr Lubbers of the Catholic People's Party and Mr Boersma of the conservative Anti- Revolutionary Party — represent parties which have come out strongly in favour of supporting the tender, and on this basis a vote could be a see-saw affair.

While the moratorium continues, it has been pointed out that the contract would be worth 3300-million to the Dutch economy.

Unemployment is one of the major political issues in Holland at present with nearly 200,000 Dutchmen out of work, and it is thought that this factor will be very carefully weighed by the shakily placed Dutch Government.
S.A. atomic deal with Iran denied

PRETORIA — The chairman of the Atomic Energy Board, Dr. A. J. A. Roux, yesterday denied reports of South African uranium sales to Iran and Iranian participation in a South African enrichment plant as completely untrue.

Dr. Roux was approached following reports — also denied in Tehran — that Iran had agreed to buy uranium from South Africa. Iran was also reported to be negotiating with several countries, including South Africa, for uranium supplies for planned nuclear power stations.

"It is the policy of the Atomic Energy Board not to reveal contracts on uranium sales and therefore neither to confirm nor deny reports of such sales," he said.

"The alleged sale of uranium to Iran and participation by Iran in a South African enrichment plant is so far fetched that I have no alternative but to deny it completely," he stated. — (Sepa.)
R23m profit in Sasol's best year

SASOLBURG.—The chairman of the South African coal, oil and gas corporation (Sasol), Dr P. E. Rousseau, announced in Sasol yesterday a consolidated profit after tax of R23 475 000, compared with R17 118 000 in the previous year.

Dr Rousseau, who was delivering his address at the 25th annual meeting of Sasol, said these were "the best financial results in the history" of the corporation.

There had been "general satisfactory production performance in oil-from-coal, petrochemicals and the Natref Refinery," he said.

Sales turnover of group products rose to R589-million from R383-million in the previous year.

Dr Rousseau said that gas consumption rose by more than "abnormal" 27.3 per cent, mainly as the result of the present low price in relation to other forms of energy — industrial energy consumption in South Africa maintains a 6.2 per cent annual growth rate.

However, price increases in the second quarter of the financial year were expected to trim future demand, he said.

Despite erratic production in the initial months of the financial year, crude oil processing in the Natref Refinery for the first time showed a modest profit.

Operation of the naphtha cracking plant during the last year "was uneconomic to the extent that we were barely able to cover depreciation."

Dr Rousseau devoted a considerable part of his address to the Sasol II pro-
Fares up... or service down, warns prof

(RM 25/10/75)

Staff Reporter

BUS passengers should brace themselves for an increase in fares or a deterioration of service, Professor Peter Welgemeed of Rand Afrikaans University said yesterday.

Welgemeed, a specialist in transport economics, was commenting on the 3.1c a litre increase in the price of petrol which came into operation yesterday.

And in Pretoria yesterday, the Motor Industries Federation warned it would be making another approach to the Government for increased profit margins for petrol retailers before the end of the year.

And this could mean another petrol price increase.

The director of the MIF, Mr R. G. du Plessis, said the federation had appointed an economist to investigate the plight of petrol retailers, and to motivate another claim.

The claim would be for a 10 percent mark-up on delivered cost of petrol. A similar claim in April was rejected.

Motorists now pay 31.1 cents a litre. If the MIF demand is agreed to by the Government, the price would reach 22 cents.

BUS 6 7 8 wouldm. 11

Prof Welgemeed yesterday said: "The inflation spiral will force fares up or the service spiral will plummet."

"In road transport a lot of inefficient companies will be forced out. The petrol price increase will hit hard."

Welgemeed is a director of Trans Tugela, the Bantu Investment Corporation company which was hit by a boycott after it raised its fares in Newcastle.

He is also an adviser to Mr Dana Viljoen, the man responsible for the corporation's vast bus network.

Mr Johann Maree, development and labour economist with the University of Cape Town, warned yesterday: "Coming on top of devaluation, the price increase of petrol will have a ripple effect on major African needs, particularly food."

Rising prices were a potentially explosive issue among the African people unless they could increase their real wages—but that was dependent on their ability to organise themselves into trade unions to bargain for higher wages.

The petrol increase is also likely to push up Black taxi fares.

A Soweto taxi-owner, Mr G. M. Mlangeni, said Soweto taximen absorbed the previous petrol price increase.

"But now that petrol has gone up tremendously, it would be fitting to raise fares as well."

In Johannesburg yesterday manufacturers and retailers said they would not push up their prices before Christmas in reaction to the petrol increase.

Mr H. S. Drue, marketing manager for Bambi Toys said it would be unfair to increase prices now. But he expected prices to go up between five percent and 7.5 percent next year.

A spokesman for Germans said they would not increase prices before the new year.

And Mrs Dolly Shiller of Little Pats said the petrol increase had forced them to cut down on home deliveries.

"But we won't be putting our prices up any further this year."

Mr. E. A. Apter, marketing manager for Checkers said: "If a manufacturer demands an increase before the end of the year, we will discontinue the line rather than pass it on to the consumer."

But some prices would be increased at the beginning of 1976, he said.
THE State-backed Southern Oil Exploration Corporation (Soekor) is to embark on a new R25-million-a-year off-shore oil search along the South African coast between Lamberts Bay, on the west coast, and Port Elizabeth.

Soekor is to drill 18 off-shore test holes in the next two years.

Two rigs will be used. One is a North Sea oil rig, Sedco 911K, on the way to South Africa with an American crew. The operation will be conducted from Mossel Bay, where six administrative staff members are to be based and the company has already hired a building in the town, while staff members are looking for accommodation.

Gas find

Big deposits of oil-bearing gas were discovered off Plattenberg Bay six years ago, but the hole was sealed up and left alone, as the gas would provide the pressure to raise oil if a strike was made.

World experts have said the Plattenberg Bay find was an indication that there was a vast offshore within 500 km of the gas field.

The gas could be used to provide enough petrol and oil for South Africa for five years. However, the loss of gas pressure in the well would make it impossible ever to raise the more valuable liquid beneath it.

Two rigs

In a recent interview, Dr P. J. van Zijl, managing director of Soekor, said two rigs would be used in the project.

While the first could be expected in South Africa this year, the second would not arrive until mid-1977.

Dr van Zijl said a strike yielding 30,000 barrels a day would be viable, but a strike next year would not produce oil until after 1980 because of the complex development work necessary.

The new probe is expected to cost at least as much as all the off-shore oil drilling done in South African waters since 1977.
Garagemen criticise MIF over petrol price

The Weekend Argus Correspondent 11/11/75

JOHANNESBURG: — Garage owners and managers have criticised the Motor Industries Federation for delays in presenting their case for a petrol price increase.

Last week, Mr B. G. du Plessis, director of the MIF, said the federation would ask the Government 'within six to eight weeks' for an increase in the retail profit margin on petrol to 10 percent.

But yesterday, it was announced that an in-depth report by an economist into all aspects of petrol selling would not be ready much before the end of the first quarter of next year.

Hitting back

But service station operators said the delay would be crippling. Mr Errol Loubsie, manager of a garage in the Johannesburg central area, said: 'It's time all the garages got together and refused to sell petrol. But if we did that, we would be 'ousted' by the petrol companies in double quick time.'

Mr Loubsie said it was time the MIF did more for garage owners.

Relief-call

He believed the oil companies should grant temporary relief to petrol re-sellers by lowering the price to them.

'The MIF should concentrate on this instead of trying to press the Government for an increase,' he added. 'When you are carrying a large number of account customers, as we are, you are paying 14 percent on your overdraft and getting only five percent profit when they eventually pay.'
New impetus to oil hunt

Own Correspondent
CAPE TOWN — The State-backed Southern Oil Exploration Corporation (SOEKOR) today confirmed that 18 off-shore test holes will be drilled during the next two years between Lamberts Bay, on the west coast, and Port Elizabeth, in a new attempt to find a South African oil source.

The drilling programme will cost at least R25-million a year and a North Sea oil rig — Sedco K — is on the way to South Africa, with an American crew. It is not yet known when the rig will arrive.

The operation will be conducted from Mossel Bay.

Big deposits of oil-bearing gas were discovered off Plettenberg Bay six years ago but the hole was sealed up as the gas would provide the pressure to raise oil if a strike was made.

Sapa reports that "oil fever" has hit Mossel Bay and enthusiasm is high.

World experts have said that the Plettenberg Bay find was an indication that there was a vast oilfield within 300 km of the gas find.

It is believed that the gas would provide enough oil and petrol for South Africa for five years but, once it was exhausted, the liquid oil would remain untapped forever.

Dr van Zijl said a strike yielding 50,000 barrels a day would be viable, but a strike next year would not produce oil until after 1980 because of the complex development work necessary.
CELEBRATING 75 years of involvement in Southern Africa, the giant Royal Dutch/Shell group used this occasion to announce, through its wholly-owned subsidiary, Shell Southern Africa (Pty), a capital expansion programme involving expenditure of up to $165-million in the next 10 years.

This investment will considerably strengthen the group's commitment towards creating a more positive and meaningful presence in the southern part of the African continent. By 1985 it is expected that Shell's income from operations will amount to $175-million, exceeding current investments of R90-million.

Shell's acquisition in Southern Africa over the next decade is to become transformed from being just a petroleum supplier into a great chemical company with growing interests in chemicals and metals.

Where its chemical activities are concerned, Shell intends to grow into a fully-integrated marketing and manufacturing operation, with a rating as one of the top 10 companies in the world, according to its chairman and chief executive, Mr. K. L. C. Ken Gisting. Shell South Africa's chairman and chief executive.

With this target in view, it must inevitably lead Shell into becoming more South African by opening its doors to local participation.

It is a point which was conceded by Mr. Gisting during an interview at Shell House — which looks down Greenmarket Square, Cape Town, and has been the group's headquarters since 1970 — when he outlined the philosophy behind his ongoing efforts to increase South Africa's share of Shell's business.

SHELL - 75 YEARS IN SOUTHERN AFRICA.

Natal Mercury 3/11/75
Setting sights on the chemical industry

The chemical industry is one of the fastest-growing sectors of the economy and is a major player in South Africa. It is a major contributor to the country's GDP and has significant potential for further growth.

In recent years, the industry has seen a surge in investment, with companies like Squires Chemicals investing in new plants and expanding existing facilities. This has led to increased production capabilities and a stronger local supply chain.

One example of this growth is the Squires Chemicals plant in Durban, which has been expanded to meet the growing demand for polypropylene. The company has also been able to negotiate lower prices for raw materials, which has helped to reduce production costs and increase profitability.

The chemical industry in South Africa is also benefiting from the country's efforts to diversify its economy. By investing in sectors like chemicals, the government hopes to create jobs and boost economic growth.

In conclusion, the chemical industry is a key player in South Africa's economy and is expected to continue to grow in the coming years. With increased investment and a focus on innovation, the industry is well-positioned to meet the challenges of the future.
SA involved in secret N-talks

LONDON — A top-secret meeting of senior officials from the seven members of the "nuclear suppliers group" will be held here this week.

The meeting takes place amid controversy over the sale of nuclear know-how for peaceful purposes to countries like South Africa and Brazil.

The suppliers are Britain, the United States, Russia, France, West Germany, Canada and Japan.

The Common Market Commission in Brussels has given France until the end of this week to lift the 12 percent tax on imported Italian wine or face charges before the European Court of Justice.

The tax, forced on the French Government by militant farmers, is in clear breach of the regulations of the EEC common agricultural policy, the major achievement of the EEC and a structure France has fanatically defended against British and German proposals to amend it.

Ulster's bloody and long-running crisis.

The constitutional convention elected in Belfast to try to produce a formula for a government structure in embattled Northern Ireland winds up this Friday.

It will send its report — recommending the return of the old Protestant ascendancy — to the British Government.

Westminster is expected to reject this, opening a new and dangerous stage in
PRESS RELEASE ON A COMMERCIAL URANIUM ENRICHMENT PLANT IN SOUTH AFRICA, BY DR. THE HONOURABLE P.G.J. KOORNHOF, MINISTER OF MINES

RELEASE: 24h00 on 12 Nov. 1975

On 20th July, 1970 the Honourable the Prime Minister announced in Parliament that scientists of the Atomic Energy Board had accomplished an exceptional achievement by developing a unique process for the enrichment of uranium, and that the Government had approved the building of a pilot plant to test the process on an industrial scale. Since then the Uranium Enrichment Corporation of South Africa, Limited (UCOR) has been formed to take over the enrichment of uranium from the Atomic Energy Board, to develop the process further and to complete the construction of the pilot plant and to put it into operation.

Excellent progress has been made with this programme and in April of this year the Prime Minister was able to announce that a part of the pilot plant at Valindaba had been successfully commissioned and that it complied in all respects with the prediction that had been made. It is expected that the construction of the rest of the plant will be completed early next year after which it will be commissioned so that the whole plant can be brought into production in the course of 1976.

Simultaneously, during the past two years, UCOR first on its own and later in co-operation with authoritative foreign concerns, undertook feasibility studies from which it emerged that a commercial plant, based on the South African process, would be competitive with all the enrichment processes, either already applied, or in an advanced stage.
of development, in the free world.

It is hardly necessary to stress the importance of this conclusion - especially for South Africa. The world is caught in the throes of an energy crisis and with the restrictions which came about in connection with the use of oil as a source of energy, it is clear that nuclear energy will play an ever increasing role in meeting the energy demands of mankind. Since the energy crisis most countries have expanded their nuclear power programmes considerably and according to estimates nuclear power will be responsible for approximately 50% of the electricity generating capacity of the free world by the end of this century.

Developments also indicate that power reactors employing enriched uranium as fuel have decided economic advantages over other power reactor types and the nuclear power programmes of the world are consequently mainly based on enriched uranium as fuel. The expanding nuclear power programmes will thus bring about an ever increasing demand for uranium and more specifically for uranium in the enriched form.

Against this background it is clear that South Africa, as one of the few large uranium producers of the free world and with its relatively large uranium reserves, can make an extremely important contribution - which in fact it has already been making during many years - to assist in relieving the energy problems with which the world is faced, by supplying uranium. By the commercial application of its enrichment
process, which promises to be competitive with existing processes and by marketing at least a part of its uranium in its most refined form as enriched uranium, South Africa will be able to extend this contribution significantly and such a step will be of exceptional value to the scientific, technological and industrial development of the country. Furthermore, it will enable the Republic, in due course, to itself produce the enriched uranium required for its own nuclear programme, rather than becoming dependent, in an unstable world, on foreign sources for its requirements.

There can therefore be no doubt that South Africa must develop its enrichment programme further. In May 1973 I was able to announce that the Government had authorised UCOR to commence with the development of the large-scale components required with a view to constructing a commercial enrichment plant and excellent progress is being made in this respect. This in itself is a formidable task since the enrichment of uranium is such a highly sophisticated undertaking. It has consequently now become essential to lay down a directive for the commercial enrichment of uranium in South Africa.

The Government has consequently decided that the construction of a commercial enrichment plant, to which it will give its full support, is to be proceeded with, but that a decision on the size of the plant will only be taken in 1978, when the additional development work will have progressed sufficiently and the comprehensive preparatory work will have been completed.
The decision, in 1978, on the size of the plant will be made in the light of factors such as the enrichment situation in the free world at that stage, the extent of enrichment contracts concluded in the meantime and the economic conditions prevailing at that time. It is envisaged that the plant will come into operation in 1984 with full production in 1986.

In the current economic climate it is decidedly relevant to indicate that by far the biggest expenditure on the project will be incurred as from 1978 when orders for plant equipment will be placed and the actual construction of the plant initiated. The expenditure during the years 1975 to 1979 will, therefore, be relatively small.

I wish to stress what the Prime Minister said in Parliament in 1970, namely that this project is solely directed to the peaceful applications of nuclear energy and is undertaken not only in the interests of South Africa, but also in the interest of the world community. Once again I should like to emphasize that the South African Government is prepared to subject the envisaged plant to a system of guarantees inclusive of inspection, provided that such a system does not interfere with the normal effective operation of the plant and, of even greater importance, provided that it does not create the danger for South Africa that sensitive details of its process can leak out and be misused. The latter is a responsibility which South Africa has vis-à-vis the world community and which it will under no circumstances ignore.
Furthermore, I should like to stress once again that the Republic is prepared to share the benefits from its enrichment process with friendly countries, subject, however, to conditions which will protect the interests of South Africa. Foreign participation in both the development and construction phases will, therefore be welcomed by the Government and will enable it to make the project a multi-national venture for the benefit of all parties concerned. Negotiations with foreign concerns have been going on for a considerable time with this as objective. Such negotiations are, however, protracted due to the complexity of the whole matter and a further statement will be issued in course of time.
New company to handle coal in Cape

THE wholesale distribution of coal in the Cape, Free State and Lesotho had been simplified and improved, Mr N. A. Stott, Cape Town manager of the Transvaal Coal Owners' Association, said today.

A new company, Southern Coal Traders (Pty) will undertake the sale and distribution of coal at the wholesale level throughout these three areas.

Its chairman is Mr S. R. Baker, assistant managing director of both the TCOA and Natal Associated Collieries, and its general manager is Mr N. Keis, previously general manager of J. K. Coal Syndicate (Cape). Mr Stott is the Cape director.

The company will be based in Port Elizabeth but have field representatives.

AS AGENT

It will act as agent for the Transvaal Coal Owners' Association, the Anthracite Producers' Association and the Natal Associated Collieries.

Southern Coal has been formed by merging J. K. Coal Syndicate (Cape) (Pty), Freight Services (Pty) (Cape Coal Division) and Coal Wholesale (Pty).

The Transvaal Coal Owners' Association and the Anthracite Producers' Association will participate in the company.

This merger should provide an improved service to coal consumers throughout the territories, Mr Stott said.
'Go' for huge uranium plant

By EDWIN ARNOLD
Mining Editor

THE GOVERNMENT has given the go-ahead to a vast new commercial uranium enrichment plant which overseas industry sources estimate will cost at least R1 000-million.

The decision was announced yesterday in Pretoria by the Minister of Mines, Dr Koornhof.

He said the site and size of the plant would not be decided until 1978.

Dr Koornhof declined to give any official estimate of the cost. But overseas sources say that a 5 000 tonnes-a-year plant would cost at least R1 000-million at today's prices.

Uranium has to be enriched — purified into concentrate form — to provide the power for nuclear generating plants.

South Africa, the world's third largest uranium concentrate producer, is believed to have developed a unique uranium enrichment process, which is thought overseas to be about 30 or 40 per cent cheaper than any other rival process.

The new enrichment project — which Dr Koornhof expects to come into operation in 1984 and into full production in 1986 — holds the promise of a major boost to South Africa's energy supplies and to her foreign exchange earnings.

Expenditure on the plant would be "relatively small" from 1975 to 1978 when the final decision on size of the plant would be taken, the Minister said.

By 1978 the Government should have a clear idea on the world supply and demand situation and the potential for sales of South Africa's enriched uranium, the Minister said.

Sales of enriched uranium should make a very substantial contribution to the balance of payments situation as the enriched product is probably worth at least two or three times as much as unprocessed uranium.

South Africa is in an excellent position to take advantage of the widely expected surge in international demand for enriched uranium.

South Africa and South West Africa possess about 22 per cent of the West's cheapest uranium reserves.

Foreign participation in the development and construction stages of the plant would be welcomed, Dr Koornhof said. He stressed the project was intended to be concerned solely with the peaceful uses and applications of nuclear energy and was being undertaken, not only in the interests of South Africa, but also of the world community.

The government was prepared to have the plant regularly inspected and subject to a system of guarantees provided this did not interfere with the operation of the plant or allow the secrets of South Africa's unique process to leak out or be misused.

The rest of the pilot plant at Valindaba would be completed early next year and the whole plant will come on stream later in the year, Dr Koornhof said.
Money-spinner
uranium on
the way

BY EDWIN ARNOLD
Mining Editor

THE VAST potential foreign exchange earnings for South Africa from a large-scale uranium enrichment plant plans for which were outlined by Dr Piet Koornhof, Minister of Mines, yesterday are shown by the latest figures on installed nuclear capacity from the Organisation for Economic Co-operation and Development. These show a sevenfold increase estimate from 79,000 megawatts (MW) in 1975 to 546,000 MW in 1985.

A typical 1,000 MW light-water reactor needs 450 t of uranium oxide initially and around 185 t annually for reloads over a life of 20 years.

Recent estimates forecast demand increasing from 22,760 t of uranium oxide in 1975 to 149,000 t in 1985 and 245,000 t by 2000. Cumulative demand between 1975 and 1985 is expected to be 789,000 t, which will rise to 3,400,000 t by 2000.

The figures are mind-boggling and make one ask if such a demand can be met. The answer is probably yes, but only if uranium prices rise sufficiently to bring on the required production.

The big worry is whether the basic nuclear construction programme can be afforded. The OECD forecasts that the 1975-80 basic construction programme would cost around $160,000 million before allowing for cost escalations and overruns.

South Africa is the world’s third largest uranium concentrate producer, according to United States Bureau of Mines figures, with a 1974 output of 4,366 t out of total world output of 19,965 t.

This output is a by-product from gold mining, but will jump next year when Rossing comes on stream as a pure uranium producer.

According to United States Bureau of Mines figures, South Africa and South West Africa together account for 22 per cent of the world’s 1,100,000 t of $19 a lb reserves. The United States has another 25 per cent at this price while Canada and Australia have 26 per cent and 12 per cent respectively.

UNIQUE

In Paris earlier this year, Dr Roux, head of the Atomic Energy Board made it clear that South Africa was determined to upgrade the ultimate selling value of these reserves by a factor of two or more by using its unique enrichment process.

According to overseas sources, the viability of a 6,000 t a year plant has been costed out on a selling price of $74 a kilogram (around $3.54 a lb). This compares with long-term enrichment contract prices of around $190 a kg.

South Africa’s plant would be the world’s sixth commercial enrichment facility — after the United States, Britain, Russia, Holland and France.

The cost of a 5,000 t a year plant was estimated in April at the Paris meeting at R180 million.

This figure excluded the cost of electricity, but included R180 million for further research and development and testing plus its per cent for contingencies and a 5 per cent for in-house project engineering.

Uranium conversion, process equipment, and costs of the enrichment plants are not as well known as it is impossible to estimate the
Koornhof gives uranium plant details

Staff Reporter

A decision on the size of the uranium enrichment plant to be built in South Africa would be made late in 1978, the Minister of Mines, Dr. Piet Koornhof, said in Pretoria yesterday.

"The decision would be made in the light of the enrichment situation in the free world, the extent of enrichment contracts and the prevailing economic conditions," he said.

It was envisaged that the plant would come into operation in 1984 with full production in 1986.

Expenditure during the years 1975 to 1978 would be relatively small.

Dr. Koornhof stressed that the project was solely directed to the peaceful applications of nuclear energy and was undertaken not only in the interests of South Africa, but also in the interests of the world community.

The Government was prepared to subject the plant to a system of guarantees, inclusive of inspections.

This would provide the system did not interfere with the operation of the plant, and did not create the danger for South Africa that sensitive details of its process could leak out and be misused.

"I should like to stress again that South Africa is prepared to share the benefits from its enrichment process with friendly countries, subject to conditions which will protect South Africa's interests," Dr. Koornhof said.

WELCOMED

Foreign participation in the development and construction phases would, therefore, be welcomed. This would make it a multinational venture for the benefit of all parties.

It was expected that the construction of the rest of the pilot enrichment uranium plant at Pelindaba would be completed early next year, and the whole plant would be brought into production during 1979.

...
Anglo supermill could earn R30m profit annually

John Cavill
LONDON — Anglo-American’s “supermill” project could be producing 350,000 ounces of gold, 1,000 tons of uranium and 540,000 tons of pyrites from the slime dams of defunct East Rand mines in 1978, according to London stockbrokers Quilter, Hilton, Goodison & Company.

The stockbrokers’ mining analyst estimates that evaluation of the project should be completed by early 1978 and that construction of the giant mill, handling 1.5m tons of sands and slimes a month, would take two years.

Investigation of the project by Roiden Investments, the exploration company in which Amgold holds 20 percent, has been going on for 12 months into establishing a mill and treatment plant on SA Lands’ ground near Brakpan.

Sands and slimes will be piped to the mill in slurry form — the pipes following the Escom power line rights of way — from mines such as Brakpan, Van Dyk, Modder B and Springs.

Quilter Hilton Goodison estimate the average gold content of their slimes to be 0.8 g/t with a uranium grade of 45 to 68 g as well as pyrites.

URANIUM

On the basis of gold at 150 dollars an ounce and a recovery grade of 0.6 g/t, the bullion proceeds would be R45.5m a year. Uranium at 66 dollars a kilogram would produce R26.5m while pyrites (badly needed for sulphuric acid) at R20 a ton could yield R10.8m.

The brokers estimate that profits could be between R30m and R40m.

This project would be "of a dimension equivalent in importance to a substantial new gold mine," says Quilter Hilton Goodison.

This East Rand project, about which an announcement is expected shortly, is part of a bigger scheme to treat oil residues elsewhere, writes Mac Thain.

"It is essentially a package operation, the viability of which depends not only on the successful extraction of the three products involved but also on marketing them.

Gold presents no real problem, but Rolden will have to be pretty certain about disposing of uranium, for which the market is improving but by no means booming.

In the case of pyrite, sales contracts will have to be negotiated with producers of sulphuric acid.

The capital cost of the East Rand scheme has been estimated at R30m, with further spending if similar undertakings are established elsewhere."
Labour union backs petrol price cuts

Labour Reporter

The 190,000-strong Confederation of Labour is sending a telegram to the Minister of Economic Affairs, Mr Heunis, to condemn efforts to stifle petrol price cutting.

"Why should there be such an outcry when a single petrol outlet in this vast country acts in the spirit of free enterprise," asked Mr Africo Nieuwoudt, president of the confederation.

"We welcome this breakthrough in a field which is notorious for its non-competitive and inflation-fueling practices — from petrol price fixing right through to high repair bills and exorbitant prices for spare parts.

"That is why we are anxious to give the East Rand hypermarket every support at a time when all of the country is fighting to keep prices down."

"We only hope that others will follow this commendable example," he said.

Mr Nieuwoudt said the confederation's telegrams to Mr Heunis would also express members' concern about the recently announced rise in short-term insurance premiums.

"We are not happy with the explanation given for the premium increases. We don't believe they are in the spirit of the manifesto against inflation," Mr Nieuwoudt said.
Own Correspondent
BONN — The German Atomic Forum, an organisation of nuclear industry interests, has appealed to the Bonn Government to help a West German concern to export two nuclear power stations to South Africa.

Professor Heinrich Mandel, the body's president, told its annual meeting: "In the export of nuclear facilities and know-how, a country such as West Germany, as a treaty-loyal and non-nuclear-armed state, is at a considerable disadvantage in regard to its main international competitors due to the Non-Proliferation Treaty.

"This disadvantage must be balanced out by the active support of the Federal Government for industry's export efforts."

A German nuclear concern, Kraftwerk Union, is on a short list of three bidders for the two stations. The others are Fromatom of France and a three-nation consortium of Switzerland's Brown Boveri, America's General Electric and Holland's Vorolme.

The Dutch Parliament this week voted against allowing Vorolme to take part in the project. However, the vote is not binding. A Cabinet decision is still to be made.

In Bonn, an anti-apartheid group is planning to publish more official documents taken from the South African Embassy in a bid to stop West German participation.

Mr Wolf Geissler, who has masterminded the campaign here of leaking previous documents, which the Embassy reportedly stole, refused to say what the documents to be published next would contain.

He said the decision of which to publish lay with the exiled, Lusaka-based African National Congress.

Mr Geissler's organisation and African nationalists have alleged that the help South Africa is receiving in the nuclear field will enable it to build up a military potential with which to defend apartheid if it is forced to clash between Black Africa and South Africa.

Mr Geissler said: "It's the same nasty business as with Cabora Bassa — the Swedes stopped their Areva company taking part for political reasons. But our industry doesn't apply these types of yardsticks, let alone scruples.

"But perhaps these documents will have some influence on the decision, especially in view of the pressure building up in Nairobi."

He was referring to sharp criticism of nuclear co-operation between West Germany and South Africa made at the World Council of Churches conference being held in the Kenyan capital.

A Kraftwerk Union manager has just completed a visit to South Africa, and a spokesman for the company in Frankfurt said it expected to submit its final tender at the end of the month.

Opinion is reportedly divided in the Bonn government over whether the deal should go ahead after the furor the earlier publication of documents caused.
Council to take over from Escom

The Johannesburg City Council intends taking over Escom's electricity supply network in the developing southern areas of the city at a cost of about R300 000. Township involved in the planned takeover are Kliplis Park, Mayfield and its proposed extensions, the proposed council townships at Lielda en Vrede and Rietvlei, Rispar Agricultural Holdings, Patlynn Agricultural Holdings and the proposed Kliplis Park Industrial Township.

The council has agreed to apply to the Electricity Control Board for the extension of its supply network into these areas. Escom has agreed in principle to the proposed transfer, subject to the council buying the reticulation assets. Escom has also stipulated existing consumers in the area must consent to the takeover.

TRANSFER

The council will have to advertise the transfer and the board will consider objections from the public.

It is the council's policy to take over the electricity network in the whole of Johannesburg to ensure uniform tariffs. It will continue to purchase electricity from Escom. The use of Escom power in the city is growing as the council's own generating capacity is pegged by Government policy. Only Escom can build new generating plants.
Dual rates jolt from Escom

JOHANNESBURG—Escom's electricity rates would be increased by about 15 percent from April next year and would be further increased by about 13 percent from September, 1976, the Electricity Supply Commission said in a statement here yesterday.

Escom said an increase in electricity costs was unavoidable as a result of the unexpectedly large increases in costs during 1975 and because further cost increases were expected in 1976.

Coal, which had increased by 38 percent in 1975, represented the highest cost increase, the statement said.

Total coal expenditure would increase from R112.1 million, originally budgeted for 1975, to an estimated R187.5 million in 1976, Escom said.

Other working costs would increase from R119.7 million, budgeted for 1975, to R163.1 million in 1976.

Escom estimated that financing costs would increase from an estimated R16.7 million for 1975 to R219.4 million in 1976.

The statement said the decision to introduce the increase in two phases was taken in keeping with the general campaign against inflation, and to spread the effect of the increase over a period of time.

Escom said the delayed rate increases implied that the overall rates for the year 1976 would on average be 16 percent higher than the present rates. — (Sapa.)
Petrol price cuts in res.
of S.A. like

Mercury Correspondent

JOHANNESBURG — A Court decision to allow Pick 'n Pay to continue discount petrol sales at their Boksburg hypermarket could herald the breakthrough for cheaper petrol throughout the country.

The company's chairman, Mr. Raymond Ackerman, said yesterday he believed the judgment had set a precedent for future negotiations with oil companies and was a boost for his plans to set up discount petrol sales in all major centres.

A rival supermarket chain, OK Bazaar, said the court's decision had reinforced their plans for future petrol discount sales—but the Motor Industries Federation (M.I.F.) vowed to take every possible step to stop what it called "the further erosion of the stability of the industry."

Mr. Sarel Steyn, general manager of Trek Petroleum, whose company lost yesterday's battle to stop Pick 'n Pay's cheap petrol sales, said widespread discount petrol would harm the country.

Trek Petroleum was ordered to continue supplies of petrol to Pick 'n Pay's Boksburg hypermarket in a judgment by Mr. Justice G. A. Coetzee in the Johannesburg Court yesterday. He also ordered Trek to pay the cost of the action.

Cut off

The dispute arose when Trek cut off supplies of petrol after it learned that the hypermarket was selling it at half-a-cent a litre less than other stations.

In his judgment, Mr. Justice Coetzee said Pick 'n Pay had sold petrol "in conformity with its general policy."

Consequently, almost overnight goodwill had built up, and the hypermarket had become one of South Africa's largest single sellers of petrol. However, supplies had been cut off on December 2.

The Judge said the relevant regulation in the National Supplies Procurement Act stated that at no time could petrol
World wide furore looms French win atom deal

The R800-million contract for the construction of South Africa's first nuclear power station was awarded by Escom tonight to a French consortium - setting the scene for a further international furore over the project.

The Swiss-Netherlands-United States consortium was the favourite to handle the massive project.

And the industrialists who have fought desperately in the past few weeks to push through their bid in the face of political opposition in the United States and the Netherlands are now certain to round on the pressure groups who blocked their efforts.

Associates of the consortium have been pleading with officials of South Africa's Electricity Supply Commission in the past few days to hold off their decision until they could get the guarantees of political non-intervention in the project on which Escom was insisting.

But Escom officials reveal that on Monday this week it had suspended negotiations with the consortium of US, Swiss and Dutch companies for the supply of the two-unit nuclear power station.

This had been done because of the failure of the Dutch Government to provide the necessary guarantees and assurances of supply by the specified date of May 21.

Tonight's announcement said the contract for the construction of the power station at Koeberg, 28 km north of Cape Town, had been awarded to the French consortium consisting of Framatome, Alstom and Spie Batignolles—two of the Dutch-Soldahana and Orange Fish tunnel projects—would be responsible for the civil engineering works.
Power from the Transkei

THE PROPOSED R30 million hydro-electric power scheme which South Africa will build for the Transkei is under active discussion by the two governments.

Although test drillings have already been started in the Transkei by the Cominco group, the final shape of the project is far from settled.

In broad outline, however, the plan is to build a complex series of large dams, one of which will be connected by tunnels cut under mountain ranges, such as was done on Australia's Snowy River project.

The ultimate installed capacity power output is estimated at 2,000 megawatts, or about twice the capacity of Kariba.

The project is expected to revolutionize the economy of the Transkei, bringing in an annual income of around R30 million, with minimal maintenance costs.

All the power output from the project will be fed into the South African grid, and the Transkei's needs will be met by feeding back from the grid.

By far the greater part of the power, however, will be consumed by South Africa. Bronging in and shutting off turbines will be a problem, and remote control in South Africa means that power from the Transkei will only be used to meet peak load demands and will not form part of the base load supply.

It will take about 15 years to complete the complex, interlinked system which will involve six major dams.
ABOVE: A photo-montage of the site and how South Africa's first nuclear power station at Dynefontein, 28 km from Cape Town, will look when completed. It will be known as Koeberg and will cost about R$75-million according to today's costs. After the nuclear power station is commissioned in 1982, it will produce nearly 1,900 megawatts into Escom's national grid, making it one of the biggest power stations in South Africa.

* LEFT: South Africa's first nuclear power station will rise on this site just north of Cape Town, where Cementation teams are seen recovering core samples of soil which went to provide tenders with information for their foundation designs. Construction of the Koeberg nuclear power station is scheduled to begin this year. The two-unit system will consist of two pressurized water reactors, each capable of producing 922 megawatts.

JOHANNESBURG. Escom announced on Saturday that the Escom contract for the construction of South Africa's first nuclear power station at Koeberg, 28km north of Cape Town, had been awarded to a consortium of companies which included General Electric Co. of the United States, Brown Boveri of Switzerland, and N.V. Koninklijke Zundert of the Netherlands. The consortium includes General Electric of the United States, Brown Boveri of Switzerland, and N.V. Koninklijke Zundert of the Netherlands, which is involved in nuclear power stations in various countries. The consortium is responsible for designing, constructing, and operating the Koeberg nuclear power station.

The announcement was made by Escom officials, who said that the Escom contract for the construction of the power station at Koeberg, 28 km north of Cape Town, had been awarded to a consortium of companies which included General Electric Co. of the United States, Brown Boveri of Switzerland, and N.V. Koninklijke Zundert of the Netherlands. The consortium is involved in various countries, including the United States, Switzerland, and the Netherlands.

Details of Koeberg contract

Fable Bay than to the colder Atlantic at Dynefontein.

Escom said it had thoroughly investigated all reactor systems, paying particular attention to capital and operating costs, safety aspects and reliability.

Throughout the world light-water reactors predominated over other reactor types, and it was decided that Koeberg should have a light-water reactor system.

22 COUNTRIES

Light-water reactors, whether of the pressurized or boiling-water type, are safely operating in 22 countries. Technical organisations have been set up, laying down stringent rules and regulations and reactor operating licences are granted only when all necessary requirements have been fully met.

In South Africa, the Atomic Energy Board constitutes the technical body responsible for granting Koeberg's reactor licence. It is in close consultation with manufacturers' safety staff, and the licensing authority of the reactor's country of origin.

Consultation
Fuel pledge seen as reason for French win

TOM COPELAND
Political Correspondent

THE FRENCH GOVERNMENT'S apparent willingness to supply long-term fuel needs for SA's first nuclear power station at Koeberg has probably been the decisive factor in the awarding of the R875m power station contract to a French consortium.

Informed political sources see the French victory in their tender bid as due as much to France's realistic foreign policy towards South Africa as to French technological and commercial skill.

The ability of the French contractors to guarantee the fuel supply is said to carry particular conviction because of the French Government's attitude to the supply of military equipment to South Africa in recent years.

The French consortium was the contract aboard bid by an American-Dutch-Danish consortium and a German consortium in collaboration with South Africa's Muret and Roberts because it was the only one which could provide the necessary credit guarantees and supplies of fuel.

OPPOSITION

It appears that strong political opposition in the United States and Holland to participation in the nuclear-power project led directly to the instability of the American-Dutch consortium's interest in the fuel assurance required by the Ecom.

Informed sources point out that the political debate in these countries has been heavily influenced by South Africa's involvement in the nuclear-power project - in particular the possible nuclear weapons programme, irrespective of the nuclear power station.

Neither the French nor the South Africans have yet revealed the nuclear-power proliferation treaty, but it seems likely that the two governments may agree to the non-proliferation of fuel or technology through a bilateral agreement.

MATTER OF TIME

The Koeberg power station, 32 km north of Cape Town, is expected to be operating by 1982 and South Africa will clearly rely heavily on enriched uranium being produced on a commercial scale in the Republic.

The Minister of Economic Affairs, Mr Chris Heunis, said yesterday that the Government obviously welcomed the awarding of the contract but he emphasised that the deal was negotiated independently by Ecom.

The French Government took the decision in principle to establish the nuclear power station many years ago and we naturally approve of Ecom's handling of the contract, he said.

"WELL JUDGED"

The United Party's experts on nuclear power, Mr Berck de Villiers, MP, said the decision by Ecom to proceed with the nuclear power station in the Cape Town area was a welcome development in relation to the present energy situation, "well-judged and has our full support."

"As South Africa does have independent and substantial uranium resources it is right that we should begin to develop a nuclear power capability of our own."

PARIS - Warnings have been sounded that if "there will be trouble" in France over the nuclear power stations that will supply to South Africa.

The state-run "France-inter" radio led its first morning news bulletin with the news from South Africa that "Questions are bound to be asked about it."

France's national Sunday newspaper, "Jourual de Demain" had a headline over five columns, "There will be trouble. It said that it was a "false alarm" but said it was "going to present some difficulties" for anything concerning South Africa, "France is charged with policing itself."

It said that the French-speaking African leaders, who attended a conference here earlier this month with President Valery Giscard d'Estaing, would "be very favourable. It added that "the Americans will not get very much about the contract" because they told the French President that they were violating the United States only a week ago that France should not adopt such a policy to sell its nuclear plants abroad. The United States favours some kind of control.

The newspaper concluded that "the semi-official reason given by South Africa for choosing France - that the Western nations and the international financial world had opposed a political solution - could start polemics."

The secret of the contract was well kept and the French press looked on the American-South Africa consortium as having already won it. But there is no doubt that President Giscard is going to ride into a major political storm over the next few days.

N-deals 'strictly controlled'

France tries to allay fears

PARIS. - The French Foreign Minister, Mr Jean Sauvagnargues, in an interview published here yesterday, sought to allay fears that France was helping to spread nuclear weapons by selling foreign countries nuclear technology.

Mr Sauvagnargues, who gave the interview before the South African deal became public, said that France had imposed strict controls on its sales of nuclear know-how. The technology was meant for peaceful purposes.

The 6-to-7 million deal was expected to arouse protests in France and against close relations between Paris and Pretoria. But diplomatic sources expect protests from France's West African allies to be on a formal level only.

Leaders of a number of French-speaking African countries met in Paris earlier this month and President Valery Giscard d'Estaing was presumed to have told them of the deal.

The president announced last year that France would halt any nuclear sales to South Africa. His opponents said that France would not produce any arms contracts already completed.

France has long been South Africa's main arms supplier.

In the interview Mr Sauvagnargues replied to United States fears that French nuclear processing plants sold abroad could be used for military purposes. He said that France had renounced plans to conclude a deal with South Korea but had continued with Pakistan which had accepted all the guarantees asked of it.

Official French policy calls for clients to abide by conditions of the International Atomic Energy Agency for prior agreement that nuclear technology is to be used for peaceful purposes only.

GUARANTEES

"International relations would become complicated if everyone acted on the principle that guarantees meant anything - we will not relax our controls (on nuclear technology) as long as we consider them to be as good as the others," he said.

Opponents of France's policy claim that contracts on military sales have been regularly violated. The main example cited was a deal with Libya which was theoretically prohibited by the米兰as it would be contrary to the disposal of the third world. However, the French officials were embarrassed when Libya confirmed Israeli charges that the jets had been put at Libya's disposal during the 1979 Middle East war.

French officials were expected to reply to criticism of nuclear sales to South Africa by stating that it was a "Western Organisation for Economic Co-operation and Development treaty, prepared to clinch the deal.

The United States Under-Secretary of State for non-proliferation, Mr Myron Nazarian, talked here Wednesday last week that the United States intended to sell South Africa two nuclear reactors.

France has also agreed to sell nuclear power stations to Iran, Egypt, Pakistan and Libya. — Despatcher
N-contract causes storm in France

Own Correspondent

PARIS. — A major political and diplomatic storm yesterday broke over President Valéry Giscard d'Estaing, after announcement of France's nuclear contract with South Africa, described as "a fabulous deal" by supporters and "a mistake, a political crime" by opponents.

Warm seawater won't spread too far — expert

Staff Reporter

The great volume of warm seawater discharged by the proposed nuclear power station at Koeberg will have only a localized effect on marine life, says a University of Cape Town zoologist.

Professor A. C. Brown, head of the Department of Zoology, said yesterday that the discharge of coolant estimated at 100 tonnes a second would tend to drive away some species and attract others.

"Of course he warmest parts will be unbearable for some creatures, but the temperature will vary with distance and it is likely that this zone will support species normally found on the south coast between Cape Point and Port Elizabeth."

Professor Brown would not say whether sharks would be among these. He commented: "There are already sharks in Table Bay."

The university completed a three-year study of the effects of the discharge on marine life at the end of last year, and a report was produced for Escom.

Professor Brown said the question of possible contamination of the seawater was also studied, but he could not comment as the information in the Escom report was classified.

He did not think it likely that the beaches at Koeberg would be opened to the public for recreational purposes — in spite of the warmer water.

The sea temperature near the site is approximately 13 percent C. The water used to cool the nuclear reactors will be discharged at a temperature of about 23 degrees C.

France's official line is that "the contract must be seen purely on technical and commercial level — it has nothing to do with politics."

A spokesman for the Quai d'Orsay Foreign Ministry, questioned by reporters yesterday, said the nuclear plant was "a classic electricity-producing factory" and there was no question of France giving South Africa the key to nuclear bombs.

The evening Le Monde newspaper made a point mentioned by a large section of the press when it said: "Giscard d'Estaing was elected President on his promise to conduct a liberal and enlightened foreign policy — this deal contradicts this policy."

In favour

The mass circulation evening France-Soir asked, "Has the French Government signed an excellent commercial contract, or concluded a bad political bargain?"

It said the French left was describing the contract as "a mistake, a political crime."

But the newspaper argued in favour of the deal.

It said that it was useless to criticize the contract as not being part of a liberal French policy because "there are too few liberal countries in the world today — one has to do business where one
'Politically' dead over by Black

By ROB EISENBERG

HAVANA, Cuba, Jan. 21—An American and American- Cuban combination has been found for the purchase of the Cuban Sugar Company, according to sources familiar with the situation.

The new buyers are reportedly engaged in the peanut, tobacco, and sugar businesses in the United States. They are expected to take over the company's operations as soon as possible.

A United States purchase of the company would be of interest to Cuban investors, who see it as a way to secure the future of the company and its employees.

The deal is expected to be completed within the next few weeks, and the new owners plan to invest heavily in the company's operations.
less to criticize the contract as not being part of a liberal French policy because "there are too few liberal countries in the world today — one has to do business where one can".

The Communist Party, as expected, became hysterical in its organ "L'Humanite". It said, "France is giving Pretoria the means of making 100 atomic bombs".

Critics

Socialist Party spokesman Lionel Jospin called the deal "surprising".

But there has been no public statement by any major political figure like Communist Party leader Georges Marchais or Socialist Party leader Francois Mitterrand.

All signs here are that even top-ranking Government figures were taken completely by surprise by the announcement on Saturday from South Africa. While the Government agreed several years ago to the tender for the contract, it is unlikely that even the President could have been aware that France had been given the contract in preference to other competitors.

But even such a strong critic of the contracts as Le Monde declared yesterday, "The South African decision was a logical one."
CHEMICAL manufacturing giant, AE & CI, has bought a invention from Mobil Oil that could enable it to manufacture ethylene from coal while simultaneously producing substantial quantities of high quality petrol as a by-product.

First estimates show that AE & CI might be producing about 20 per cent of this country’s annual petrol needs.

By Nigel Bruce

Mobil discovered, if put over a zeolite catalyst produces a limited range of hydro carbons, principally aromatic hydro carbons, which is in effect a good petrol. "What AE & CI is mainly interested in is that inter-upt the methanol reaction to petroleum hydro carbons holds promise of yielding ethylene in commercial quantities" he says.

"An important objective of the development process will be to reduce the petrol-ethylene ratio of the Mobil invention in favour of a greater ethylene and smaller petrol output. Nevertheless, this by-product petrol, because of its composition, could be used to upgrade Sasol petrol manufactured by the Fischer-Tropsch process, which produces a wider range of hydro carbons that result in a lower octane rating.

Further objectives of the development phase are to estimate the scale of operation, the risks involved and determine the exact size of the capital investment.

Currently, AE & CI’s ethylene supplies are obtained from Sasol, which imports and cracks Naphtha for this purpose. Although Sasol Two will ultimately give rise to a more substantial 150,000 tons a year, AE & CI is looking for an additional annual supply of about 300,000 tons of ethylene a year in the Eighties.

If this ethylene output is reached from the new process he says that at its present stage of development the process will require about five million tons of coal annually, and if would make AE & CI the second largest industrial coal consumer in the country.

Feedstocks

Even on development of the invention, AE & CI discovers that from imported feedstocks ethylene is cheaper, this will not necessarily mean the scheme’s abandonment. For, as Mr. Webb explains, domestic ethylene production from coal will ensure long-term supplies. Moreover, it will save millions in vital foreign exchange.

After negotiating for nearly a year, Mr. Webb signed a collaborative agreement with Mobil on November 18 in terms of which AE & CI would develop the process for chemical production and a non-exclusive right for fuel production. Mobil in turn, will benefit from AE & CI’s development and research and has an option to participate should AE & CI go into production.

AE & CI’s Mr. Ronnie Webb . . . giving a fortuitous lead into petrol production.

Mobil made its discovery about two years ago when researching catalytic methods for the refinery operation. Because of its limited interests in petrochemicals, Mobil approached ICI (U.K.) because of its pre-eminence in methanol technology according to Mr. Webb.

ICI which owns about 40 per cent of AE & CI, and knowing of the latter’s interest in coal as a route to hydro carbon feedstocks, drew it in to the collaborative work it was doing with Mobil on the discovery. Mr. Webb believes AE & CI is particularly well placed to develop and exploit Mobil’s discovery because of its inherent skills and the abundant supply of coal in this country, large deposits of which are mined by Anglo American group interests which, through B.B., are associated with AE & CI.
Sasol 2 in drive for staff

Staff Reporter

FLUOR SA Pty, the American company which will build the giant Sasol project on the Eastern Transvaal highveld, has started recruiting staff.

The Springs-based company will start soon on the R1 600-million project near Trichardt and has vacancies for 300 employees. Sasol 2 will be one the world's biggest gasification projects.

PROJECTS

Wherever possible, the company will employ local labour and materials. The second oil from coal project will be 10 times bigger than the present one at Sasolburg.

Work on the project is expected to take five years. FLUOR, with its headquarters in Los Angeles, is one of the largest heavy engineering and construction companies in the world and has completed projects in Australia, Korea and Beadon on the Persian Gulf.
US interest grows in Sasol's oil-from-coal

The spread of enthusiasm overseas over the Sasol oil-from-coal projects launched in South Africa was the main theme discussed by energy experts from nine nations at a private conference in Johannesburg today.

The experts — with a particularly strong delegation from the United States — met as the International Coal Research Committee.

They had already agreed at a meeting in Pretoria yesterday sponsored by the Fuel Research Institute that the oil crisis had made oil-from-coal processes more viable and attractive than ever.

Australia has decided to launch its own Sasol and America, which is aiming at independence in energy, is vitally interested.

According to Dr C C la Grange, director of the Pretoria-based Fuel Research Institute, which is hosting the meeting, "the moment the Americans heard that Sasol was on the programme, more than 30 top researchers decided to come, including the heads of the National Coal Association and the North American Coal Corporation."

The heads of the Australian and British coal industries are also attending, as are top of coal people from Belgium, Canada, which has 10 representatives, France, Spain and West Germany.

The overseas delegates to the meeting have visited coal and gold mines, research centres, power stations and Sasol itself.

America would "have to" follow South Africa's lead in building petroleum-from-coal plants, according to the president of the American National Coal Association, Mr Carl Bagge. After inspecting Sasol One, Mr Bagge said it was "tragic" that the Kellogg process of extracting petrol from coal was developed in America—and first put into practice here.

"We in America just took coal for granted until Opec clamped down on oil in 1973. Now there is renewed interest in coal and particularly in gasoline from coal" he said.

In Houston yesterday, a high-ranking US Treasury official, Mr Gerald Parsky, charged that lack of a "sensible" energy policy in his country was creating the risk that Opec would be able to dictate world oil prices well beyond 1980.
Shortage blamed on plant delay

Mercury Reporter

THE SERIOUS shortage of industrial coal in Natal, which has threatened production at some factories, has been caused by further delays in the Cabora Bassa hydro-electric scheme in Mozambique.

Mr. Pieter Treurnicht, public relations officer for the Electricity Supply Commission (Escom), in Johannesburg, said yesterday coastal generating stations in Natal had been used for some time to supply the Transvaal power grid as power from Cabora Bassa was not yet available.

Mr. Treurnicht said many Transvaal stations had been forced to close down for essential maintenance because Escom had planned to receive power from the giant Cabora Bassa scheme much sooner.

He said the delay was due to "purely technical reasons." Escom had expected to receive power early this year.

Mr. Treurnicht said, since this was not available, essential maintenance on the Transvaal generating stations could no longer be delayed. He said another factor contributing to the coal shortage was heavy rains in northern Natal which had disrupted mining operations and reduced coal stockpiles.

Power from Cabora Bassa is still not expected for many months.
The Petrick Report on the coal resources of SA can rightly be called a seminal document. It is a mine of information and its study will justify the burning of much low-cost electric power, while that lasts.

It will certainly be a major influence on official thinking, and, as an unabashedly pro-coal document, will be another significant step in the rehabilitation of coal from a Cinderella industry into a dynamic national resource. It is critical of past pricing policies and could well pave the way for further increases to the TCOA producers and better terms for the captive Escom collieries. But on exports, it is lukewarm.

Petrick takes the view that coal has always been made subservient to gold.

"Certain of its interests have suffered in consequence," no doubt partly because "all major coal producing areas are now directly under the ownership and control of the large mining houses". And "the emphasis on mining interests on low cost electric power...have led to the acceptance of cheap electricity as a matter of ordinary providence".

Pricing policy and "a facile misconception" that SA's coal reserves were inexhaustible are blamed for low extraction rates in the past. Bord and pillar mining, Petrick points out, leads to extraction of 30%-80% of a particular seam, and only 10%-50% of coal in situ on a multi-seam property. Yet despite this high rate of wastage, "under the present pricing system, the bord and pillar method still holds a certain cost advantage."

As the main theme of the Report is the need for conservation of coal, Petrick's conclusions on pricing policy as a means to this end are unequivocal. Higher prices would encourage the application of more sophisticated systems, like mechanical spouts instead of leaving pillars, or more emphasis on opencasting, and with its vast capital costs. The recommendation is that "the whole system of price control for the industry be revised..." (and) that the price of coal be substantially increased in order to allow much needed expansion in coal mining productive capacity".

Perhaps guessing that the door had been unjammed, the Chamber of Mines produced a two-page memorandum, tabled with the Report, which argues even further along the same lines.

It says that the necessary "technical competence" does not exist at the Department of Commerce "to assess and project the long-term consequences of its policies". The Chamber recommends that "the setting of the coal price should be removed from the ordinary sphere of price control and the exclusive responsibility of the Price Controller". This, it adds, is not out of "disrespect to this officer" but because "our contention is that in the case of the coal industry there are other vital considerations which the Price Controller's office is not equipped to judge".

Instead, the coal price should be reviewed by a committee representing the Departments of Commerce and Mines and the coal industry, retaining "a form of price control". The Chamber also argues strongly for a revised price formula and against differential treatment for collieries outside the captive sector. Its submission is one of the most interesting parts of the Report.

The theme of conservation running through the Report is partly because resources are now reckoned to be fully known. Petrick estimates 81 000 Mt of known coal occurrences of which 25 000 Mt are extractable under current technology, though the point is made that reserves, as opposed to resources, are "dynamic" because of improved techniques or higher prices.

But against the background that resources are known, demand is rising "much more rapidly than was previously estimated", and SA coal is in demand on the export markets. In the latter, Petrick urges caution, with no large scale exports of high grade or metallurgical coal at all.

One weakness is perhaps that the Report does not argue out the foreign earnings benefits of coal exports. The conservation argument could obviously be carried too far in the case of a small field (in the 30-60 Mt bracket) which was not interesting to Escom, Iscor or Sasol but appropriate to export needs.

Moreover, the Report's social comment is limited; on higher coal prices in this context it merely observes that higher coal prices would extend reserves "without undue hardship to the majority of consumers". Not everyone will agree. But the general conclusion is inescapable: coal prices are going up. Everyone, from marginal gold mines to private households, will have to get used to paying more.
SASOL II COST HITS R1900m

Mercury Correspondent
CAPE TOWN — The costs of the second Sasol have soared by a staggering 86 percent in less than a year, the Progressive Reform Party’s Mr. Gordon Waddell, MP for Johannesburg North, revealed yesterday.

Mr. Waddell was responding to a reply by the Minister of Economic Affairs, Mr. Chris Heunis, that the latest estimate of the total anticipated costs for the venture would be R1 900 million.

This represented an increase of R879 million is less than a year, and was a classic example of the ravages of inflation and devaluation on the South African economy, Mr. Waddell said.

What made the answer even more revealing was that it was based on the October, 1975, price levels.

Mr. Waddell said it was true to say that inflation had affected other countries but certainly not to the same dimension.

“These are horrendous figures.”

He warned that it was going to be extraordinarily difficult to recover the ground which South Africa had lost in terms of the other countries with which it traded.
Escom tariffs to raise price of electricity

ELECTRICITY bills in Cape Town are going to increase steadily this year as Escom’s tariffs to the City Council escalate.

Heavier bills could come within a month to offer a 5 percent increase in the council’s operating costs.

The Electricity Supply Commission has announced ‘higher’ surcharges for all its consumers in the Western Cape.

The existing levy of 2.5 percent on tariffs is being pushed up to 40 percent this week, and from the beginning of September it will soar to 60 percent.

The first increase will add about R2.4 million to the City Council’s Escom bill, pushing up the cost of providing power to the city by about 5 percent.

‘Obviously, for this reason alone one could expect a 5 percent increase in tariffs here,’ Mr. Dennis Palesa, City Electrical Engineer, said today.

‘Clearly, we will have to revise our tariffs. We cannot absorb all these increases.’

COAL

He said the ‘large and unexpected’ increases in Escom charges, coupled with recent increases in the cost of rail coal, meant the council would have to consider putting up its charges to users.

He said recommendations for higher tariffs in the city would probably be put to the council soon.

Escom’s ‘higher’ surcharges will also mean heavier electricity accounts in a number of Western and Southern Cape towns, which buy their power from the corporation.
Shortage of coal looms

By ADAM PAYNE
Mining Editor

THE TRANSVAAL is facing a coal shortage months before mid-winter because production from the collieries is unequal to demand. This situation has arisen partly because Escom has asked the Transvaal Coal Owners Association for extra supplies of 23,000 t a week.

Moving into winter, this figure is likely to rise sharply, I am told, and could more than double, with all power stations working at peak capacity.

A contributory factor to increased demand by the power stations is the failure of Cabo Bessa to feed into the South African grid.

In the coal-mining industry there is no satisfaction at this situation — only a realisation that for years the industry has warned that unless the price was raised strongly there would be no incentive to open collieries and South Africa would face a coal famine.

Apart from the stepped-up demand from Escom, consumption by industry has increased because of coal substitution for oil.

SOLUTION

The only solution, in the industry's view, is a rise in the coal price that is sufficiently high to stimulate new investment.

Mr Anthony Lee, chairman of the TCOA, confirmed last night that the supply-demand situation was tight, and said a coal price rise could have an immediate effect.

Although it would take some years to increase overall production by the opening of collieries, immediate measures to raise production could result from a price rise.

Temporary opencast collieries could be opened within months to help check the shortage.

'These would assist in bridging the gap,' he said. The seriousness of the situation, I am told, lies in the fact that the developing world is also looking for coal, 'I don't think there's an urgent need right now, but a year or two down the line, I'm not sure.'
ONE OF THREE powerful international consortiums is expected to be named in the next few weeks as the successful tenderer for construction of a nuclear power station at Duinefontein, near Cape Town, the ultimate total cost of which has been estimated at R1 150 million.

This is to be South Africa’s first N-power station, and there has been stiff competition around the world to land the contract for its establishment.

A spokesman for the Electricity Supply Commission (Escom) told from Johannesburg yesterday that there was no truth in rumours that Germany would refuse to supply plant for the station if South Africa did not first sign the nuclear non-proliferation treaty. The West German firm Kraftwerk Union is among the tenderers for the power station contract.

FINAL TENDERS

The three consortiums that were invited by Escom last year to submit final tenders for what is to be known as the Koeberg power station were:

- General Electric of the USA and Brown Boveri of Switzerland;
- Framatome and Spie Batignolles of France; and
- Kraftwerk Union and Murray and Roberts of South Africa.

These consortiums were selected after Escom put an “outline inquiry” about the Koeberg project on the market internationally in February, 1974, to nine leading manufacturers of light-water reactor power stations.

The N-power station is scheduled to become operative in 1982, and fully operative in 1983.

Last December the Upper Volta ambassador to West Germany, Mr Alasse Mensah, urged West Germany to take African interests into account before it decided on supplying South Africa with a nuclear power station.

“We do not want nuclear arms and radio-active fallout on our continent,” he told the West German Deputy Foreign Minister, Mr Hans-Juergen Wischniewski.

The South African Minister of Economic Affairs, Mr Chris Heunis, has told Parliament the first phase of the Koeberg project will cost about R600m and the second phase another R550m. A further R350m will be accrued on interest during the construction period.
Koreans get own village

Korean affairs

Korean affairs have a peculiarity claim to South Korea's foreign affairs. Recently the special Korean Affairs Office was established in the Prime Minister's Office, and under the charge of the special Korean Affairs Office, the Korea's foreign affairs are handled.

With the special Korean Affairs Office, the situation of Korea's foreign affairs is being handled effectively. This office is formed by the Special Korean Affairs Office and the Korea's foreign affairs are handled under the charge of this Office.

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French row
over SA atom deal

PARIS — The Federation of Protestant Churches in France has protested against the sale of a two-unit French nuclear power station to South Africa.

The federation's council issued a "disapproval of this type of commercial transactions" and said "legitimate internal economic preoccupations cannot justify an initiative which implies a serious risk of dissemination of atomic armaments."

The communiqué added: "In this precise case, it includes support in contempt for the most clearly stated recommendations of the United Nations for a regime which is based on a racial discrimination which is leading the South African people toward a bloody drama."

Mr. Lucien Abondard, sales director for the Framatome company which is selling the reactors, said in a television interview that the contract represented about 200 million francs for French workers.

Asked if there was any fear that the plant would help South Africa to build atomic bombs, he said it was true that some plutonium would be produced by the reactors, but "many other elements are necessary without which it is absolutely impossible to build an atomic bomb."

He said the International Atomic Energy Agency in Vienna would monitor the use of the materials and installations. — Saga-AP.

(See "Nuclear homeshell boost for French" — Page 9)

Another Koeberg soon is 'unlikely'

John Patten,
Political Correspondent
CAPE TOWN — The clinching of the contract for the R800-million Koeberg nuclear power station was unlikely to be followed soon by other nuclear power stations, a United Party energy spokesman, Mr. Durick de Villiers, said today.

The reason: Koeberg would provide for future expansion of the Western Cape in the '80s and after, and there was no other coastal industrial complex likely to be big enough in the near future to justify it.

Meanwhile, the announcement of the deal has been generally welcomed.

Mr. A. H. Hoodkraal, chairman of the Cape Town City Council's Utilities Committee, said the high cost would inevitably affect the consumer cost of electricity.

But the need for additional power was vital because of the increase in power consumption throughout the country and particularly in the industrial and developing areas.

Mr. D. Baker, managing director of Murray and Stewart, the South African company involved in the unsuccessful tender with a German company, said the award of the tender to France had been a tremendous blow.

"But the project will involve all sorts of activities and we still hope that we will be able to get in on certain aspects of the job, though we will not be able to participate to the ex-

To Page 3, Col 8
NEW OIL FOR SA

THE MOBIL group is to spend another R11-million at its Durban refinery, bringing new investment in the country to some R60-million in the past six years.

By TONY KOENDERMAN

enables Mobil to reduce its heavy bunker fuel oil production from about 25 per cent of total output to about 21 per cent.

The last year or two has seen a slump in demand for heavy fuel oils in South Africa. This is partly the result of the worldwide shipping slump, partly because the reopening of the Suez Canal has diverted some shipping away from the Cape sea route, and partly because the rising cost of oil has encouraged a swing back to coal as a source of energy.

Consequently, there is now a surplus of heavy fuel oil here, which is being exported — at a loss. Three years ago our refineries were not able to produce enough fuel oil to meet the demand.

At that time, the product out of a barrel of crude oil broke down as follows: petrol 30 per cent; jet fuel 15 per cent; illuminating paraffin and diesel 30 per cent; fuel oil 25 per cent; asphalt, lubrication oil, solvents, liquid petroleum gas 10 per cent; refinery fuel consumed in the processing of oil 5 per cent.

Now there has been a shift in product demand away from fuel oil. Current demand is 30 per cent down on what it was a year ago, but it's picking up again.

Unfortunately, it's not easy to make big adjust-ments in the product mix, and the bigger the adjustment you wish to make, the greater the cost.

"If you're prepared to spend enough — about R100-million for one processing plant — you could eliminate all the fuel oil," says Mr England.

Three other oil companies are busily expanding in South Africa. Like Mobil, Shell is planning a new complex to cope with the changing demand pattern by making gas-oil instead of fuel oil. A R50-million polypropylene plant is also on the drawing boards. In all, an outlay of R500-million is envisaged in the next decade.

Doubling up

BP, which last year severed its marketing link with Shell, is talking of doubling its R140-million investment within 10 years.

And Caltex is spending R68-million to increase the capacity of its Cape Town refinery by 60 per cent to 5-million tons a year.

National refining capacity, including Mobil's 1974 development which added 50 000 barrels a day, must now be about 19-million tons a year.

And Sasol II is due to expand by another 1.5-million tons in the early 1980s.

But Trek Beleggings has shelved indefinitely its planned Richards Bay refinery, although general manager Sarel Steyn emphasises the project has not been abandoned.

Mobil Refining's managing director, Bill England (inset) and part of his company's R200-million investment.
years (of further drilling and planning) before a final production plan and a further four years before production.

But it's still a long way from R1bn to R3bn. Surely there must be a cut-off point when Sasol II just doesn't remain economically viable?

Indications are, says De Villiers, that international plant prices are dropping. "We're buying like hell now and as you commit you tend to firm. It's surprising what you can get at a fixed price or on a limited escalation basis. We are trying to squeeze everything we can.

The next 12-18 months will be the major procurement period and Sasol will have completed the bulk of its buying. That how much of this is imported and how much local, De Villiers won't say.

It's therefore impossible to estimate the impact of the giant project on the balance of payments. Enough to suggest that it will be severe.

De Villiers does say, however, that Sasol won't be going to the overseas capital markets per se. The money will be raised by a combination of:

- Parliamentary appropriations;
- Export credits;
- The Strategic Oil Fund.

In the latter case, Sasol will get only a portion of the $2.2bn on offer. This is the portion which goes to the Rand. "The Rand will help," argues De Villiers, "but in the period of time in which we can continue to feed this fund."

The only other source is an unknown quantity of export credits and public and private sector involvement.”

Still afloat

Though James Brown & Harper will have lost at least R5.5m on account of its shipbuilding contracts, it hasn't lost faith.

This week's internal statement that the Anglo-American subsidiary had an approximate loss of R1.07bn for the half-year to December 31 follows last year's admission that JHB had already lost R3.8bn on shipbuilding, 1975/1976/10. The trouble, arising from contracts booked between July 1972 and March 1973, is twofold.

Firstly, JHB entered contracts to build six oil rig supply vessels for a Norwegian customer at fixed prices which have subsequently been overwhelmed by inflation.

Secondly, JHB signed up to build Parma's 9,600-hp 5,900-tonne tug stern John Ross in a role as secondary contractor to Scotland's Robb-Caledon, one of the world's largest tug builders, which has the contract for the sister ship, the Wardale Pathfinder.

Robb-Caledon, as lead yard supplying JHB with technical background, has run into troubles of its own and is running a year behind schedule on the John Ross. JHB, forced to stand over to build the Ross from overseas funds, which was available in 1974, and to take over a contract, has also had to stand behind its scheduled deliveries of three months after the Scottish had been.

An Anglo-American spokesman said the JHB this week it has also meant that JHB has been unable to plan resources, the worst affected, still having some vessels under construction and contracts with JHB to complete. Indeed, JHB has recently taken out its insurance to take it through to January 1975 and intends handing over most of its plant in the form of "the equipment, capacity and site" to the new company with no limitations and it remains to be seen what we can get further contracts.

Since starting the John Ross, JHB has several building: a tug for Chevron (Doha Bay) at Qatar with an option on
How peace could come from power

ELECTRICITY is the only form of energy likely to get cheaper in a world bedevilled by inflation.

This is one of the points made — and supported by hard evidence — by master engineer Henry Olivier, who has been intimately involved with some of the world’s greatest hydro-electric schemes, including Kariba, Caboura Bassa and the Orange River Project.

The facts on which he bases his idea that the price of electricity can fall from Rhodesia. Over a ten-year period the price of the average unit sold in Rhodesia has come down from 5.68 cents to 3.93 cents, a truly impressive performance due almost entirely to the increasing proportion of hydro-electric capacity in the system,” comments Dr. Olivier in his recently-published book Damit.

But Dr. Olivier’s vision goes far beyond the price of power, important though this aspect may be. In electricity, he sees a unifying principle applicable to the whole of Africa south of the equator.

One’s first reaction could well be that any lasting peace and cooperation in this area of daggers drawn is an impossible dream.

Dr. Olivier does not agree. Any experience has so far been that in the end statesmanship has prevailed, economic considerations have triumphed over political ideologies, and developments have been undertaken in the interests of the well-being of the people.

“If all this comes to pass, we shall truly have engineered for peace,” he writes in his book.

South Africa’s trump card in any negotiations aimed at creating a pan-African electricity grid is her capacity to use power and her ability to pay for it. Vast schemes which can be built in countries still economically backward become viable when there is an assured market for the primary product, electricity.

The spin-off for the under-developed country is ample power for internal use along with controlled water resources, a catalyst to spark both agricultural and industrial development.

“The giant Caboura Bassa concrete wall and the machinery buried in the south bank of the Zambesi are merely the corner stone of a vast scheme which could turn Manzolipago into the granary of Africa and open a mineral treasure-house of immense value,” writes Dr. Olivier.

He thinks that the dam will not be used as a weapon against South Africa: it is in the same way that the Arabs have used their oil.

“Who else would buy the power? The choice of market is limited and the income is vital for the future development of the project.”

There is another aspect Dr. Olivier does not mention. While South Africa might buy and use this hydro-electricity, we would not become dependent on it. Our great coal-fired power stations are here to stay and will still provide the Don’s share of electricity.

Closer to home, it seems likely that a similar collaboration could arise between this country and the Transkei.

Last year, Chief Kaiser Matlouza announced that hydro-electric power generation in the Transkei was being investigated by the S.A. Department of Energy and Natural Affairs. A major project in several stages was involved.

The central output of such a scheme would be far in excess of the needs of the Transkei. It was set to be exported to South Africa and fed into the Escom grid.

The benefits which would accrue to the Transkei would include the employment of thousands of people during construction, many of whom would be trained to a highly skilled level.

The necessary roads and power lines would contribute materially to the creation of the infra-structure. Capital costs have been recovered, the Transkei should have a steady export running, and many millions of rands a year from electricity sold to South Africa.

Precise details are not yet final but investigations have been done and it seems that the S.A. Government will finance the project.

Dr. Olivier sums up his whole idea. “The concept is there. The needs are apparent. The potential is there in Southern Africa. Even the means are identified. The pan-African electricity grid can be the whole issue. The revenues and royalties earned from exploiting the united resources of the member countries could make a material contribution to national budgets and standards of living in these territories. The rock steady determinable costs of hydro-electric installations would form the anchor block of such a concept.”
**Koeberg nuclear power station contract**

**CHECK BEACH, SAYS UCT**

A REPORT by two University of Cape Town zoologists recommends that regular samplings should be taken of various fauna along the Duynefontein coast once the Koeberg nuclear power station becomes operational.

The report, presented to Escom last year after a three-year study of the area's marine ecology, said the heated effluent discharged by the plant — estimated at 100 tonnes a second — would probably change the population structure and density of certain species.

Researchers used diving gear for some of their surveys of a 35 km stretch of coastline. Of this about 13 km is rocky shore, supporting sub-tidal kelp beds, and the remainder sandy beach.

**BEACH FIRST**

The effects of the discharge could be expected to be felt first, and most severely, by the beach fauna, they found. It was suggested that checks be carried out regularly at varying distances from Koeberg to monitor these effects.

Noting that any drastic effects on the ecology of the area can be expected to evoke public outcry, the report said the survey would provide a baseline so that positive changes brought about by the power station could be recognized and deleterious effects on marine life prevented by Escom.

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The nationwide excitement and activity following the awarding of the R875m Duynefontein nuclear power station contract is already being shadowed by the inevitable question: How safe is it?

By ALAN DUGGAN

The nation-wide excitement and activity following the awarding of the R875m Duynefontein nuclear power station contract is already being shadowed by the inevitable question: How safe is it?

People would be subject to higher radiation levels by simply moving to Johannesburg, where the level is about 25 percent higher than in Cape Town.

The discharge of coolant into the sea is subject to the same limit, says Escom. This will ensure that no one swimming, fishing or enjoying sea foods taken from around the outlet receives more than 10 mrem/year (thousands of radiation units expressed as Röntgen Equivalent Man).

But accidents, failures and mistakes are nevertheless assumed to be possible, says Escom. In urgent cases, the reactor is shut down automatically and emergency systems are started to cool the fuel. The operator is provided with an entirely separate means of shutting down the reactor if the control rods fail.

Finally, there is the protection of the containment building, which is usually double-walled. Pumps are arranged to draw air from the space between the walls or from the building itself.

It could not be established yesterday whether the Koeberg building will be double-walled.

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The Duynefontein nuclear power station, Koeberg, was one of the most thoroughly researched projects in the country's history, an Escom spokesman said yesterday.

Escom formed the Duynefontein Site Investigation Committee in 1969 to examine the suitability of the site and advise on the likely impact of the station on its surroundings.

"We spent R1m on planning and preliminary work," said the spokesman, "and we covered every conceivable aspect of the project."

Among the organizations and scientific bodies involved in the study was the Atomic Energy Board, the Cape Provincial Administration, the CSIR, the Department of Health and Water Affairs, the Division of Sea Fisheries, the Divisional Council of the Cape and the University of Cape Town.

Escom has promised that great attention will be paid to architectural values to the layout and planning of the grounds.
R390m loan for Sasol II rejected

From RICHARD WALKER

NEW YORK — South Africa has suffered a bitter setback here with the rejection of a breakthrough R390 million-plus US Government loan guarantee for the Sasol II oil-from-coal project.

The decision came as a surprise. Some observers immediately linked it to the recent riots, but officials declined to give any explanation.

The loan was seen as an important step in boosting US-SA relations and ending the limitations set on US Government support of investment in the Republic.

The application was made by the Fluor Corporation of California, a key Sasol contractor, and would have covered exports connected with the project.

Fluor and South African officials are discussing the situation, and a direct appeal may be made to President Ford to reverse the decision — taken by the Export-Import Bank, the US Government’s trade-boosting agency.

It comes at a particularly embarrassing time for Pretoria — right after the Kissinger-Vorster meetings and while there is some concern of a flight of capital from the Republic.

Granting the facility had been seen by some as one of the “presents” Dr Kissinger would make to Mr Vorster in exchange for his co-operation over Rhodesia.

US laws forbid direct Government loans for South African deals and have limited the amount of loan guarantees — normal commercial bank loans backed by a US guarantee in the event of failure.
City's 10pc power shock

2/7/76

Under the Johannesburg City Council's coal escalation clause, higher power costs will be automatic.

Towns and rural areas outside Johannesburg are unlikely to be affected immediately by the coal price rise.

They are supplied by Scow, which said today it was unlikely to raise prices.

Mr W Stoloff, chairman of the Coal Merchants' Association, announced late yesterday that the Price Controller had approved a 30c increase in the price of 90 kg bags of domestic coal, bringing the new selling price to R1.50 in Johannesburg.

Selling price

The selling price of industrial coal went up today by 43c a 90 kg bag.

The Price Controller has also approved a further increase of 18c a bag to reimburse merchants for unavoidable increases in labour costs.

Heavily hit by the increases will be Soweto's million residents, who use about 500,000 tons a year.

The Minister of Economic Affairs, Mr J C Heunis, said in a statement last night that while the Government accepted the recommended new prices, it had demanded and obtained an undertaking from the coal producers that they would maintain and expand their production capacity to provide for the needs of the internal market for the next five years.

The director of the Federated Chamber of Industry, Mr H J J Reymond, said today that the coal price increase would have "a minimal effect on the cost of living" and that it would not be inflationary.

Johannesburg's electricity tariffs will increase by 10 percent immediately, because of the big increase in the price of coal.

Mr Wessel Barnard, the City Electrical Engineer, said today: "The coal price increase is the most inflationary thing I have ever heard of."

Mr Barnard said the increase was in effect more than 50 percent - not the 33 percent claimed by the Coal Merchants' Association.

He said the association had used the total delivered cost and not the pithead price, as the basis for their arithmetic.

The pithead price, until yesterday, was R4.45 a ton. This has now risen by R2.00 - an increase of more than 50 percent.

The total delivered cost, including railage, was R6.76 a ton and this is expected to rise to R8.02, which gives the CMA figure of 33 percent.

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**Lack of coal hits Rand industries**

Rand Industries have a serious coal shortage and have already suffered production losses.

Shortages of both industrial and household coal have been caused by a drop in production at Eastern Transvaal collieries.

Leading industrialists said today that transport contractors were not to blame and that the problem was caused by loading delays at collieries.

"We are concerned about the shortages and are having difficulties keeping up full production with coal supplies dropping," said an executive of a Johannesburg food company.

He said the company's Johannesburg plans could not stockpile coal because of space problems and last weekend had to cut production by half when supplies ran out. The plant uses 150 tons of "small nuts" a week.

**STOCKPILE**

A spokesman for a leading Rand brick company said demand for coal was outstripping supply.

"We stockpiled during the summer but are expecting problems," he said. "Our factories across the Rand use more than 20,000 tons of coal a month. Daily deliveries in the group have dropped by several hundred tons, but we have not cut production as we still have coal in reserve."

The company's executive had been assured by the Transvaal Coal Owners' Association that production capacity would improve in the next two to three months, he said.
Putting the Brakes On
TOUGHER petrol restrictions could mean a loss in productivity, a slow down in the economy and increased inflation, a top transport expert warned this week.

Mr. Bernal Floor, director of Stellenbosch University’s Transport Research Centre, was speaking against speculation that the Government is contemplating another tightened squeeze on motorists — perhaps even rationing — to cut the massive oil import bill.

In an interview, he made it plain that with the present state of the country’s public transport, people had no choice but to use cars.

“Because of a certain extent municipalities were responsible for this, and in the other countries they could be held ‘criminally responsible’.

As the country heads into increasingly severe balance of payments difficulties, the Government is desperately seeking ways to cut import costs.

One way would be to reduce petrol consumption, but motorists are giving less and less support to the current petrol restriction campaign, and are increasing this driving the speed limits.

Mr. Floor’s shock message to the Government is: the country’s total oil consumption, and tighter restrictions would only really pay of in this way unless they were less drastic than they damaged the economy.

South Africa’s public transport system is no substitute for private transport for Whites, according to Mr. Floor, who described it as “pretty useless.”

Putting into operation a multi-modal public transport system in this country is considerably worse than before the Second World War.

Aqntiquated

It has been allowed to deteriorate, he says, to a “regrettable state.” In many ways it is technologically antiquated. Many people find themselves living near public transport which are effective in terms of services are more erratic and less frequent than years ago.

“To some extent municipalities are to blame. They’ve tended to look on public transport as an unwanted evil. They feel that if they can only get shot of it, they’ll be far better off. This is very shortsighted.”

Use of public transport costs the commuter extra time, and a severe curb on cars would mean a slow-down in the whole economy — especially considering the poor telephone service.

“Business is much better equipped face-to-face. And studies have shown that people who have to spend time commuting just don’t work properly if they arrive. You can’t expect a man with a high salary to contemplate another tightened squeeze on motorists — perhaps even rationing — to cut the massive oil import bill.

In an interview, he made it plain that with the present state of the country’s public transport, people had no choice but to use cars.

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Efficiency

“Such a system will take many years to build up, and in the meantime the car will have to do.

“I would like to see a campaign explaining to people how they can use their vehicles more efficiently, cutting out unnecessary trips and travelling time.”

Mr. Floor gave figures showing that only 33 percent of the total amount of oil consumed in South Africa is used for car travel — and much of this was for commercial purposes. As some of the oil is produced in South Africa, even in commercial driving, private motorists would not make much difference to the balance of payments.

“Not much use in fiddling around there.

“And to improve public transport to the extent that it could replace private transport would cost a fortune in overseas equipment and technical assistance. Fortune in overseas equipment and technical assistance. For more in fact the cost of the oil for fuel. The only solution might be to go on importing fuel, at the same time motivating the government to be wasteful and import public transport system where economically feasible.”

Mr. Frank Martin, MEC in charge of road traffic in Natal, said the effect of hefty fines to stop people disobeying the speed limits was “beginning to wear off.”

“I know people who have been caught three or four times and paid a fortune.”

A major Government campaign was needed to ensure the motorists’ support. They should “come clean” with the public and tell them exactly why the restrictions were necessary.

Mr. Martin said people in this country were wasting petrol “like it was going out of fashion.” He thought people would respond to a genuine appeal to cut down on consumption.

“I think the facts are catching up with the Government. They’ve got to tell the people what the position is, otherwise we could eventually reach a situation where there will just have to be rationing.”

Togetherness

“People should come into work together. They must plan their trips.” Public transport in its present state could not cope. In many places it was “almost non-existent.”

Mr. T. B. Labuschagne, an Automobile Association Public Relations Officer, said local authorities and

South African Railways would have to make their services more attractive to lure people out of their cars.

Alternative

In the big metropolitan areas a second car is a necessity and not a luxury for a family, he says.

“Public transport is so much cheaper now than the car. With rising motoring costs, people are looking for an alternative, but the public transport idea will have to be jacked up.”

Dr. Gervin Maanap, an economist at the University of Natal who has done considerable work in the transport field, feels more severe petrol restrictions would provide a considerable challenge to public transport authorities to reorganise and improve their services.
New delay in signing of N-contract

Own Correspondent

PARIS. — A last-minute delay in signing the Escom-Framatome R1 000m nuclear contract, scheduled for last Saturday, has at least made clear that France is determined to conclude the agreement.

For French officials and Foreign Ministry staff worked overtime to translate documents into French and English for the initialling of the inter-state contract last Thursday. For four feverish days and nights, South African officials here received the fullest cooperation from their French counterparts.

While Escom announced in Johannesburg yesterday that the delay would only last for a few days, there is concern here over any possible hitches to the contract, which must be signed by France, South Africa and the International Atomic Energy Agency in Vienna.

The SA Ambassador to France, Mr Louis Pienaar, flew to Vienna on Friday for talks with the agency's Secretariat-General with a view to preparing all necessary papers for signature by the board, which meets on September 17 in Rio de Janeiro.

Six weeks

But there are 103 members of the agency, and many are bitterly hostile towards South Africa. They will have six weeks to lobby against the deal.

It is known here that France and South Africa did not plan to sign the contract till the agency's board met next February. But they were forced to act more swiftly, owing to growing world criticism levelled at France for selling nuclear reactors which it is claimed could manufacture atomic bombs.

While it is true that "differences" between Escom and Framatome are "purely technical", it is understood here there is some disagreement about the safety devices to be "built into" the two plants, which raise their total cost.
South Africa must tighten belts, says expert

AND DO IT NOW!

The Government must introduce petrol controls immediately and propose import controls...
Fuel decisions tomorrow

Vehicles to be seized?

The Minister of Economic Affairs, Mr Heunis, is expected to put drastic plans for fuel cuts before the Cabinet tomorrow, including a proposal to impound the cars of speeding motorists.

The inter-departmental committee responsible for drawing up the plans is understood to have proposed a top speed limit of 75 km/h — 5 km/h lower than the limit imposed during the first Arab oil price lift.

The most stringent proposal is that people convicted of exceeding the limit will have their cars impounded for varying periods, lengthening with the seriousness of the offence.

**Stored petrol**

It is also understood that if the Cabinet agrees, the limit on stored petrol will be slashed to five litres. The motorist will not be permitted to carry this in his car.

Petrol stations are expected to close from noon on Fridays until Monday morning.

Most of the work on the fuel restrictions has been done by the Department of Commerce and the Economic Advisory Council.

The Prime Minister’s chief economic adviser, Dr P J Blesbott, recently appealed in favour of stringent fuel cuts to rescue the country’s balance of payments position.

**Immediate?**

It is not known, however, when the restrictions will be imposed. Mr Heunis is believed to be keen to make an announcement with immediate effect on Wednesday, but there are doubts whether the machinery can be set up in time.

It is thought that the Cabinet will decide instead to bring in the restrictions just before the Transvaal school holidays begin on December 3.

**Tougher speed traps**

 Pretoria Bureau

Legislation likely to revolutionise court procedure in speed trapping cases is expected to be announced soon by the Minister of Justice, Mr Kroesen.

Informed sources say the announcement of the new legislation, will probably follow the publication of new petrol regulations.

At present, the prosecution has to bring evidence that the equipment used to trap a speeding motorist was accurate. There is no standard for speed testing equipment laid down yet by the Bureau of Standards.

If the new legislation is introduced, it will mean an affidavit will be entered in court laying down standard specifications for the equipment used. The court will then accept that the equipment used was accurate and the accused will have to produce evidence that the equipment was faulty.

**“Accurate”**

Mr G W van der Veen, chief of the provincial inspection service, said today that all the equipment used by his men was tested by the province and had been found accurate.

Mr P J Gebert, one of the biggest manufacturers of speed testing equipment in South Africa, said today: “There is a lot of speculation going on behind closed doors, but manufacturers have not been called in.”
Work starts at Koeburg

South Africa's first nuclear power plant at Koeburg is going ahead as planned, despite Nigerian political pressure on France to withdraw from the R900-million project.

A spokesman for Escom said today work had already started at the site — the first of several nuclear power plants to be built in South Africa. The output of the first plant will be about 921 Mw.

French atom policy stays — Page 25.
In its “shop early for 1980” policy, Sasol II contracts so far nearly total R600m.

Two major orders valued at around R100m each have gone to Air Liquide for the oxygen plant and to Deutsche Babcock for the steam plant. Linde, with several contracts for gas, hydrogen and ethylene plants also hauls in over R100m.

Managing contractor Fluor has kept a low profile after announcing its consortium contract with Babcock & Wilcox, Dillinger Engineering & Contracting, General Erection and Roberts Construction.

But Fluor has spent R12m with Honeywell Automation in the US to process control equipment (using TCD 2000 control computers) for the new Sasol, and that’s equivalent in value to the current total annual SA market for instrumentation.

Other Sasol shopping includes around R40m with SA firms for houses, flats, streets and services for Secunda. Among the successful, Pretoria Earthworks, LTA, Schachat Cullum, Stocks & Stocks, Bester Homes, Gough Cooper and Basil Reid.

Bosjespruit, the new Sasol mine, has also had some R45m earmarked for its development. Winning companies include Hunslett Taylor, Shaft Sinkers, E L Bate-man and Siemens.
Petrol puts off PM's meeting

PRETORIA. — A political meeting which the Prime Minister, Mr Vorster, was to have addressed in Groblersdal next week has been cancelled because of petrol restrictions and the ban on outdoor gatherings, a spokesman for the National Party said yesterday.

The meeting of supporters from at least seven northern Transvaal constituencies, was to have been held at an open-air venue on November 13.

Mr Jack Steyl, secretary of the National Party in Transvaal, told Sapa that the petrol restrictions were the principal reason for cancelling Mr. Vorster's last planned meeting in the province this year.

"We were expecting 5,000 to 7,000 people, some from as far away as Soweto and Nelspruit. They would not have been able to get there and home on a Saturday with the petrol restrictions."

A second reason for the cancellation was the ban on outdoor gatherings, under the Riotous Assemblies Act, which has been extended to December 31, he said. — Sapa
Express Reporter

WEEKEND traffic on some Transvaal roads has been more than halved since the new petrol restrictions were introduced — and country holiday resorts are complaining that they have entered a "lean" period.

But the little mountain kingdom of Swaziland is booming, thanks to a boost in weekend tourism following the country's decision to make petrol available to homeward-bound motorists on Sundays.

Transvaal weekend traffic is down 40 per cent, said the Chief Provincial Traffic Officer, Mr G. W. van der Veen, yesterday. Hotels in the northern and eastern Transvaal report a big drop in bookings but areas nearer Johannesburg expect to gain from the restrictions.

Swazis cash in on fuel cuts
Oil rumour: Soekor & Govt are silent

Industrial Reporter

The state-backed oil exploration group, Soekor, and the Government yesterday refused to confirm or deny rumours that the giant American offshore oil rig, Soekor K, had struck oil off Mossel Bay.

Responding to Cape Times queries on the possible strike, a Soekor spokesman yesterday said the rig had not yet "carried out any tests". Asked if they had encountered an oil "show" he said Soekor could not commit itself.

"That's all I can say. It would be up to the Minister of Mines (Mr S.P. Botha) to make any announcement."

The Minister was also unwilling to say whether oil had been found.

Sources in the oil industry yesterday told the Cape Times that tests would normally be necessary only to determine the extent of the strike. An oil "show" should be a matter of record.

A scheduled visit by a party of journalists to the rig earlier this month was cancelled with the explanation that the Minister of Mines had other commitments.
South Africa's petrol restrictions have dealt a further blow to Rhodesia's tourist trade, already hard hit by the troubled security situation.

South African motorists, particularly in family groups, have always been regarded as the "bread and butter" of the Rhodesian tourist trade.

UNFORTUNATE

"The petrol restrictions have hit us badly," says Mr Eric Crabbe, senior marketing officer of the Rhodesian National Tourist Board.

"Previously if somebody had, say, a week off, he had in fact nine days, counting the weekends, to travel. Now he only has four and a half days in which to travel."

"I do not want to sound as though I am complaining. Obviously the South African Government has to act as it sees fit. But for us it is an unfortunate fact of life."

SURPRISED

In an attempt to lure back its bread and butter trade, the Rhodesian Tourist Board has mounted a "meet-the-people" campaign in South Africa.

"Two teams of young women have been operating information stalls in shopping malls throughout the Reef and Pretoria for the last month."

"We have been very pleasantly surprised at the interest we have aroused," says Mr Crabbe.

Many of the questions from the public have been concerned with the safety aspect, he says.

SAFETY

"I would have no qualms about recommending to my best friend that he take a motoring tour of Rhodesia. We cannot guarantee his safety, but then what country does?"

Mr Crabbe said it was too early to say whether the Victoria Falls tourist trade had slumped because of the recent terrorist attack there. All hotels at the Falls had been full last week because of the golf classic.

One of the girls manning the stalls, Miss Margot Ackhurst of Salisbury, said a majority of the people who came up to her were interested in the political situation in Rhodesia.

Such queries were normally sidestepped, Miss Ackhurst said, as her job was tourism, not politics.
Jeppe man found guilty of contravening the new petrol regulations two days after they were introduced. The magistrate he poured 10 litres of petrol into his car because he did not want to waste it.

Alfredo Ferreira (38), of Hans Street, pleaded guilty yesterday to transferring petrol from a container to the tank of his motor car on October 24 without the necessary permit.

He told the magistrate, Mr N V P Andrews: "I had the petrol before the new law was passed. I put it in my car because I didn't want to throw it away."

He also said that because he spoke Portuguese he found out about the new law "much later."

Mr Andrews warned Ferreira not to commit the offence again and discharged him.
THE major industrial nations — the U.S., Britain, West Germany, Japan, France and Italy — are competing fiercely to pick up lucrative contracts from oil-rich Saudi Arabia and Iran. Both countries are spending thousands of millions of dollars on mammoth development plans. GUY ARNOLD reports on these growth markets.

West fights for Saudi Arabia oil orders

SAUDI ARABIA and Iran both offer the same kind of growth market for Western business to develop so competition is fierce among the major industrial States.

Both countries have vast revenues from oil (virtually their only exploitable resource); both are in the middle of mammoth development plans and are attempting to modernise virtually every facet of their economies; both have recently taken over control of their oil industries; and both are spending vast sums on their defence forces.

When either country goes on an international shopping spree it is prepared to spend thousands of millions of dollars, not surprisingly, therefore, the major industrialised countries such as the U.S., Britain, France, West Germany, Italy and Japan have been competing to win contracts.

A typical example of recent developments in Saudi Arabia was the appointment earlier this year of the British firm Halveroe and Partners as consulting engineers for the expansion of the Red Sea port of Yanbu.

One of the biggest bottlenecks to Saudi development is the inability of its existing infrastructure to handle the huge volume of imports to Yanbu, which at present can only receive small vessels, is to have seven deepwater berths.

The target of Saudi Arabia’s huge current plans is to achieve a growth rate of 10 per cent while the aim is that the non-oil sector — crucial to long term diversification plans — should grow at 15 per cent.

The plan expects to invest 14,000 million dollars in new hydrocarbons-based industries over the next five years; it also envisages that between 200 and 250 small and medium non-oil manufacturing units will be established in the private sector at the same time.

Recently, however, there have been disturbing reports that Western companies are not simply cashing in on this huge development market but that in some cases they are deliberately going slow or in other ways evading their commitments in the hope of securing a longer life for their activity in the country.

Iran’s oil reserves are far smaller than those of Saudi Arabia and will run out sooner.

Hawk

Her population is at least three times as large and so, in terms of her own development aims, she has become a “hawk” in the councils of OPEC. Its strategy is to obtain the highest price it can for its oil and to use the money to industrialise in every conceivable way.

The Shah has often talked of his industrial-commercial aims. In the current budget 7¾ per cent of revenue comes from oil and gas and this is likely to be the pattern for years to come.

As with Saudi Arabia, Iran is offering huge development contracts and has tended to specialise in giant long-term oil-refining/technology deals. The most spectacular of these was that concluded in 1974 with the West German firm Krupp when Iran purchased a 23 per cent interest in its iron and steelworks division.

Part of the deal covered the training in West Germany of 2,000 Iranians.

There are huge plans to extend the country’s steel industry from the present production figure to one-of 5 to 7 million tons in about seven years. The Shah has said: “In about 15 years we will have about 25 million tons of steel.” But at present draw-backs include both lagging oil revenues and manpower shortages.

Early this year a number of top Western bankers, including 60 from the U.S., met in Tehran for a conference which looked at ways of making the city an international money market.

Meanwhile, contracts have been awarded to Snanprogett of Italy and Sofregas of France for engineering studies of the giant pipeline that will eventually carry Iranian gas across the country and then through the Soviet Union to West Germany, France and Austria.

Marconi

Recently Saudi Arabia awarded contracts worth 500 million dollars to three companies to modernise its air traffic control system: the companies concerned are Marconi Radar Systems of U.K., Lockheed Aircraft International and Federal Electric Company YTP of the U.S.

At the same time the British consulting engineers, Sir M. McDonald and partners, took on the job of supplying an additional 200,000 cubic metres of water a day to the city of Riyadh from a source 100 kilometres from the city (they had already designed a scheme to supply 300,000 cubic metres of water a day). The new project will take more than three years to complete and will cost £250 million.

These are just a few of the contracts awarded under Saudi Arabia’s 140,000 million dollar development plan.
Shortage of coal

93. Mr. G. H. WADDELL asked the Minister of Economic Affairs:

Whether shortages of coal occurred in any areas of the Republic during the winter of 1975; if so, (a) in which areas and (b) what were the reasons for the shortages in each case.

The MINISTER OF ECONOMIC AFFAIRS:

During the winter months of 1975 a large number of persons and organiza-

...tions in various parts of the country submitted representations to the Government as well as the coal producers about their alleged inability to obtain adequate supplies of coal.

These representations came mainly from persons and organizations in Port Elizabeth, Bloemfontein, Pretoria, Johannesburg, Queenstown, East London, Hex River, Windhoek, Alexandria, Grahamstown, Port Alfred, Jamestown, Middelburg, Somerset East, Dordrecht, Aliwal North, Middelburg, Graaff-Reinet, Cradock, Lady Grey, Beaufort West, Fransburg, Sutherland, Carnarvon, Williston, Victoria West, Colesberg, Kimberley, Vryburg, Vrededorp, Ficksburg, Bethlehem, Ladybrand, Potchefstroom, Polotsi and Louis Trichardt.

The relevant representations were based on actual shortages of coal supplies experienced by some of these persons and organizations as well as the fears of some other persons and organizations that they might be confronted with actual coal shortages within the foreseeable future.

The problems experienced with the supply of coal during the winter months of 1973 were due to one or more of the following factors:

(i) the marked increase in the domestic demand for coal which resulted from the energy crisis of 1973 and which could not in the short term be met by means of increased production by the mines;

(ii) labour and other problems which hampered the expansion of coal production in the short term; and

(iii) the submission to the South African Railways of record quantities of goods for conveyance by rail as well as derailments, wash-outs, power failures and problems at the mines which resulted in delays in the rail transport of certain goods, including coal.
Coal consumption

223. Mr. T. ARONSON asked the Minister of Economic Affairs:

(a) What was the total domestic consumption of coal in 1975 and (b) what was the consumption by (i) private consumers and (ii) public bodies.

The MINISTER OF ECONOMIC AFFAIRS:

(a) 65,700,000 metric tons.

(b) (i) 10,000,000 metric tons.
(ii) 54,600,000 metric tons.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>1972/73</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
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<tr>
<td>81</td>
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<td>82</td>
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<td>-12.32</td>
</tr>
<tr>
<td>95</td>
<td>-12.87</td>
</tr>
</tbody>
</table>

**Note:** The table shows deviations from the average monthly cash wage for all economic regions as of 2002.
534. Mr. G. H. WADDELL asked the Minister of Economic Affairs:

(1) What was the total domestic consumption of coal in 1975;

(2) how much of this amount was used by (a) private consumers and (b) public bodies;

(3) what amount of the coal consumed by private consumers was used by Whites and non-Whites, respectively.

The MINISTER OF ECONOMIC AFFAIRS:

(1) 65 700 000 metric tons.

(2) (a) 11 100 000 metric tons.

(b) 54 600 000 metric tons,

(3) The information requested by the hon. member is not available.
Electrical power supply

594. Mr. H. E. J. VAN RENSBURG asked the Minister of Economic Affairs:

(1) What percentage of the Republic's electrical power supply is to be imported during the current year?

(2) whether ESCOM has alternative means of generating power to make good any shortfall in expected power from the Caborn Bassa scheme; if so, what means;

(3) whether there was any increase in ESCOM's generating capacity during 1975; if so, what was the percentage increase as compared with 1974.

The MINISTER OF ECONOMIC AFFAIRS:

(1) There is no certainty as to when the Caborn Bassa supply will commence, but in terms of the agreement between South Africa and Portugal ESCOM should receive an initial supply equal to 6% of its own development capacity. Of this supply approximately 9% will be reserved for Mocambique.

(2) Yes, its own reserve capacity.

(3) Yes, according to planning 13%.
For written reply:

ESCOM: Charges for electrical power

333. Mr. G. H. WADDELL asked the Minister of Economic Affairs:

(1) (a) On how many occasions since 1970 has ESCOM increased its charges for electrical power, (b) on what dates and (c) by how much on each occasion;

(2) whether ESCOM is to introduce further increases; if so, (a) when and (b) by what amounts.

The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) Five.

(b) (c) (cent per unit on total sales)

<table>
<thead>
<tr>
<th>Month</th>
<th>(c)</th>
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<tbody>
<tr>
<td>July 1971</td>
<td>0.0227</td>
</tr>
<tr>
<td>July 1972</td>
<td>0.0336</td>
</tr>
<tr>
<td>April 1973</td>
<td>0.0376</td>
</tr>
<tr>
<td>April 1974</td>
<td>0.0338</td>
</tr>
<tr>
<td>April 1975</td>
<td>0.1128</td>
</tr>
</tbody>
</table>

(2) Yes; (a) and (b) increases for 1976 only have been decided upon and are reflected below to show the increase for each of ESCOM's various undertakings:

<table>
<thead>
<tr>
<th>Undertaking</th>
<th>Present Surcharge</th>
<th>1 April 1976 Surcharge</th>
<th>1 Sept 1976 Surcharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertaking</td>
<td>22.5%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Northern Cape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertaking</td>
<td>-7.5%</td>
<td>5%</td>
<td>20%</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertaking</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
</tr>
<tr>
<td>Border Undertaking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30%</td>
<td>50%</td>
<td>70%</td>
</tr>
<tr>
<td>Natal Undertaking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25%</td>
<td>42.5%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Orange River</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undertaking</td>
<td>40%</td>
<td>60%</td>
<td>80%</td>
</tr>
<tr>
<td>Eastern Transvaal Undertaking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-7.5%</td>
<td>5%</td>
<td>20%</td>
</tr>
<tr>
<td>Rand and Orange Free State Undertaking</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) (i) and (ii) On 27 March 1976 the stocks of coal on hand at the three power stations in question were as follows:

- Port Elizabeth: 7,332 metric tons
- Cradock: 536 metric tons
- Graaff-Reinet: 189 metric tons

It is not possible to indicate what stock of coal are normally on hand at each of the three aforementioned power stations at this particular time of the year because, depending on the general coal supply position in the country, the stocks on hand at individual power stations during any particular time of the year could vary appreciably from year to year.

However, on 29 March 1975, the stocks of coal on hand at the three aforementioned power stations were as follows:

- Port Elizabeth: 14,461 metric tons
- Cradock: 1,706 metric tons
- Graaff-Reinet: 423 metric tons

(2) The coal producers accord the highest degree of priority to the supply of coal to undertakings such as power stations, hospitals, the South African Railways, etc. and a daily record is being kept of the quantity of coal in stock at each power station, the daily coal burning rate of each power station, the quantities of coal which have already been railed to each power station and which are, therefore, in transit to it, as well as the quantities of coal which still have to be railed so as to ensure that each power station will daily have adequate quantities of coal at its disposal. However, no undertaking can be given that sufficient quantities of coal will be supplied during the forthcoming winter months to certain power stations or to all the power stations in the country since the supply of coal to power stations cannot be treated in isolation of the essential coal requirements of other priority users. The abovementioned applies equally to the power stations at Port Elizabeth, Cradock and Graaff-Reinet.
Nuclear power station at Duynefontein

*4. Senator L. E. D. WINCHESTER asked the Minister of Economic Affairs:

Whether it is anticipated that the nuclear power station at Duynefontein will have any environmental effects; if so, what effects will it have on (a) the Cape coast and (b) sea temperature.

The MINISTER OF ECONOMIC AFFAIRS:

Only a slight effect:

(a) none; and

(b) an increase in the immediate vicinity of the power station which according to studies will create a marine life pattern similar to that of False Bay.
Audio/visuals

Is it essential to show any equipment such as a videotape?

Mr. W. T. WEBBER asked the Minister of Economic Affairs:

(a) From which countries is ISCOR importing coking coal, (b) at what average price f.o.b. South African ports is it imported and (c) what is the average price of locally produced coking coal.

The MINISTER OF ECONOMIC AFFAIRS:

(a) Tenders for the supply of straight coking coal from abroad are presently being awaited by ISCOR.

(b) Falls away.

(c) Between R12.60 and R19.35 per ton f.o.b. for straight coking coal.

(d) Will everyone be able to see? Is there a dais or platform? Is there enough room for the proper positioning of one or more projection screens?

(e) Will everyone be able to hear? Will you need to use a microphone? Is there a public address system already installed? Will there be any distracting noises and can these be silenced during your presentation?

(f) Can the room be darkened easily? Are there sufficient power supplies for any projected visuals or recorded sound?

Visuals

(a) What equipment will you have at your disposal? Will there be an experienced projectionist available?

(b) Are there any suitable visuals or other aids (e.g. films, videotapes, sound tapes; slides, etc.) already available?

(c) What facilities are there for obtaining or making others you may need?

Budget

Has a budget already been prepared? If so, how much money has been allowed for:
Price rises on Monday

4 cent petrol jolt

No benefit

The restructured petrol price will be made up by the new crude oil increase, the higher profit margin of filling stations and the reimbursement of all companies for the 0.4c a litre they absorbed when oil-producing countries increased the price of crude in 1976.

Although it has been reported that Saudi Arabia and the United Arab Emirates — the Opec members who decided to hold down the crude price increase to five percent — plan to step up their production by 40 percent to meet world demand, South Africa will not benefit from the lower price.

Our fuel is sourced mainly from Iran, one of the leading proponents of a higher increase at the recent Opec meetings.

Likely cost

Iran is said to be losing $62 million a day because of its decision to opt for the higher 10 percent hike.

South Africa's fuel bill increased almost sixfold, from R19 million in 1972 to R1 015 million in 1975, Mr. Heunis said in October.

"This year petrol is likely to cost South Africa R1 200 million."

Mr. Heunis added that the amount spent on the importation of petroleum products was one of the major contributory factors in the increase of the total balance of payments deficit.

A Railways spokesman said any increase in the price of petrol would not put any more money in SAR coffers.

"This has nothing to do with us," he said. "Pipeline charges were increased by 10.7 percent on September 1 last year, and at the moment no further increase is proposed."

Harvey Thomas, Motoring Editor

The price of petrol on the Rand will go up by an expected 4c a litre on Monday. The increase will be announced by the Minister of Economic Affairs, Mr. Heunis, today.

The new price of premium petrol will probably be 28.1c a litre or R1.38 a gallon. It is the biggest single hike since the fuel crisis and follows the decision by most oil-exporting countries to raise the price of crude oil by 10 percent.

The new price is expected to contain an added profit for the petrol retailers who, until now, have been working on a 4.8 percent mark-up on gross.

Dealers are expected to get an additional 0.6c a litre in terms of a negotiated formula that will guarantee their mark-up.

The retailers' higher profit margin follows years of...
Hard-pressed South African motorists who cut their petrol intake by 22 percent last November are helping to foot the bill for Sasol II to make South Africa less dependent on foreign oil imports.

This was the opinion last night of leaders of commerce and industry, economists and the Automobile Association after a 4c a litre petrol increase announced by the Minister of Economic Affairs Mr Houmis.

It is the biggest single increase in the fuel price since the worldwide oil crisis after the Yom Kippur War and is certain to set off a series of commodity increases, resulting in a further rise in the cost of living.

"A further increase in South Africa's petrol price is the inevitable but regrettable result of our dependence on foreign petroleum supplies," said Mr J P Cronje, president of the Federated Chamber of Industries.

LESSEN

"Half of the increase will be used to lessen this dependence and make an investment in the future by strategic stockpiling, by accelerating the search for oil, and by stepping up production of motor spirits from the country's abundant coal resources.

"Of the remaining two cents, one third (or 0,63c per litre) would be given as an increase in the profit margins of petrol retailers. The remaining 1,31c would go to the oil industry and would help compensate for increased freight charges and the recent OPEC price rise."

REGRETTED

A spokesman for the Automobile Association said that the association regretted the Government's imposition of a fuel tax to help finance Sasol II.

LOGICAL

The chairman of the motorcycle section of the Motor Industries Federation, Mr Tom Borril, says the logical "cheaper transport" is the motorcycle.

He said the change would save a motorist at least R140 a year.

DEPRESSED

Meanwhile, the president of Assocomin, Mr S O Goodwin, and the president of the Federated Chamber of Industries, Mr J P Cronje, are worried about the impact the petrol rise will have on an already-depressed motor industry.

Mr Cronje said motor vehicle sales would drop further.

Rondalite says petrol prices have risen by nearly one-third during the past year and by 137 percent in the past four years.

UNLIKELY

Dr Lawrence McCrystal, chairman of the Anti-inflation Action Committee, says the leap in petrol price is unlikely to boost inflation drastically.

Because of the shortage of money and the recession, the petrol increase would largely be absorbed as most people would be forced to buy less petrol.

"Incomes are not keeping pace with inflation so people will just have to travel less. But if we put wages up we will just be back on the inflation merry-go-round."

VERY HARD

Mr J J Verheem, director of the South African Consumers Council, agreed with Dr McCrystal that the price rise might mean only a one percent increase in the consumer price index.

"But I think it is still very hard on the consumer and the fact that filling stations got a rise is less acceptable to me."
Rises softer for public transport

Own Correspondent
PORT ELIZABETH. — The price of diesel oil for public transport will rise 1.3c a litre compared with the 4c petrol price rise in operation from this week.

Diesel oil used for private purposes would go up 3.3c a litre, a spokesman for the Ministry of Economic Affairs, Mr Chris Heunis, said yesterday.

The price rise for paraffin would be 1.3c a litre. This would apply also to liquid petroleum gas and white spirits used for private purposes.

For lubricating oil the price rise would be 1.7c a litre, which probably would mean an increase to motorists of 1c a 500ml can and 9c a five-litre container, Mr Alan Bergman, chairman of the South African Motor Traders Association, said yesterday.

He said filling stations would be able to apply the new price when formally advised by the Motor Industries Federation and when old stocks had been sold.

Prices of other petroleum products would rise, Mr Be De Beer, deputy price controller said yesterday, writes a Rand Daily Mail reporter.

The increases are: Motor oil, 1.7c per litre, the higher price accounting for increased packing costs; furnace oil, 1.3c per litre, white spirits, 1.3c per litre and aviation fuel, 3.3c per litre with 1.3c to go to the oil companies and 2c on excise duty.

Paraffin is not subject to the 2c excise duty and will rise by 1.3c per litre.

Liquid petroleum gas bought in bulk will go up 3.4c per litre with 1.3c to go to the oil companies and 2.1c per litre for excise duty.

Liquid petroleum packed in cylinders will rise by 6c per kg with 3.7c per kg for excise duty and 2.3c per kg to the oil companies.
Petrol profit defended

An oil company spokesman has come out in defence of the "huge killing" some garage owners are said to be making by selling old petrol stocks at the increased price.

This was a "little windfall" for garages which had kept going at a meagre five percent markup or less for a long time and made little difference to them, said Mr S-J Steyn, general manager of Trek.

Mr Steyn estimated that South Africa's 4 700 garages would make no more than R400 extra on average in this way.

He admitted that oil companies could also make "a little extra" on their old stocks, but said this did not apply to the two cents of the four-cent increase per litre which went towards Sasol 2. This two cent tax was payable at the point of sale to the filling stations, he explained.

**WINDFALL**

The oil companies' windfall had to be seen in the light of the 0.4c a litre cost increase which oil companies had absorbed since October 1975. Their profit margin had remained unchanged on the sum fixed in 1960, Mr Steyn said.

One garage owner said the profit of R2 729 he would make through selling his stock of 65 000 litres at 4 cents extra was only a fraction of the amount he had lost over the last four years.

"Wage increases, petrol price rises, lower profits"
Is it essential to show any audio/visuals, such as a film or a videotape?

Boost solar power—plea

A call for the development of solar power to replace South Africa's dependence on fossil fuels was made at the agricultural scientific congress by a top Government engineer.

Mr. T. J. Bruwer, director of agricultural engineering in the Department of Agricultural Technical Services, said if the people of today's world were to be fed adequately, there appeared to be no alternative to the extensive use of machinery using fossil fuels.

But this would deplete available energy resources that some alternative sources had to be explored and exploited before that time.

Nuclear energy was too costly and hazardous - so solar power was probably the only practical and permanent way of meeting the world's food demands.

The abundance of solar energy was such that a small area of the Kalahari, measuring 50 km by 50 km, could meet all of South Africa's energy needs even if its energy conversion rate was only 10 percent.

Yet despite this abundance, South Africa was spending only R150,000 a year on solar energy research and application.

A solar-powered South Africa should be the nation's goal, Mr. Bruwer said, and he asked how long it could continue to do almost nothing to counteract the "abundance of ignorance" on the subject.

Visuals

(a) What equipment will you have at your disposal? Will there be an experienced projectionist available?

(b) Are there any suitable visuals or other aids (e.g. films, videotapes, sound tapes, slides, etc.) already available?

(c) What facilities are there for obtaining or making others you may need?

Budget

Has a budget already been prepared? If so, how much money has been allowed for:
The Government should consider easing weekend petrol sale restrictions if the new fuel prices caused a drop in consumption, a motoring expert said today.

Mr J van Huysteen, director of the Motor Industries Federation, was commenting on a call by the Automobile Association for a review of the weekend fuel curbs.

Mr van Huysteen said although it was too early to establish the trend, the higher price of fuel and the general economic squeeze might themselves result in a reduction in consumption.

In that case the federation would call on the Government to review the restrictions.

The Automobile Association said in a statement the need for motorists to fill up before weekends had aggravated traffic congestion and caused a wastage of fuel.

A Botswana Government official has said the 4c a litre petrol price increase may force prices to rise to the equivalent of between 29c and 31c a litre in his country.
Iraq seeks oil slump talks

KUWAIT—Iraq has asked Kuwait to call an 'emergency meeting' of the Organisation of Petroleum Exporting countries (Opec) to discuss the slumping demand for high-priced Opec oil.

Iraq reportedly wants a new Opec meeting because of the oil cartel's split over prices, which has forced higher-priced Opec members like Iraq and Kuwait to suddenly cut production. Venezuela also has called for a special price meeting following Saudi Arabia's decision to increase its production of cheaper oil by 40 per cent in 1977, to undersell the others. —UPL
Petrol profits inquiry

JOHANNESBURG — South African consumer watchdogs have demanded public inquiries into petrol company profits and overheads.

The president of the Housewives' League and Mr. Eugene Roelofse, consumer ombudsman for the South African Council of Churches, made the call in response to reports that the balance sheets of major petrol companies in South Africa had not been examined by the Price Controller for two years. During that time the price of petrol has jumped from 16.5c a litre to 27c.

Mr. Roelofse said there should be a public inquiry into the overheads of petrol companies which are used to justify high price increase demands.

"I do not believe that companies are doing their bit to cut costs by rationalising distribution, advertising and competition — all of which the consumer pays for.

"With such a strategic commodity as petrol which the public has to buy at a price set by the Government, it should be public knowledge how overheads are calculated and thus where their justification for price increases come from.

"Petrol companies are the most vocal when it comes to chiseling out relatively unimportant information to the public but become as blustering, quiet and shuttered as a dominatrix at her first ball when it comes to giving out information which is critical to the consumer's pocket," DDC.
Gold rise will not offset jump in oil cost—Heunis

RUSTENBURG — South Africa would be foolish to think that the price of gold could be used to compensate for the continuous rises in the prices of oil and other imported goods, the Minister of Economic Affairs, Mr Chris Heunis, said today.

"The developments in our balance of payments after the sharp decline in the gold price during 1975 have already given us a taste of the type of problems we will encounter continually if we do not succeed in lowering the relative level of our fuel consumption permanently," he said.

Although it was too early to judge the effects of the recent intensification of fuel saving measures on consumption, he was confident that the necessary adjustments in fuel consumption could be effected if everybody cooperated.

"If everybody in South Africa acted responsibly in this connection we would not only be making an essential contribution to easing our balance of payments problems, but it will also enable us in the long term to finance out of our own resources a higher growth rate than that of which we are capable at present."

The recent and the expected further increases in the oil price were not the only reasons for South Africa's increasing reliance on imported goods and foreign capital. It was but one of the reasons for a trend about which he had previously expressed concern, namely, the tendency in the economy to make production processes increasingly capital intensive.

Less employment opportunities were being created for every rand invested in production capacity, and this posed the real danger that a high level of unemployment could become a structural problem in the economy.

"This matter therefore requires our urgent attention and I intend ordering an investigation into the causes as well as the possible steps to handle it effectively," he said. — Sipa.
186. Mr. G. H. WADDELL asked the Minister of Economic Affairs:

(1) (a) On how many occasions since 30 June 1975 has Escom increased its charges for electric power, (b) on what date and (c) by how much on each occasion;

(2) whether Escom is to introduce further increases; if so, (a) when and (b) by what amount.

The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) Three,

(b) and (c).

1 April 1976—15 per cent,
1 September 1976—13 per cent,
1 January 1977—23 per cent;

(2) (a) and (b) the dates and magnitude of further increases will depend on future cost increases and ESCOM'S ability to borrow money for its capital requirements for further development.
rt. 12 - INSTALLATION RETURNS.

Immediately after the installation of Principals, the First Principal of each Chapter within the Province shall cause to be transmitted to the Provincial Grand Scribe E a return, in duplicate, of the Principals and Past Principals of the Chapter, and of all members of the Chapter who claim to be entitled to rank and vote in the Provincial Grand Chapter, specifying in the case of joining Past First Principals, the name and number of the Chapter, and the year in which such Companions respectively have served their said office.

No Companion shall be entitled to attend as a member of Provincial Grand Chapter unless his name shall appear in such return.

The return shall be signed by the First Principal and Scribe E and to such signatures shall be added the full postal address of the signatories.

H. W. col 17 28/1/77

Art. 13 -

In case of complaints or appeals against the Grand Scribe E to the Provincial Grand Chapter, the Grand Scribe E shall be required to transmit to the Provincial Grand Chapter the following information:

- The total domestic consumption of coal in the Republic in 1976, including both the amount used and the amount remaining.
- A breakdown of this consumption by the following categories:
  - (a) 68 900 000 metric tons,
  - (b) 12 300 000 metric tons,
  - (c) 50 600 000 metric tons.

Such complaints or appeals shall be considered by the Provincial Grand Chapter.

Art. 14 - PROVINCIAL GRAND JANITOR.

The Provincial Grand Janitor, or Companion acting as such, shall at every meeting of Provincial Grand Chapter, see that every Companion attending is properly clothed and that no unqualified person is admitted.

Art. 15 - ALTERATION OF BYE-LAWS.

No addition or alteration, repeal or abrogation of these bye-laws shall be permitted unless on the motion duly made and seconded in Provincial Grand Chapter, notice of such motion having first been sent in writing to the Provincial Grand Scribe E, and passed by a two-thirds majority of those present and qualified to vote at that Convocation.

Any amendment comes into force immediately after having been approved by Supreme Committee.
PETROL IS TAKING South Africa for a ride and the marketing system should be drastically changed, says Mr. Eugene Roelofse, consumer ombudsman for the Council of Churches.

In an interview he called for:

- No more petrol brand names and service station emblazoned with oil company colours. "Service stations must sell petrol, period. There's no need for all those names and special colours."
- A Government investigation of petrols and additives to examine differences, if any, between products.
- An investigation into the advantages of additives in terms of consumption, performance, decreased engine wear and so on.
- Oil companies to pool their resources to avoid unnecessary delivery costs, especially to farmers in the country areas.
- The whole fuel marketing set-up to be the subject of an inclusive Government investigation.
- No more petrol advertising. "We are all being urged to use an little fuel as possible, severe restrictions have been imposed, and then one gets those huge expensive ads trying to get us to do just the opposite."

Mr. Roelofse said proper price control principles were not being applied to the oil companies.

"It is quite evident that oil companies could absorb certain cost increases by a more rational marketing system."

"And they should be forced to do this by the Price Controller before price increases are allowed, because increases are only supposed to be approved to enable a firm to recover unavoidable increases in its costs — and then only if the financial records clearly show the firm cannot absorb part or all the cost increases itself by means of savings in other directions."

He said the price of petrol had risen from 15,1 cents a litre in 1974 to 27,6 cents a litre now — a jump of 82,9 percent.

"In the foreseeable future, we are not going to return to a situation of plentiful and relatively inexpensive petrol."

"We are dealing with a product of vital strategic importance. There is no room for wasteful private competition. It is an emergency commodity."

"Yet I have worked out conservatively that oil companies spend a minimum R$37,000 a year just on entertainment allowances."

"This type of expense is legitimate to the free enterprise system if it wins the friendship of people, and possibly their influence, to enable the marketing system to go well."

"But I don't believe it is relevant to the marketing of petrol. If it is, I challenge the oil companies to tell us exactly who they are entertaining to the tune of R$11,000 a month."

"Whose influence or friendship are they buying? And then are they paying out a minimum R$37,000 a year on membership of golf clubs. Should they be able to use this sort of expense to justify price increases?"
Cabora Bassa scheme

[1] Mr. H. H. SCHWARZ asked the Minister of Economic Affairs:

(1) Whether the Cabora Bassa scheme is in full operation; if not, when is it expected to be in full operation;

(2) Whether the Republic is at present getting power from the scheme; if so, what amount.

†The MINISTER OF ECONOMIC AFFAIRS:

(1) No; it is expected to be in operation during the first half of 1977;

(2) Yes; only interrupted test transmissions totalling 1 239 million kilowatt hours until December 1976.
PETROL DICTATORSHIP
How the oil companies are holding the Government over a barrel

By Finance Editor CHRISTOPHER MORRIS

Oil companies operating in South Africa have beenadditional pressure onto the Government, and can dictate the terms and prices at which their products are sold in this country, a spokesman for the South African Motor Traders Association said this week.

And, he said, the oil companies agree among themselves on the price of petrol.

"The Government can only plead that this is not too harsh," said the spokesman.

"The oil industry in this country is controlled by the giant international companies, if the Government tries to dictate what they should charge, it would be the easiest thing for them to stop supplies.

"Petrol for this reason is not price-controlled by the Government: the Government is merely trying to control the price of petrol, because if it tries to control the price, the companies can simply put them aside and not make the price increase too harshly.

"You will find that the profits earned by local companies are negligible - profits absorbed by the parent company and there is little we can do about it.

"Our country is very vulnerable to boycotts - and if the Government should get on its high horse on the question of the petrol price, the companies would just stop supplying.

"The reaction from consumer bodies was that the stranglehold of the S.A. Council of Churches and consumer experts, said this week that there were several countries in Africa and in the Caribbean, i.e. William van Rooyen, chairman of the S.A. Council of Churches and consumer experts, said this week that there were several countries in Africa and in the Caribbean, i.e.

"The big five companies operating in South Africa - the five of the seven sisters as they have been called - work very much in conjunction, he said, and closely with the Government.

"The spokesman for the price controller said he knew there was an agreement between companies called the "agreement policy"

"We are dealing with a profitable commodity - not with a protected commodity," he said.

"The first companies were operating in South Africa - the five of the seven sisters as they have been called - work very much in conjunction, he said, and closely with the Government.

"The spokesman for the price controller said he knew there was an agreement between companies called the "agreement policy".

"Interestingly, the Board of Trade completed a report in June 1979, recommending that oil companies should not be exempt from the general prohibition of resale price maintenance.

"An application for petrol to be excluded from RPM was lodged by the Motor Industries Federation. The Federation argued it would be in the interest of suppliers, retailers and the consumer if petrol was excluded.

"The Board rejected the Federation's arguments saying the applicants had failed to justify the continued existence of the practice. The recommendations were not implemented.

"This week, John Stimson, British Petroleum, who is one of the companies who are considering setting up additional refineries, said the price of petrol is controlled by the Government of South Africa. The price is controlled by the Government of South Africa.

"I understand that about 50% of the country's petrol is owned by the oil companies which lease the sites, buildings and equipment, however, expected to fork out an additional $500 million for acquiring the site. The price of petrol should find its own level, but the price of crude oil is controlled politically at source, and handled by major international organizations, who can make book adjustments from one country to another because of the strategic value of petrol and the massive effect on the economy, the cost to the consumer should be regulated by Government from point of loading onwards.

"The market in South Africa, according to a recent report by a local company, is in the 200,000,000 marks of the petroleum cake. In second place is a French company, the Societe Anonyme des Petroles, with 10.3% of the local market. The latest figures show a slight increase for Shell (about 8%) followed by CAO (15%), Total (12.5%), Sasol (7%), BP (4.9%) and Snell (2.5%).

"The latest four cents are increased, claim consumer bodies, will take another 10% of the steadily spiraling cost of living.

"They feel the oil companies could have absorbed at least some of the increases declared by their foreign parent.

"While 70% of the four cents are increased, has been shifted off by the Government for mainly strategic purposes, a healthy 1.31 cents a litre goes to the oil companies, which are claimed about discussing either their profits or their market share."

"The extension of the curb on service-station building has been warmly welcomed by the South African Motor Traders Association and the Motor Traders Association.

"The five-year rationalisation agreement made by the oil companies and the Government, was due to expire in December this year, but still existed until December 1989.

"Says Janne van Hyuystem, director of MIF: "The intensified fuel restriction measures have made this plan even more important.

"It's my personal opinion that even more restriction could have been done, but I would think that a year to 18 months before the end of the period, a review is likely to be made.

"In Durban, Jessey Collins, the SAMTA executive chairman, said: "We strongly advocate the policy, particularly when we have had the hard experience of the operation of the plan, and as one of the signatories to the plan, I feel we would be able to call for a review when we want."

"The Government is unlikely to be able to do much with the companies. Their massive investments in the country give them an exceptionally strong lobby when it comes to deciding oil matters.

""However," says Van Hyuystem, "we have not been an increased throughput in existing stations during the operation of the plan, and as one of the signatories to the plan, I feel we would be able to call for a review when we want.""
Koeberg nuclear power station

306. Mr. H. F. J. VAN RENSBURG asked the Minister of Economic Affairs:

(1) What is the estimated total cost of the Koeberg nuclear power station;

(2) (a) how many years will it take to complete its construction, (b) what is the estimated expenditure on this project in each of these years and (c) what is the estimated power-generating capacity of the station;

(3) whether it is expected that the price of power from this station will be lower than that from conventional sources;

(4) (a) from what sources is the capital being obtained to finance the project and (b) what amount is being obtained from each source in each year.

The MINISTER OF ECONOMIC AFFAIRS:

(1) R970 million as estimated on 31 December 1976 excluding escalation;

(2) (a) eight;

(b) according to the basic contract—

R 62 million during 1976
R 86 million during 1977
R151 million during 1978
R212 million during 1979
R201 million during 1980
R130 million during 1981
R 78 million during 1982
R 50 million during 1983

(c) 1 844 MW(e);

(3) extensive studies have indicated that towards the early eighties the station could in relation to coal fired power stations be operated economically;

(4) (a) 85 per cent of the repatriable financing costs, including cost escalation, are being supplied by a consortium of French banks while the balance will be obtained by ESCOM from its Internal Capital Development Fund and by way of local and foreign loans; and

(b) at this stage full particulars cannot be furnished, but the R86 million required for 1977 have already been obtained from foreign sources.
Afras block move for
Oil embargo on SA

The story, according to sources, is that the move was taken in response to the "oil embargo" on South Africa. The headline reads "Afras block move for oil embargo on SA."
A litre jump is predicted

Fuel rise expected

Harvey Thomas, Motor Editor

The petrol price is expected to jump by two cents a litre on April 1. Informed motor industry sources said today the increase would result from higher rail tariffs and a further increase in indirect taxation in the main Budget.

Tomorrow the Minister of Transport, Mr Muller, presents his Railway budget in Parliament and it is expected that he will announce tariff increases of between 10 and 20 percent.

This will increase the price of petrol on the Rand by between three-tenths-of-a-cent and half-a-cent a litre.

When Senator Hortwood presents the main Budget on March 30 he is likely to announce another tax increase on petrol which will boost the price by 10 cents a litre.

Sales tax

With these anticipated increases and the new 25 percent increase in sales tax announced yesterday, the motor industry — the largest secondary industry in the country — is facing what could be a battle for survival by certain companies.

Executives today predicted that the initial effect of the higher sales tax would be a new car spending spree for four to six weeks while buyers snapped up vehicles at the old prices.

This would artificially boost March sales figures while cutting into the April, May and June volumes.

When current stocks were exhausted and when the anticipated higher fuel price took effect the industry could expect a serious slump with most companies reverting to the shorter working week.

Retrenchment

"We can also expect widespread retrenchment, especially in the various assembly plants," a spokesman said.

The problem has been compounded because nearly all motor companies are operating in the red and have announced further price increases due this year. These vary from 10 percent to 15 percent.

Taken in conjunction with the higher sales tax this will mean that a R5 000 car on January 1 will probably cost close to R6 000 by December 31.

© "Rises "Forerunner of tough budget" — Page 10.
© "Higher tax will depress economy" — Page 17.
Petrol price is to go up again

Pretoria—Another increase in the petrol price is virtually certain from the beginning of April.

Speculation on the new increase has been rife for the past few weeks, and motor industry sources claim it could be at least two cents a litre.

Reasons for the speculation are:

The Minister of Transport, Mr. Louwrens Muller, in his Budget today will announce higher rail and pipeline tariffs.

And, that the Minister of Finance, Senator Horwood, may raise the excise duty on petrol in the main Budget.

Depending on how heavily the Minister of Finance decides to load motorists with a higher excise duty, the increase could be in excess of two cents a litre.
Petrol tax may rise

By GERALD REILLY

A BIGGER excise duty on petrol may be one of the key fund-raising devices in the 1977-78 Budget, which will be presented on March 30.

This would mean increased pressure on most prices.

Motor industry executives say that the Minister of Finance, Senator Horwood, needs to squeeze all sources of revenue harder to meet the Government’s spending programme, particularly the expected steep increase in the defence bill.

They say that when he is faced with the alternative of raising income tax, he will choose to increase revenue by a bigger excise duty. A higher petrol price will also have the spin-off advantage of discouraging travelling.

Excise duty is nearly 6c a litre now.

It is believed there is no likelihood of another levy on fuel to help finance Sasol II.

From the present petrol price through the Strategic Oil Fund, Sasol gets 4c a litre as a contribution to the funds needed for the R2 000-million plant.

This amounts to between R250-million and R300-million a year.

Eventually, according to authorities, the fund could provide about half the total cost of the project.
3 years to light up Soweto?

By The Star's Insight Team

The whole of Soweto will have electricity in three years if the Government agrees to guarantee bank loans to finance the project. An announcement of the Government decision could be made on Thursday.

Yesterday The Star's Insight Team established that a feasibility study, so detailed, as to be almost a plan of operation, has already been prepared and that large civil engineering and electrical companies are ready to start work as soon as the Government gives the go-ahead.

This point has been reached after seven months of work and negotiation that brought together officials from the Department of Housing Administration and Development, the West Rand Bantu Affairs Administration Board, four banks and three large industrial corporations.

RETICULATING

Their job was to find a way of reticulating electrical power to Soweto without straining Government financial resources in a recessionary period.

The feasibility study, prepared by Roberts Construction and Siemens (Pty) Ltd with cooperation from the Anglo-American Corporation envisages the electrification of the whole of Soweto in three years.

It makes provision for installing electricity in all houses that do not have it at present, updating the low-voltage systems installed in some houses and providing reticulation for all new houses.

The cost is estimated at approximately R11 million which will be financed initially by loans from Barclays National Bank, Volkskas, Nedbank and The Standard Bank of South Africa.

See "Government must approve money to light up Soweto." — Page 21.
Sasol II

458. Mr. T. ARONSON asked the Minister of Economic Affairs:

(1) When is Sasol II expected to be completed;

(2) whether the estimated total cost of the project includes the cost of establishing townships and of housing; if not, what is the estimated amount in respect of these items;

(3) what is the estimated saving in net outlay of foreign exchange for each of the 10 years after completion of Sasol II.

The MINISTER OF ECONOMIC AFFAIRS:

(1) Towards 1980-81;

(2) no; approximately R75 million based on 1977 price levels;

(3) until 1985 a net saving of approximately R230 million per annum; thereafter approximately R350 million per annum.
Nuclear power station at Duynefontein

459) Mr. T. ARONSON asked the Minister of Economic Affairs:

Whether there has been a re-assessment of the costs of the first and second phases of the nuclear power station at Duynefontein; if so, what is the cost of each phase based on current prices.

The MINISTER OF ECONOMIC AFFAIRS:

Yes; two reactors are being erected at Koeberg. According to the basic contract prices excluding price escalation the total estimated cost of the plant and the first reactor is R518 million and that of the second reactor R452 million.
Cost of power to be probed

CAPE TOWN.—The Minister of Economic Affairs, Mr. Heunis, has asked the Board of Trade and Industries to investigate and report on the present tariff policy and tariff structure in the supply of electricity in South Africa.

Mr. Heunis said he had requested the Board, in terms of the Board of Trade and Industries Act of 1944, to investigate and report on the matter, with due consideration of:

- The influence on the economic growth and development of the country.
- The effect of uniformity or differentiation in tariffs on different areas and groups of electricity consumers.
- The relationship of the tariff policy and tariff structure of South Africa with that of the municipalities and provinces.
- The adequacy of existing legal provisions effecting the tariff policy and tariff structure regarding the supply of electricity. — S.A.P.A.
Trade support for national petrol price

The Motor Industries' Federation has welcomed a Government investigation into greater national uniformity of petroleum prices.

The Board of Trade inquiry will look at price structures and policies for petrol, diesel fuel, paraffin, liquid petroleum gas and furnace oil. The structures and policies will be examined in relation to economic growth, transport costs and refining, as well as their localised effects.

The director of the MIF, Mr J van Huyssteen, said they had been pressing for uniform petroleum prices for many years.

"There are now 93 different prices for the three different grades of petrol," he said.

He understands that the price differentials, which cover transport costs, were introduced in the old days to compensate coastal areas for the higher prices they paid for steel and other products manufactured inland.

"I don't see this argument applying now."

THREE GRADES

He said the Government should also establish if it was necessary to have three grades of petrol now that there was a blanket speed limit of 90 km/h.

"One, or even two grades, would mean deliveries could be rationalised and petrol pumps and tanks could be better utilised."

A spokesman for the Transvaal Agricultural Union said at first sight there appeared to be merit in the idea of uniform prices, but that the implications would have to be closely studied.
Uniform fuel prices move

HOUSE OF ASSEMBLY.

The Board of Trade and Industries is to investigate the possibility of introducing uniform fuel prices throughout South Africa.

The effect of such a move could be to increase fuel prices slightly along the coastal areas and possibly decrease prices originally in the up-country areas.

The announcement was made by the Minister of Economic Affairs, Mr. Chris Heunis.

The investigation would involve the price structures of petrol, diesel fuel, power paraffin, liquid petroleum gas and furnace oil, used as energy sources, according to the announcement.

The investigation was to make special reference to the influence of the price structures and policies upon the economic growth, the effects of rail, road and pipeline transport tariffs and costs on the delivered costs of the various fuels.

The location of production or refining activities and the effects of uniformity or differentiation of the fuel prices on the different areas and the influence of uniformity on fuel users.

Mr. Heunis said that representations had been made to him to amend the present system where the prices of petroleum products were determined by oil companies with the Government's approval.

The present system provided that prices were set at levels which varied from area to area.
Fuel price warning

CAPE TOWN — Equalisation of the prices of petroleum products throughout the Republic could lead to economic distortion, the Shell Oil Company said in a statement here.

The statement was issued yesterday after the Minister of Economic Affairs, Mr. Heunis, said representations had been made for an amendment of the present system, which allows the price of petroleum products to vary in different areas according to transport charges.

Shell said the introduction of such an administratively complex measure might not be in the best interests of the country or the individual consumer.

"In a country like South Africa, this could lead to economic distortion if the system of price equalisation did not apply to other essential commodities and services," Shell said.

● Extra R111m bill for the Refex. — Page 2.
Second nuclear reactor at Koeberg

Mr. C. W. EGLIN asked the Minister of Economic Affairs:

1. Whether Escom is planning to build a second nuclear reactor at Koeberg; if so, when;

2. Whether any further reactors are planned; if so, where will they be sited.

The MINISTER OF ECONOMIC AFFAIRS:

1. The already planned station will have two nuclear reactors which will be put into operation in 1982 and 1983 respectively;

2. At this stage only a third reactor which can be erected at the existing Koeberg site is anticipated.

Diagram ?

(a) What is the significance of the above?

(b) Under what conditions would this frontier - a straight line - 
possibility frontier?

(c) Explain fully the shape and slope of the production possibilities frontier.

(d) Would it be true to suggest that a straight line is the best possible frontier?

(e) Could you suggest whether the possibility curve would be more efficient than q, rather than p ?

Cross elasticity of demand
Factors of production
Equilibrium price level
Interior goods
Ceteris paribus

SECTION B

ECONOMICS 1A TEST (continued...)

11.
Commerce against petrol price move

DURBAN — South Africa's major coastal Chambers of Commerce met for the first time in Durban this week and unanimously decided to ask Assocom to oppose the introduction of a uniform petrol price.

Representatives from Cape Town, Port Elizabeth, East London, Durban and Richards Bay also discussed inconveniences to commerce and industry in the new airways timetable which comes into effect in April.

On petrol, Mr Ken Hobson, general manager of the Durban chamber said coastal areas were at a price disadvantage, price-wise, where manufactured products and basic commodities such as coal and electricity were concerned.

Petrol was one of the few commodities which were cheaper at the coast and as Assocom had always "set their face against subsidisation of any sort," he felt confident of their support.

Regarding the new airways timetable, Mr Hobson said a lot of services had been cut out and various problems were foreseen.

"We decided to ask South African Airways to try to consult with various chambers before they firm them up in future."

The chambers agreed that staggered working hours would be a good thing but with the exception of Cape Town, with its good train service, transport was the major practical problem.

Mr Hobson said the exchange of views had been so worthwhile that the coastal chambers had decided to meet twice a year. The next meeting would be at East London in September, he said. — DDC.
### Mercury Reporter

SOUTH Africa's major coastal chambers of commerce met for the first time in Durban this week and unanimously decided to ask Assocom to oppose the introduction of a uniform petrol price.

Mr. Ken Hobson, general manager of the Durban chamber said coastal areas were at a price disadvantage where manufactured products and basic commodities such as coal and electricity were concerned.

Petrol was one of the few commodities which were cheaper at the coast and as Assocom had always "set their face against subsidisation of any sort" he felt confident of their support.

Representatives from Cape Town, Port Elizabeth and East London, Durban and Richards Bay also discussed inconveniences to commerce and industry in the new airways time table which comes into effect in April.

The chamber favoured staggered working hours but felt transport was the major practical problem, except in Cape Town, which had a good train service.

Mr. Hobson said the coastal chambers had decided to meet twice a year.

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### The Johari Window

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Petrol price protest

Own Correspondent
SOUTH Africa’s major coastal chambers of commerce met for the first time in Durban this week and unanimously decided to ask Assocom to oppose the introduction of a uniform petrol price.

Representatives from Cape Town, Port Elizabeth, East London, Durban and Richards Bay also discussed inconveniences to commerce and industry in the new airways time table which comes into effect in April.

On petrol, Mr Ken Hobson, general manager of the Durban Chamber, said coastal areas were at a price disadvantage, price-wise, where manufactured products and basic commodities such as coal and electricity were concerned.

Petrol was one of the few commodities which were cheaper at the coast and as Assocom had always “set their face against subsidisation of any sort”, he felt confident of their support.

Regarding the new airways time table, Mr Hobson said a lot of services had been cut out and various problems were foreseen.

“We decided to ask South African Airways to try and consult with various chambers before they firm them up in future.”

The chambers agreed that staggered working hours would be a good thing but with the exception of Cape Town, with its good train service, transport was the major practical problem.

Mr Hobson said the exchange of views had been so worthwhile that the coastal chambers had decided to meet twice a year.

The next meeting would be at East London, possibly in September, he said.

put us

helpful to prospective students. We would also be grateful if you would send a copy of your current prospectus and any other information you think may be of your current prospective and any other information you think may be

this serve to encompass all sectors of the population.

arising and coloured communities, but it is hoped emotionally to enlarge

concerns, but we are focusing our attention primarily on the Asian, communities. It is the immediate establishment of a career information

development and education in the Western Cape. One of our

foundations for social development is working in the fields

Dear Sirs,

26/1/79

2.00

P.O. Box 67

Telephone: Cape Town 67-5477

Rondebosch 7700

12th April, 1977.
Petrol shock due next week

Pretoria — Next week's big shock is expected to be another increase in the price of petrol.

And the extent of the increase will depend on the extent of the higher excise duty expected to be imposed on fuel by the Minister of Finance, Senator Horwood, in Wednesday's Budget.

That the price of petrol will go up from April 1 is certain, according to motor industry sources.

The 21 percent increase in pipeline charges announced by the Minister of Transport, Mr. Lourens Muller, earlier this month had added about half-a-cent a litre to oil company costs.

According to the public affairs manager of BP, Mr. Graham Barr, this will be passed on to inland motorists from April 1.

Formula

The price formula used by the Government to determine fuel prices provides for an automatic recovery of higher transport charges.

However, if the excise duty is increased by 2c a litre — and this is the fear — then the price of premium fuel on the Rand and Pretoria will rise to more than 30c a litre.

It was pointed out that the exchequer gained nothing from the recent increase.

Our correspondent reports from Cape Town that the Minister of Economic Affairs, Mr. Chris Heunis, yesterday named the committee to investigating uniform fuel price.

The members are: Dr. S. J. Klei, chairman of the Board of Trade and Industries, Mr. H. S. Mabir, deputy chairman of the board, Dr. D. J. Mouton, Mr. H. de Wet, Mr. H. J. P. T. Kruger.
JOHANNESBURG — Next week’s big shock is expected to be another increase in the price of petrol.

And the extent of the increase will depend on the extent of the higher excise duty expected to be imposed on fuel by the Minister of Finance, Sen Horwood, in Wednesday’s Budget.

That the price of petrol will go up from April 1 is certain, according to motor industry sources.

The 21 per cent increase in pipeline charge announced by the Minister of Transport, Mr L. Muller, earlier this month is alone sufficient reason for an increase.

The 21 per cent hike has added about 0.5c a litre onto oil company costs, and according to the public affairs manager of one, Mr Graham Barr, this will be passed on to inland motorists from April 1.

The price formula used by the Government to determine fuel prices provides for an automatic recovery of higher transport charges.

However, if the excise duty is increased by 2c a litre and this is the fear then the price of premium fuel on the Rand and Pretoria will rise to more than 30c a litre.

It was pointed out that the exchequer gained nothing from the January 4c rise, and that the Government needs higher revenue. — DDC.
They can get petrol permits

Tim Patten,
Political Reporter
CAPE TOWN — Magistrates are entitled to issue permits for many reasons to people who believe they should have the right to buy petrol during weekends.

The Minister of Economic Affairs, Mr Heunis, has disclosed the guidelines laid down to magistrates on which permits could be issued.

Not only overseas visitors, farmers and church ministers are entitled to permits, but bridal couples off on their honeymoon, their parents and family members attending their wedding would also be granted permission.

TRAIINEES
Permits would also extend to the parents of army trainees who travel from far to be with their sons before they leave for a period of border duty.

An army trainee could get a permit if he visited his parents for a reunion before call-up.

Schools in rural areas would also get permission if they had to transport children long distances for sporting events at weekends.

Mr Heunis

This would also apply to players in a provincial team who had to travel by car on a long distance would also qualify.

The qualifications for permits do not stop there. Estate agents selling farms are entitled to permits, as are motor dealers who needed to fill up a car's tank on a Saturday morning if a sale was made.

The permit for the motor dealer, Mr Heunis said, would only stand during normal working hours and be applicable for the sale of motor vehicles.

Car-hire firms are also granted exemption, as are commercial travellers in South West Africa. Part-time farmers would also be entitled to apply as are evangelists and missionaries who travel long distances to deliver sermons.

FUNERALS
Church ministers who attend weddings and funerals in other than their normal areas could also get petrol at weekends.

Newspapers, Mr Heunis said, would also be granted permits.

"The basic principle," he said in reply to a question in Parliament, "is that permits are only granted in cases of emergency and for essential business and productive purposes.

"All applications not falling under these categories are therefore excluded by the guidelines to magistrates on the issue of permits for the purchase of petrol during weekends."

But, he said, the guidelines also provide for the issue of permits to certain classes who possibly do not strictly fall within these categories.
Sweeping powers in revived fuel Bill

John Patten
Political Correspondent
THE ASSEMBLY — Sweeping powers for the Minister of Economic Affairs, or officers delegated by him, to take petrol saving measures are envisaged in legislation published in Parliament today.

The powers are backed by proposed maximum penalties of fines of £2,000 (or two years' imprisonment) or both. In addition to these penalties a court could suspend or cancel drivers' licences or trading licences and 'confiscate any property of the person convicted, which was used to commit the offence in question.'

The Petroleum Products Bill, which has had its first reading in the Assembly, was earlier the source of public controversy when reports on the draft legislation were published. At the time the Minister, Mr. Heath, agreed to discuss its terms with the oil companies. He is now going ahead with the Bill following the talks.

If the Bill goes through in its present form, the Minister, the Secretary for Commerce or the Controller of Petroleum Products will be empowered to give notice in writing to any person regulating or even prohibiting the use of any petroleum product for any specified purpose.

The Minister would also be given powers to regulate or prohibit the purchase, sale, supply, acquisition, possession, storage or transportation of any petroleum product, and would also have powers to regulate or prohibit sales outlets of such products and to prescribe the price at which any petroleum product could be sold.

Regulations could be made to empower inspectors to search premises without a warrant and to seize any petroleum product.
Tough sentences in Petrol Bill

HOUSE OF ASSEMBLY—The cancellation or suspension of driver's licences and the confiscation by the courts of the property used by an offender, are provided for in the Petroleum Products Bill published here yesterday.

In terms of the Bill, the courts may also impose a fine not exceeding R2 000 or imprisonment not exceeding two years, or both, on any person who contravenes or fails to comply with any provision of the Act.

The Bill, introduced by the Minister of Economic Affairs, Mr Heunis, also provides that the courts can suspend the trading licence, permit or authorisation of the person convicted, which is required in respect of the sale of any petroleum product, if the offence in question relates to the sale of any petroleum product.

The Bill, which has been read a first time, provides for the saving of petroleum products and economies in their distribution costs.

It also provides for a maintained price of petroleum products.
Petrol up by 0.5 cents tomorrow

Harvey Thomas, Motor Editor

The price of petrol on the Rand rises tomorrow by up to 0.5c a litre. Premium will now cost 28.6c a litre.

The increase is because of the higher pipe-line tariff announced in the Railway Budget earlier this month. Last year, the pipe-line made a profit of R3.1-million.

The price of petrol at the coast will remain unchanged while the biggest increase will be in certain remote areas of the country where an additional 1.1c will be added to the cost of a litre.

UNIFORM PLAN

The Minister of Economic Affairs, Mr. Heunis, has just appointed a committee to investigate proposals for uniform petrol prices throughout the country.

At present, Johannesburg drivers pay 2c a litre more for petrol than the price in Cape Town. The price was last increased on January 8 by 4c a litre.

The increase was made up of 0.16c for higher crude oil prices, 0.4c to the South African oil companies, 0.8c in garages and 3c in excise duty to bolster the country's Strategic Oil Fund and to finance the new Sasol 2 oil-from-coal project.
Search for oil

Mr. G. W. MILLS asked the Minister of Mines:

(1) How many oil rigs are officially involved in the search for oil?

(2) What is the present average daily cost of each rig to the State?

(3) (a) When was the search for oil in South Africa commenced, (b) what has been the cost to the State to date, and (c) what results have been obtained?

(4) How long will the search for oil continue?

The MINISTER OF MINES:

(1) Presently two oil rigs are involved, one on land and one at sea.

(2) On land, R500, and at sea, R50 000, per day.

(3) (a) At the end of 1965.

(b) R79.5 million up to 28 February 1977.

(c) On land only very small unimportant occurrences of oil and gas have been found, mainly in the Transvaal-Natal coal field. At sea, two possible gas fields have been discovered, one off Plettenberg Bay and one off the Orange River mouth. In addition, smaller gas occurrences and one small oil occurrence have been found.

The search on land is almost certain to end this year. The search at sea should continue until such time as all the possibilities have been investigated. At the moment drilling at sea with one rig has been planned for 1977, and a decision whether the search should thereafter be continued will depend on the results obtained during this period.

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Petrol firm spent R4-m on 'facelifts'

The petrol price has risen 170.2 percent for consumers in the last four years. In that time BP South Africa has been spending nearly R4-million on “facelifts” to service stations.

According to the March edition of the BP News Bulletin, the “refurbishing and redecorating” has been to more than 800 service stations in major towns and areas. Their efforts have focused mainly on sing-posting the various services and facilities at the stations.

Mrs Yvonne Foreshaw, vice-chairman of the Housewives’ League, attacked BP for its “gross extravagance.”

“In a free enterprise system it’s not beauty or PR work that counts but low prices.”

“The man in the street does not care if the station is beautiful or has soft toilet paper. He is concerned about prices. Something the non-competitive petrol companies forget.”

Mrs Foreshaw said petrol companies should cut down on the excessive number of petrol stations to reduce prices and improve service.

Mr Mike Hawkins of the SA Co-ordinating Consumer Council, in essence agreed with Mrs Foreshaw’s letter statement.

He said, the money could have been used to subsidise stations in small towns with lower profit margins.

Mr Keith Seyer, a spokesman for BP, Cape Town, said the money had been spent to help small dealers improve their petrol stations.

He said the motion had been set in action before the Arab oil embargoes began—which started the petrol price spiral.

“Here it is:” Seawater into fuel — Page 3.
Nuclear plant plan for Peninsula

A MULTI-MILLION rand nuclear accelerator for scientific use - the first of its kind in the country - to be built "somewhere in the Peninsula" will be in operation within six years.

This was announced in a statement yesterday when the Administrator, Dr L A P A Munik, formally handed the scheme over to the Minister of Planning, Dr S W van der Merwe. The Cape Provincial Administration have completed a successful feasibility study.

The project, which is to be undertaken with close cooperation from the Council for Scientific and Industrial Research (CSIR) will, on completion, be available for use in medical therapy, isotope production for medical and other usages, and for use in research in physics, chemistry, and biological sciences.

The Director of Hospital Services in the Cape, Dr R L M Kotze said yesterday that it had not been decided exactly where the accelerator would be situated, but it would be "somewhere in the Peninsula".

Dr Kotze said that the cost would run to "several million rand".
THURSDAY, 21 APRIL 1977

† Indicates translated version.

For written reply:

Price of Escom power

751. Mr. G. H. WADDELL asked the
Minister of Economic Affairs:

What price is charged by Escom for the
supply of power to (a) the Witwatersrand,
(b) Durban, (c) Cape Town, (d) Port
Elizabeth and (e) East London.

The MINISTER OF ECONOMIC AF-
FAIRS:

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*That part of the monthly tariff levy
which exceeds R1.500 is subject to a
rebate of 20%.
The above are standard tariffs for bulk
users at high tension.
Govt probe on petrol prices

Protoria Bureau

An investigation into the desirability of greater uniformity in the prices of petroleum products has been ordered by the Minister of Economic Affairs, Mr. Chris Hani.

A notice in the Government Gazette today said that the board of trade and industries was to investigate and report on the suitability of the present price structure for petrol, diesel fuel, power paraffin, liquid petroleum gases, and fuel oil used as sources of power.

It would also report on the desirability of bringing about greater uniformity in the price structure of such fuels.

Consideration would be given to the price structure's influence on the economic growth and development of South Africa, and to the effect of costs by rail, road and pipeline on the cost of the fuels to the consumer.
THE SENATE. — The deeply-rising cost of electricity was a source of considerable worry and everything possible was being done to contain it, the Minister of Economic Affairs, Mr Chris Heunis, said in the Senate yesterday.

Introducing the second reading of the Electricity Amendment Bill, Mr Heunis said electricity was one of the most important sources of energy in South Africa.

Future investments by export-oriented industries could be at stake.

Escom, because of its constitution, could not enter long-term contracts which would ensure stable long-term tariffs.

"With this situation in mind I am proposing introducing into the Act a principle which would permit the Minister of Economic Affairs, after consulting the Electricity Control Board, to pay into a fund an amount not exceeding three per cent of Escom's total income from sales of electricity.

"I propose to use such monies in concurrence with the Minister of Finance for such purposes as he may prescribe."

Mr Heunis said it had become necessary for Escom to provide more of its own capital needs from revenue. An increase in tariffs would satisfy this need.

Senator A. Bozas of the United Party said he was worried about consumers who were already burdened by more increases than they could cope with.

The tariff increases envisaged by the Minister could add an additional R106-million a year to the consumers' bill.

A measure should be included in the Bill to allow local authorities to provide electricity to big consumers at the same rate that Escom could, he said.

Sen A. J. Visser, NP, said the Bill provided Escom with badly-needed means to finance its own development.

The whole world was experiencing a shortage of capital and it had become necessary to provide these funds out of revenue.

"In order to provide the many and increasing needs of consumers, expansion of the power grid has become necessary.

EFFICIENT

"Capital has to be found somewhere and the only way to provide it is through tariff increases."

One of the best ways to foster exports was to provide an efficient service.

Sen Laurie Pooter, UP, said Escom was not providing electricity at the most economic tariffs. It was in the interest of the consumer to know exactly what was in store for him.

At some stage or other the Government would have to accept that it could not continue to expand regardless. — Sapa.
CAPE TOWN. — The motor sector of the Afrikaanse Handelsinstituut's annual congress yesterday urged the Government to extend the hours of petrol sales by garages to 6 pm on Fridays and to permit sales between 6 am and 11 am on Saturdays.

In a report it blamed the weekend shutdown for wasting work hours and petrol.

The managing director of a Brits garage, Mr Hendrik van der Merwe, said Black labour at petrol stations had been reduced since the petrol restrictions, but garages still had to man the pumps.

Special trips had to be made by motorists in outlying areas to fill up ahead of the Friday noon deadline. Such trips wasted time and petrol.

Mr Van der Merwe said homelands were seriously affected because many Black workers relied on weekends to go home to build houses or make other improvements.

The delegates were told a delegation would see the Minister concerned as soon as possible. — Sapa.
Cabora Bassa Scheme

791. Mr. T. ARONSON asked the Minister of Economic Affairs:

(1) Whether the original contract rate stipulated for power from the Cabora Bassa Scheme was adhered to; if not, (a) why not and (b) what is the contract rate for power (i) stipulated originally, and (ii) paid by the Republic at present;

(2) (a) what power has been supplied to the Republic by the Scheme since its inception and (b)(i) at what cost and (ii) over what period was the power supplied;

(3) whether he will make a statement on the matter.

The MINISTER OF ECONOMIC AFFAIRS:

(1) No;

(a) the agreement between South Africa and Portugal which was entered into in 1969 provides that if as a result of unforeseen circumstances the income or costs regarding the establishment or operation of the Cabora Bassa Scheme show a fundamental change the parties will consider a request for an adjustment of the tariffs. Due to substantial increases in the capital costs of the project the Portuguese Government has requested that the contract tariff must more or less be doubled in order to provide for these cost increases. The tariff according to the agreement is 0,12075 Escudos per kilowatt hour for energy supplied up to and including a level equivalent to 80% of the contractual maximum demand and 0,04025 Escudos per kilowatt hour for electricity supplied during the test period as well as for any other energy. The Government has offered a tariff increase of 66,66% and pending the finalization of the negotiations ESCOM pays in the meantime the tariff on the basis of the South African Government's offer;

(2) (a) and (b) periodical test transmissions during the period May 1975 till March 1977. Since 26 March 1977, however, the scheme is in commercial use on a continuous basis and until 23 April 1977 2 172 260 600 Kwh have been received. In respect of 1 670 207 300 Kwh of the aforementioned quantity of power a payment of R2 822 563 has already been made. An account for the balance has not as yet been received;

(3) at this stage I merely wish to mention that in spite of technical adjustments the operation of the scheme is proceeding well and that the power which is being received by ESCOM is valuable especially in the current economic climate.
Further Koeberg contracts will announced towards the end of November for the construction of three turbine buildings. Sources say Durbal, Barlows and Broderick Engineering are in the running.

When the French won Koeberg three company consortium involve Framatome, Alsthom and Spie Batinolles estimated construction cost was R50m. Today, because material and labour escalations, the figure is more like R100m (and it could be even higher than that by the end of 1982 when the two reactors are scheduled for completion).

Local industrialists reckon on a 10% share of that lucrative cake. "Nothing has changed and industry in the Cape area will benefit from the project, planned," says IMS's Technical Director Herbert Berger.

Some 1000 black workers and around 100 French and LTA construction engineers are on site at Duynefontein, 28 north of Cape Town. Within the next couple of years at least 200 families and several hundred bachelors will be living in the area.

Local contractors hope to build recreation centres, homes, schools (knowing French eating habits) at least a couple of quality continental restaurants.

The only physical sign of near years' hard work at Duynefontein is a giant hole, 15m deep with a circumference of 1.5 km.

Engineers have been scooping thousands of tons of rock, sand and gravel from the area and are now busy "finishing" Koeberg's future foundation, pumping in a mixture of gravel and cement. When the hole is filled in a few months work proper will start.

Engineers on site are optimistic the project will come on stream, nine months. "We're about two months ahead schedule," says Berger.

KOEBE  
Industry's spin-off

A local industrial spin-off from the R1000m Koeberg Nuclear Project starts next month.

A spokesman for Industrial Machinery Supplies (IMS), which is co-ordinating technical and contractual details between Eskom and the French consortium which bagged the Koeberg contract last June, tells the FM that five SA construction companies are in the running for a R300m contract. It involves the construction of six condensers (three each per unit).

Originally, nine companies responded. That figure was later pared to five. They are Durbal, Barlows, Stein Mueller, James Brown & Hamer and Elgin Engineering.

Approximately R7.5m has been allocated for the construction of the two units. R300m will be awarded to local firms, the balance being placed with overseas companies (probably from Japan and France).

Construction work on the first unit will start in February 1981; the second will begin 12 months after that. Some 1500 t of steel is needed per unit, 1000 t from SA and, again, the balance from Japan, which makes specialised steel not manufactured in this country.
Oil-saving drive 'is paying off'

STELLENBOSCH — The chairman of Sasol said at Stellenbosch last night the Government's oil-savings campaign was beginning to yield results.

Mr D. P. de Villiers said less petrol had been used in South Africa since February than during the same period in 1976.

South Africa had largely solved the problem of storage for strategic oil supplies when oil still was only one-eighth its current price.

The main purpose of Sasol II was to make South Africa less dependent on imported crude oil. When Sasol II reached full production, the two Sasol plants together would be able to meet 33 percent of the country's petrol consumption two years ago.

Combined petrol production would then replace 24 percent of South Africa's imported crude oil supplies last year.

At full production, the savings in foreign exchange would be about R350-million.

Mr De Villiers said South Africa was dependent on oil for less than one-quarter of its energy needs, thanks to extensive use of coal, but the country's coal reserves were not inexhaustible.

The energy conservation programme now being implemented in South Africa would, like the one in the United States, be expensive. — Sapa.
Plea to save SA's coal

Political Reporter
CAPE TOWN — Faced with a world shortage of natural resources, South Africans must realise the significance of the country's coal reserves and refrain from wasting it on trivialities, the Minister of Labour, Mr Fanie Rotha said today.

Speaking in East London at the congress of municipal electricity undertakings, the Minister emphasised the significance of coal reserves in the situation where economic considerations create political pressures. He appealed to local governments to economise on electricity consumption as much as possible.

He said that despite the contribution nuclear energy would make, it would not be the final answer to energy needs.

He said the supply of electricity had to be extended to all South Africa's people in order to raise their standard of living.

This was going to make enormous demands on the national economy.

Municipalities consumed 24 percent of all the power generated in the country but when the full benefits of electrification had been extended to the less privileged this figure would increase considerably.

The use of nuclear energy for the generation of electricity was an alternative to natural resources, but it was unlikely that nuclear energy would simply take over from coal.

South Africa would derive great benefit from nuclear energy but it did
Electricity for blacks 'should come before TV'

Own Correspondent
EAST LONDON. — Electricity for black townships should be much higher on the list of national priorities than the proposed black television service which would cost about R150-million.

The new president of the Association of Municipal Electricity Undertakings of South Africa, Mr Ken Robson of East London said this yesterday when addressing delegates to the association's 46th convention in East London.

"The recent decision to electrify Soweto is of major importance but we need to examine critically our national priorities," Mr Robson said.

"Surely our present television service can cater for all peoples for an interim period?"

Mr Robson said the staggering rise in the cost of oil fuel and coal highlighted the need for electricity in black townships.

"I find it regrettable that no policy decision has been made to provide electrical installations in a proportion of houses being erected by the Government."

Mr Robson said that in Mdantsane 16,000 houses had been built without electricity but many residents were now having their houses wired at their own cost.

Dramatic changes had taken place during the past two years.

"The violence which erupted and is continuing on our northern borders and the recent confrontations in the black and coloured townships have created a climate of fear and uncertainty."

Traditional political policies were being questioned, challenged and rejected. It had been said South Africa's economic condition was the worst since the depression of the 1930s.

He said the cost structure of electricity supply had changed almost overnight with a serious effect on the finances of municipalities which buy from Escom.
LONDON. — In recent months several major reports on world energy supplies have stressed the need to restrain oil consumption. Their messages have been the same: nations are not using up oil faster than they realise, but they are also running out of time in which to cater for future needs.

So loud have been the warnings that there must be a danger that we will clam our hands over our ears and hope the problem will go away. After all, since the turn of the century, perhaps have been sensing that the world will run out of oil within the following 30 years.

The latest report — "Energy: global prospects 1985-2000," a prospectus written by the prospectus writing firm of McGraw-Hill — puts the prospect squarely. "The end of the era of growth in oil production will come in the next 25 years." How OPEC and other oil exporters will shape the world "will have profound effects on the global economy."

While the report assesses the problem of oil consumption, a government report published by the government's Central Intelligence Agency in May 1980 provides an indication of how the world's energy needs are expected to change in the future. The report, "Energy and the Global Economy," predicts that oil consumption in the industrialised world will increase by 24 per cent between 1980 and 2000, while coal consumption will increase by 18 per cent.

The report also forecasts that the world's energy needs will continue to grow, with coal and nuclear power playing a significant role in meeting future energy demands. However, the report also highlights the need for alternative energy sources to meet the growing demand for energy.

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the 1972 level. Countries, like the United States that are now large users of gas face “difficult economic and political tradeoffs if they are to continue to meet demand over the next 25 years”, the report states.

North America, Western Europe and Japan might require total gas imports of 8,400,000 barrels a day of oil equivalent by the year 2000. The resources would be available to meet these demands for a time,
Fuel savers: enthusiasm splutters

Spiralling prices and restricted sales of petrol in South Africa have precipitated a small avalanche of inventions claimed to cut fuel costs.

But the experts remain sceptical.

The technical services manager of the Automobile Association, Mr Fred Bothma, has looked at at least 20 "fuel savers" and has about eight more waiting to be evaluated.

"Using computerised testing equipment in laboratory conditions, and cars tuned to the manufacturer's recommendations, he has not yet found one system which reduced fuel consumption even marginally without a reduction in power."

TESTS

The Fuel Research Institute has been testing one or two "fuel savers" a month. But they have not impressed the director, Mr C. de Winter.

"The solution is to have enough Sasola," he said.

What is happening to the more notable systems which received publicity in recent months?

- A method of converting seawater into a petrol-like fuel was claimed late last year to have been perfected by a Johannesburg mechanic, Mr. Rene Bourdon.
- A system for run-
Restrictions cut petrol sales by 22 pc

Petrol sales had decreased by 22% since petrol restrictions had been in force, the Minister of Economic Affairs, Mr. Chris Heunis, said in the Assembly yesterday.

The Minister, introducing the second reading of the Petroleum Products Bill, said he wished to refute allegations increasingly being made by certain people and organisations that the Government's fuel conservation measures were only causing inconvenience and calling for sacrifices by the public without achieving any meaningful decrease in the country's fuel consumption.

"The preliminary figures for total petrol sales in the country during April, 1977, show sales were approximately 1% lower than the average monthly petrol sales during 1973."

"It is generally known that the country's petrol consumption increased by roughly 7% a year before the introduction of the fuel conservation measures in October, 1973.

"If no fuel conservation measures had been applied, the total petrol consumption would have increased by about 21% during the past three years. In this increase, combined with the reduction of almost 1% in April petrol sales, compared with the average monthly sales of 1973, are taken into account, it is clear that our total petrol sales during April were nearly 22% lower than what they would have been had the normal annual increase in petrol sales been maintained during the past three years."

Mr. Heunis said it was now more necessary that the Government's restrictive measures be effectively applied.

He appealed to all owners of motor vehicles to help the Government in its efforts to cut its country's expenditure on imported petroleum products by using public transport instead of cars.

Mr. Heunis said the Government had decided that fuel conservation measures should be accepted as a permanent feature of the South African way of life.

"It has been thought advisable to obtain separate powers which could be used to regulate the use and distribution of petroleum products during times when conditions are normal in the country."

"But apart from this important consideration, the Government also applies a service station rationalisation plan aimed at the distribution of petrol on an economical basis in the interest of the consumer."

"In view of certain problems experienced with the application of the plan, it is regarded as essential to obtain legal powers to regulate the distribution of petrol and other petroleum products, if necessary, in the interest of the consumer," he said. — Saps
Pretoria’s petrol conundrum

Costly petrol has led to a real decline in consumption. The government should rethink pump trading hours

Economic Affairs Minister Chris Heunis insists the oil conservation clamps must stay. He has flatly rejected an appeal by the Afrikaanse Handelsinstituut to extend petrol trading hours, pointing out that Iran’s January price increase has added a further R100m/year to the country’s foreign exchange requirement.

But the AHII is not convinced, and at a meeting of its Motorkamer this week it decided to present Heunis with a comprehensive memorandum arguing that aspects of the conservation measures are counter-productive. Meanwhile, Asso-

bored pump attendant . . . time to untie that knot

decided to present Heunis with a comprehensive memorandum arguing that aspects of the conservation measures are counter-productive. Meanwhile, Assoc-

bored pump attendant . . . time to untie that knot

im is compiling its own memo along similar lines.

Authoritative studies, in which experts have monitored petrol consumption since 1973, show that the volume of sales has fallen to its lowest since November 1974. More significant, the rate of decline is so sharp that sales may yet slump to the very low levels of February-May 1974, when the three-month moving average of motorgas consumption was 375 mega-

litres.

Pinpointing the cause of the decline is difficult. Consumption trends since the onset of the oil crunch have responded erratically to price adjustments and government’s conservation measures alike. However, oilmen say it is only partly because of the restrictions on speed and constraints on filling station trading hours; mostly, they believe, it is because petrol has finally become price sensitive.

The period since November 1973 has produced seven price increases, which have more than doubled the pump price of 95 octane fuel. At the same time the unit consumption of that grade has slumped 23%.

Of course, there has also been a stiff drop in the real disposable income of petrol consumers, due to inflation, deflationary tax hikes and huge increases in administered prices, and prospects that disposable income will rise in the near future are not promising. The whole country seems to have set itself into a death spiral, while the effect of recent admini-

stered price hikes has still to be felt. Growing unemployment will also have an effect.

Growing unemployment will also have an effect.

The international oil price outlook seems favourable now that Opec members have settled their differences and agreed to a price standard at least until the end of the year. But prospects are less certain on the home front where petrol consumers’ contributions to the cash-hungry Sasol 2 project are likely to fall behind the rate at which the cost of the project is escalating. The revised cost is R2.5bn, excluding working capital, township development, housing and in-

10/16/77

30

terest during the construction period. Construction experts doubt, however, whether the plant will be commissioned at much under R3 000m. In view of SA’s foreign capital raising difficulties it seems certain that there will have to be further petrol tax increases.

Opinion in the oil industry is divided on whether the petrol clamps have actually yielded a net reduction in the country’s overall crude oil requirement. By all accounts this still seems to be about 320 000 barrels a day (bpd). It would have to fall to about 280 000 bpd to hold the foreign exchange requirement at levels ruling before the country’s sup-

plier boosted the price by $1.19/barrel in January this year. That remains doubtful since demand for diesel fuel, which was growing at 10% pa before the price crunch, is still healthy at about 4%

However, the marginally increased demand for diesel is probably starting to come out of that portion of the barrel which, before the Suez Canal reopened and before the shipping slump, used to yield heavy fuel oil (bunkers). SA oil refineries have invested about R160m in secondary processing plant to achieve greater flexibility and one refinery has raised its diesel output 5% a barrel.

But these refinery tolerances are not yet enough to consider lifting the present restrictions on trading hours.

Newspapers are full of readers’ letters complaining of genuine hardship — and in many cases loss of productive working hours — arising from limited availability.

The high price of petrol would severely limit any increase in consumption following a relaxation of trading hours — and certainly keep it below the critical level above which it would become necessary to import more crude.

### Table: Wool Price

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<thead>
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<th>Central Coast</th>
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<td>95</td>
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Piet's 'petrol saving' device

STAFF REPORTER

VEREENIGING, backyard mechanic, Mr Piet Walker, 3d, yesterday demonstrated a device which he says cuts petrol costs by 59%. This figure could be higher if the device was manufactured by an engineering company, he claimed.

The petrol saving device, no larger than a domestic toaster, uses a 3 kg gas bottle.

"It's different from other gas systems. I know why the other systems don't work, but I won't talk yet as I would be cutting my own throat," Mr Walker said.

A large group of garages has tested the device and certified that the device does produce a 59% saving in petrol consumption. They would not comment on engine wear as they did not test the car itself.

But Mr Walker said: "I have tested the device on a number of cars and then stripped them checking for excessive mechanical wear, but have found none."

A large group of garages has tested the device and given financial support to the project.

Mr Walker's wife said: "After the first model was found to work, we sold our house and furniture. We have only a few blankets and two suitcases where we keep the children's clothes."

The cost of the device and fitting it on would be R1 850. Tests taken on a car and certified by a motor company reveal that, the car uses 11 litres for 100 km at 80 km/h without the device, and 4.5 litres for 100 km at 80 km/h with the device.

The Automobile Association asked to test the device, said Mr Walker would have to wait six months before they are able to test it.
John Fatten, Political Correspondent
CAPE TOWN — The International Atomic Energy Agency stood to lose more by voting South Africa off its Board of Governors than did South Africa, the Secretary for Foreign Affairs, Mr. Brand Fourie, said today.

He was reacting to the vote at the IAEA yesterday in which Egypt was voted on to the Board of Governors in the place of South Africa after African delegations took the stand that South Africa did not represent their interests.

Mr. Fourie said South Africa had been on the Board of Governors from the time the board was started years ago. “In fact we were a founder member of the International Atomic Energy Agency. We were among the first eight that drafted the agency’s statute,” he said.

CONFLICT

The United Party’s spokesman on energy matters, Mr. Derick de Villiers M.P., commented today that the decision by the IAEA to depute South Africa of its seat on the Board of Governors was “totally in conflict with the statute.”

“South Africa has rightly held a seat as one of the world’s major producers of uranium, and by virtue of its technical ability in the field of nuclear energy,” he said.

Sapa-Reuters reports from Vienna quoted a Nigerian representative as saying representatives of African countries felt South Africa in no way represented their interests.

South Africa’s representative on the AEA, Mr. Kurt von Schirnding, was quoted as saying the statue laid down that one country from Africa — the most advanced country in the sphere of atomic power — should be elected to the board.

“South Africa is the third biggest producer of uranium to the West. No other African country has a comparable uranium production or such extensive atomic facilities,” he said.

The 18 countries which voted against South Africa, which has held the position since the IAEA was founded 20 years ago,

To Page 3, Col 2

A AND JEWELS.

The jewels, Regalla and all other property of Provincial Grand Scribe E and the Provincial Grand Treasurer of the latter,

shall be insured against loss by

L OF FUNDS.

d by the Provincial Grand Treasurer or Scribe E such Bank or Building Society as the Provincial Executive Committee shall direct. The Provincial Grand Treasurer’s accounts shall be audited by one or two persons to act as auditors or examiners.

Cheques are to be signed by two of the following:—

The Provincial Grand Treasurer, or
The Provincial Grand Scribe E and countersigned by one of two nominated Provincial Grand Chapter Officers.

Art. 9 - AUDIT OF ACCOUNTS.

The accounts of the Provincial Grand Chapter shall be audited and certified prior to the Annual Convocation, and an abstract thereof shall be sent to every subordinate Chapter in the Province or read out and reported on by the Provincial Grand Treasurer at the Annual Convocation.
The best land plans
Uranium Cartel 2/4/77
Ph. M. White
Meeting on petrol expected

Mercury Correspondent

PRETORIA — The Minister of Economic Affairs, Mr. Chris Heunis, is expected to call a meeting of all interested bodies to discuss adjustments to current petrol restrictions within the next five or six weeks.

The convener of the petrol committee of the Afrikaanse Handelsinstituut's motor committee, Mr. H. T. van der Merwe, said yesterday: "We believe the minister intends — and this was made clear at the annual congress of the institute earlier this year — to convene a meeting of motor, hotel and tourist industry representatives, as well as other interested parties, to discuss how best to amend the existing restrictions."

Mr. van der Merwe said there was no doubt that the present conservation system could be adjusted to the benefit of the country and motorists.

The hotel and tourist industries had been particularly hard hit by the current conservation methods, he said.

The minister had promised in Parliament to try to relieve their plight — a move which would surely mean making petrol more available at weekends.

Mr. van der Merwe claimed that adjustments could be made "to make things easier" for garages and motorists without risking a higher total fuel consumption, and the sooner these were decided the better.

At the Handelsinstituut conference in Cape Town last month Mr. van der Merwe emphasised the difficulties Blacks had in travelling back to their homelands at weekends because of fuel restrictions.

He suggested that pumps be allowed to remain open until at least 7 p.m. on Fridays, if not on Saturday mornings.

Rondalla's development manager, Mr. Campbell Smith, said Rondalla believed a review of the current petrol restrictions was justified.

Rondalla had suggested that "far-away" resorts and hotels should be given authority to issue permits to get petrol for return journeys after spending at least two consecutive nights at the hotel or resort.

31. If the demand for strawberries bad harvest which reduced output

1. (a) and (b) only.
2. (b) only.
3. (c) only.
4. (d) only.
5. None of them.

32. In a simple two country world trading some homogeneous commodity

the effect of removing an import tariff on that commodity would be to:

1. Increase world trade.
2. Decrease the price of the good in the importing country by the amount of the tariff.
3. Lower the price in the exporting country by some amount.
4. Increase output by producers in the importing country.
5. Both 1. and 3. above.
THERE is mounting evidence that the weekend ban on petrol sales from noon on Fridays has turned out to be something of an "overkill." The hotel and tourist industries, both important foreign exchange earners, have been badly hit and there have been other ill-effects. A review of the current restrictions is plainly necessary.

The hotel industry's losses, because of the exceptionally early closing of the pumps, has been described by one spokesman as "massive." Popular inland resorts and game reserves, including the Kruger National Park, are suffering and it is evident that much of this lost business has been picked up by the tourist industries of neighbouring African territories, where weekend petrol restrictions are more lenient.

Other counter-productive side effects include heavy congestion of garages at the end of the week, and the practice among people in outlying areas of making special trips to fill up before the Friday deadline.

The problem is how to remove damaging consequences of the ban on weekend petrol sales without substantially increasing total fuel consumption. Understandably, rationing is rejected as a last-resort measure because of the high administrative costs estimated in the region of R5 000 000 a year. The solution may have to come from some selective means rather than through a simple extension of selling hours.

One suggestion is that "faraway" resorts should be given authority to issue certain guests with petrol permits. It may also be worth considering placing a surcharge on weekend petrol sales. This might well persuade prospective weekend travellers to economise on petrol during the week to offset higher weekend prices.

The Minister of Economic Affairs has already acknowledged the difficulties facing the hotel and tourist industries. However it is to be hoped that at any meeting between the Minister and affected parties, some sympathetic thought will be diverted to the difficulties and inconveniences facing the long-suffering motorist.
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**SOURCE:**
Department of Statistics.
Agricultural Census No. 46 Report No. 06-01-10.
N-power ‘ring’ in SA predicted

The Argus Correspondent

JOHANNESBURG. — A series of large nuclear power stations doting South Africa’s coastline has been predicted by Mr. Jan Smith, general manager of Escom.

Dear Colleague,

Mr. Smith was addressing a meeting of the Akademie vir Wetenskappe en Kuns in Johannesburg last night.

‘Another future development — and this is made possible by the use of nuclear power stations — is the erection of large power stations at the coast in those areas where today only smaller coal-fired power stations exist.

The high transport costs associated with coal power stations in, for example, the Western Cape, Eastern Cape and Natal, and the growing costs of building transmission lines, contribute to the future reality of power station decentralisation.’

We would be most grateful if you would send us R1,000 to help cover the cost of printing his report.

Thank you for your interest and support.

Yours sincerely,

FRANCIS W.

N. B. If you would like a copy of the Argus, please enclose. We hope that you will also read the Argus.

1977.

ARCH DIVISION.
OF ECONOMICS.
ATTIE BUILDING.
OF CAPE TOWN,
ONDEBOSCH.
7700.

TELEPHONE 60-4531 (Ext: 453 400)
URANIUM CARTEL
SA cold-shouldered

Carter Administration energy strategists deny that a "moral" cartel of uranium producers is being set up with the US, Canada, and Australia as members. Their objections are merely a matter of semantics however: what is being established is an "International Fuel Fund", and one of the acknowledged objectives is to increase pressure on SA's development of its own nuclear technology.

News of discussions between Washington, Canberra and Ottawa broke just as Australian PM Malcolm Fraser arrived for a White House conference with President Jimmy Carter. The cartel idea is Fraser's and it stems from his two-fold concern over the proliferation of nuclear arms technology and the continued instability of uranium supplies to most of the West.

A congressional committee concerned that the Administration was being lured into the existing Rio Tinto cartel to which the other two nations share membership with SA - summoned State Department officials to Capitol Hill. The Administration spokesman, Joseph S Nye Jr. State's top security official, told the senators that "if the US, Australia, Canada and other like-minded countries collaborate on policies for the supply of natural uranium, we can play a vital role in reducing the threat of proliferation."

When asked what other nations might join this cartel, Nye revealed that talks had already taken place in the past fortnight with France, West Germany and even the Soviet Union. But not with Pretoria.

The reason SA is being squeezed by the other major uranium producers came to light in testimony before yet another Congressional committee studying nuclear sharing pacts with Africa. Nelson Sievering, an official of the Energy Research and Development Administration, which controls nuclear policy, told the congressmen: "The US government is concerned that SA has to date declined to adhere to the non-proliferation treaty."

SA has stated it is willing to enter into discussions with the International Atomic Energy Agency about putting its future commercial enrichment plant under IAEA safeguards but has been silent about doing the same with its pilot plant. We are particularly concerned with the existence in SA of an unsafeguarded pilot enrichment plant."

Sievering also conceded the White House was concerned over the growing production of uranium ore by SA which it estimates will rise from 3 000 t last year to 4 500 t this year, 6 000 t by 1978 and 7 000 t a year in 1979/80.

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Malcolm Fraser...a cosy chat with Carter

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The river

- 50
- labour

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Consumption of oil a record

LONDON — World oil consumption recovered to record levels last year after falling for two successive years, following the oil crisis of 1973, British Petroleum's annual survey has reported.

Total international oil consumption rose 6.6 percent or 178 million tonnes last year to a record 2.879 million tonnes, surpassing the previous record of 2.773 million tonnes in 1973, said BP's statistical review of the world oil industry.

Regions or countries which showed a more than average increase in oil consumption in 1976 included the United States, Latin America, the Netherlands, Spain, West Germany, the Middle East, South-East Asia and China.

In Britain, however, oil use fell 0.5 percent, the review said.

Meanwhile, oil production reached a new high of 2.936 million tonnes, up 8.2 percent from 1975.

Previous peak

This total exceeded the previous peak in 1973 by 90 million tonnes, the study said.

Outside of the communist countries, output last year rose 8.5 percent to 2.528 million tonnes, about 40 million tonnes short of the 1973 record level, BP's report went on.

"The differences in relative growth of production and consumption reflect changes in stock levels and the net export trade to the rest of the world by the USSR and China," BP stated.

Apart from Mexico, which recorded a substantial increase in output to 46 million tonnes last year from 39.8 million tonnes a year earlier, there was a further decline in Western hemisphere oil production, the survey said. — (Sapa-AP)
Inflation rise and growth fall problem for Opec

WASHINGTON. - OPEC nations face difficulties this year as their inflation rates accelerate and growth rates fall substantially, says the deputy managing director of the International Monetary Fund, Mr. William Dale.

His forecast is made in a speech prepared for delivery to the United Nations Economic and Social Council in Geneva.

He says OPEC nations may have a $12 billion reduction in their current account surpluses to about $39 billion in 1977.

The situation in the non-oil less-developed countries is expected to improve, with growth rates rising and inflation, although still high, being brought more under control.

However, the current account deficit of the non-oil LDCs will deteriorate further this year, rising by about $5.5 billion to $37 billion.

The prospects are not encouraging for the advanced primary producing countries this year as price increases will continue at a high level, and economic growth which averaged 3% in 1976 is unlikely to revive.

The advanced LDCs are likely to have a current account deficit of about $12 500 million this year - about twice the size in real terms of the 1976-77 average.

Some of these nations, notably Finland and Portugal, have adopted adjustment programmes. But in others "conditions appear not to be conducive to internal or external adjustment".

After four years of strong foreign borrowing, their international financial position seems to be strained "and it is possible that their ability to postpone adjustment further may now be seriously diminished."

The Asian countries are expected to record the strongest growth in 1977 of the non-oil LDCs. They have the lowest inflation rate of any developing area and "are now well-positioned for a strong forward momentum."

The impact of prudent financial policies in the Latin American and Caribbean countries, favourable crops and higher export prices has been remarkable.

Together the Asian and Latin American regions account for all of the $12 billion reduction in the current account deficit of the non-oil LDCs from 1975 to 1977.

Mr. Dale says economic conditions are least favourable for the non-oil LDCs in the Middle East and Africa.

Growth rates remain unsatisfactory, inflation is still unduly high and the current account deficit continues at its 1975 peak.

"These events suggest that the countries in these areas have adjusted only minimally, if at all. The absence of such policies is casting a shadow over their present economic performance and their prospects for recovery in the near future." - Reuters.

Deficits facing non-oil LDCs

WASHINGTON. - The non-oil less-developed countries (LDCs) face a higher current account deficit in 1978 than the $37.5 billion likely this year.

Mr. Dale says such a deficit should not detract from the ability of the non-oil LDCs to attract capital and aid.

However, short-term, potentially volatile, methods used so far to finance current account deficits cause some concern.

There are indications that these imbalances are starting to be financed through medium-term and long-term funds.

The recycling process through commercial banks has been effective, although the whole system is now the subject of concern because of uncertainty about its stability and permanence.

The reduction of oil exporters' surpluses can only be gradual. In the meantime it is important these countries try to place their surplus funds in stable long-term investment.

Mr. Dale says the forthcoming quota increase will increase the International Monetary Fund's ability to promote adjustment policies.

This ability will allow the fund to promote orderly growth and a reasonable amount of price and balance payment stability.

Negotiations to establish the Witteveen facility for supplementary balance of payments financing are well under way.

In addition to the replenishment of resources through the Witteveen facility, it has been agreed that the seventh quota review will be completed by February. - Reuters.
Petrol sales notice was ‘out of date’

Mercury Reporter

A GOVERNMENT Gazette notice which appeared to extend the selling hours of petrol to noon on Saturday caused confusion in Durban yesterday.

Gazette number 5801 of June 17 reads: “No employer shall sell or supply petrol or oil . . . except between the hours of (a) 06h00 and 18h00 on Mondays to Fridays; (b) 07h00 and 12h00 on any Saturday.”

Several petrol manufacturers were unable to clarify the Gazette notice and were puzzled by it when questioned. But the Transvaal regional secretary of the Motor Industries Federation, Mr. C. M. Burton-Durham said the clause was out of date and was included in error.
Petrol price war on

CAPE TOWN — Efforts by the giant South African oil cartel to prevent a full scale price war appear to be failing and one large group has extended discounts previously offered to commercial buyers to private motorists as well.

The price war broke out several months ago when companies attempted to increase market shares by offering discounts to commercial sales.

Caltex has confirmed price cuts of 0.5c a litre and 0.25c on diesel which it says were offered in retaliation against competitors. Shell has also confirmed discounts.

The general manager of Caltex, Mr D. T. Fletcher, declined to comment last night.

The head of Total, Mr A. R. Hough, said the company would not follow the decrease and he did not expect any of the larger companies to follow either. Officials of Shell and BP declined to comment.

The Minister of Economic Affairs, Mr Heunis, said he did not propose to intervene because the matter was one between the oil companies and their dealers.

"I've no reasons to interfere if the oil companies are prepared to cut their margins unless I have evidence that this will disrupt distribution," he said. — DDC.
Big petrol price war is looming

SOUTH AFRICA'S oil giants, hit yesterday by Government-imposed duty increases, have moved closer to a full-blown price war with a number of service stations revolting against company price agreements.

And the director of the Consumer Council, Mr. Johann Verheem, launched a stinging attack on the profitability of the industry and its approach to economic problems.

Esso Standard stations, which topped 0.5c a litre off their petrol price, reported substantial increases in sales, and the chairman of the company, Mr. C. E. Lyden, said the discounts would continue. The Esso action brought savings to private motorists which had previously been confined to commercial buyers.

Counter

Two Shell garages in Pietermaritzburg responded with 1c a litre reductions. Industry sources do not expect retaliatory action to be taken against the outlets, something which has obvious implications in the spreading war. Managers of the outlets, however, seeking legal advice last night.

One of the managers, Mr. Jim Patrick, said he had taken the price cut decision without consulting Shell.

"I'm not prepared to lose my customers down the road," he said. The response to the 1c reduction had been "fantastic," he said.

"If I wasn't the biggest petrol retailer in Pietermaritzburg yesterday, I certainly am today."

Esso chairman Mr. Lyden said substantial sales gains were expected, but it was too early to be specific with figures. The move had been profitable to the extent that it was a defence mechanism which had prevented sales from evaporating. But he added that he believed the Government would tell the industry to sort out its problems. Esso would return to a normal marketing stance as soon as its competitors did.

The development in the previously low profile oil industry have drawn strong reactions from other consumer sources.

The marketing director of the Pick 'n Pay hypermarket, Mr. I. G. Ferreira, said he believed the oil companies could afford the discounts.

"Irrespective of what they say, they've got the margins."

Durban

Durban Esso stations reported brisk sales yesterday.

The manager of a petrol station in Verulam said he thought his sales had doubled.

Mr. Verheem, welcoming the move by Esso, said he expected other petrol companies to follow suit.

"The discount some companies are offering to bulk buyers should apply to individual consumers," he said.

Discount should be offered to cash customers buying petrol as usual in most forms of normal business.

"It is in the interest of the economy that a far more dynamic and positive approach is adopted on the whole question of cost increases," Mr. Verheem said.

Several Johannesburg garage owners selling other than Esso have dropped their prices - even though their supplying oil companies had not announced a price reduction by late yesterday afternoon.

One said that if he had not dropped his price he would have lost the sale of 10 000 litres yesterday.

Total has said it will not drop its price to threatened outlets.

A spokesman for BP (SA) Ltd. refused to comment. — (Mercury Reporter, Cape Town and Johannesburg Correspondents and Sapa)
Escom to finance coal mines

By DON ROBERTSON
Mining Editor

ESCOM will in future involve itself directly in the financing of coal mines for power station needs in an effort to ensure its supply of coal.

Mr J L Rothman, assets manager of Escom, said yesterday at the opening of the Kriel colliery which supplies the Kriel power station that the corporation had taken part directly in the colliery's opening.

Negotiations were going ahead between the collieries and Escom which would correct "an imbalance" in terms of prices.

"I need hardly say that for a power station stability and continuity of coal supply are paramount, hence the margin required is far more than that needed for a commercial operation."
Electricity to supply 40% of energy

Electricity would provide about 40% — double the present figure — of South Africa's net energy by the end of the century, said Mr. Jan H. Smith, Escom's general manager, in a lecture to the Johannesburg branch of the Akademie vir Wetenskap en Kuns.

The present major constituents of energy in South Africa were oil (33%), coal (30%), electricity (20%) and coke and gas (17%).

If an historical economic growth rate of 5% a year was to be maintained in the next 25 years, the number of units of electricity sold would increase at a higher rate of 6.8%. The maintenance of the growth rate of 6.8% would mean that Escom would have to increase production at an annual rate of 7.3%.

It was clear, he said, that the electricity supply growth rate outstripped South Africa's economic growth rate.

Facts to consider about the future supply of energy were that cheap energy belonged to the past; the high capital requirements of the energy industry had made it necessary to take appropriate steps; electricity in South Africa was replacing other sources of energy; and energy supply would become more capital intensive.

He said Escom's tariffs had increased by 62% in two years. This was largely attributable to rapid increases in the cost of capital goods, production costs and to high finance charges. South African electricity costs were among the lowest in the world.

The average price a KW.h sold by Escom in 1978 was 1.068c.

In real terms, if the present buying power of the rand was taken into account, the average selling price a KW.h equalled that of 1954 and was in fact 19.5% below that of 1960.

Mr Smith said inflation must be considered in planning energy supply.
Escom rates need review, say officials

Pretoria Bureau

The Institute of Municipal Treasurers and Accountants (IMTA) says there is "ample justification" for a review of electricity tariffs which local authorities are charged by Escom.

A memorandum to that effect, is being considered by the Board of Trade and Industries and will be tabled at the meeting of the United Municipal Executives in Pretoria on August 3.

In the memorandum the IMTA says local authorities, which are presently under severe financial pressure, are unable to absorb all or even part of the tariff increases imposed upon them by Escom, especially when they rise, as they have done, roughly at a rate of 18% percent in three years.

The IMTA states that local authorities bought 50,7% percent of the total electricity sold by Escom in 1975.

"However, although most of these bulk purchases are redistributed to local consumers, much of the purchases are nevertheless used by local authorities for street lighting, heating and so on."

"The considerable problems being encountered by local authorities in the capital market and the new and admittedly commendable financial policy being followed by Escom have led to and will continue to lead to very substantial tariff increases," says the IMTA.

"A large portion of the increases will be borne by shareholders and local enterprises."

"Although the public received a barrage of accounts last month, most of them have been paid," a spokesman for the Electricity Supply Commission said yesterday.

"Because of a computer fault, many consumers receive up to four months' accounts in less than a fortnight."
Petrol price war hots up

JOHANNESBURG — Several garage owners here have dropped their prices — even though their supplying oil companies have not announced a price reduction.

They have escalated the petrol price war because they fear nearby Esso stations will dampen their business.

The price-cutting ripple has developed since Esso decided to drop its price by 0,5c a litre.

A spokesman for Shell said: "We are monitoring the situation and will act if necessary."

Mr K. Bewick, public relations manager of Caltex, said: "We have not come to any decision. We have no comment on Esso's move."

A spokesman for BP said the question was receiving attention and a statement would be issued later.

Total has said it will not drop its price to threatened outlets.

Shell garage-owner, Mr K. Maybury, said he had cut his prices by 0,6c a litre because he was surrounded by Esso and Total dealers doing it.

Another Total dealer, Mr R. Tessel, reduced his price by 0,5c. He said if he had not dropped his price he would have lost the sale of 10 000 litres yesterday.

Meanwhile, the customs and excise duty on certain petroleum products is increased by 0,425c a litre for the benefit of the National Road Fund in terms of a notice in yesterday's Government Gazette.

It had been agreed with the oil companies, however, that this increase would not be passed on to the consumer, the Minister of Finance, Sen Horwood, said in a statement in connection with the increase. Pump prices of petrol for the public will be unchanged.

And in Stellenbosch, the Minister of Economic Affairs, Mr Heunis confirmed that he did not intend intervening in the price war. He was scheduled to hold talks with oil companies next month. He had no reason to anticipate speaking to them before then. — SAPA-DDC.
OIL RISE IN 1978 MAY BE 'MODEST'

BEIRUT — After six months of public disarray oil exporting countries seem agreed on quiet bargaining over next year's prices.

Arab diplomatic sources say that the member States of the Organisation of Petroleum Exporting Countries (Opec), with this year's price split behind them, are likely to line up their 1978 price policy well ahead of time.

Oil ministers are due to meet again in Caracas, Venezuela, on December 20 to fix next year's selling prices.

Industry experts think that present signs, and the condition of a glutted oil market, point to a comparatively small price increase.

Saudi oil minister Sheikh Ahmed Zaid Jamani said in Stockholm his country would like to see present prices remain unchanged next year and hoped its Opec partners would see the wisdom of such a freeze.

Libyan oil minister Mr. Bouzaidin Mabrouk whose country is usually among those pressing for higher prices, said a freeze would be completely unacceptable.

The majority of ministers, however, refused to commit themselves.

Algerian minister Mr. Sid Ahmed Ghozali said it was too early to speak in detail about 1978 prices. — (Sapa-Reuters.)
PETROL PRICE CUT IS SCRAPPED

THE PETROL price war is over. From 6 o'clock last night Esso withdrew its offer of a 0.5 cent discount, and garages that have been selling at an even bigger discount returned to the normal prices.

Announcing the withdrawal of its discount, the Esso company said: "This follows the imposition by the Government on Friday of an additional customs and excise duty on all petrol companies," the effect of which has been that Esso has been absorbing almost 1c a litre," reports Sapa.

The discount came into effect last Thursday afternoon.

The Mercury's Pietermaritzburg office reports that the two garage owners there who offered a 1c discount a litre on all grades of petrol on Friday were selling at the normal price yesterday.

Their decision followed discussions with their legal representatives.

One of them, Mr. Jim Patrick, said he regretted having to revert to the old price and believed every effort should be made to curtail the spiralling costs of running a car.

The other, Mr. Kevin Price, is at a commando camp.
from mechanics - and possible lorry drivers - there is no task which requires a high degree of skill, such that the farmer/manager cannot teach it. A formal training course would however, short cut the learning process.

The language in which Free State is often a barrier to communication, Afrikaans being spoken in the region. In this case, good rapport can only be established with the Afrikaans-speaking employees by the use of Afrikaans as the medium of communication.

Decisions regarding employees are generally made by the farmer in consultation with one or two senior men. Very often these senior men are highly conservative and not in touch with (or not in favour of) the views of the younger members of the work force.

In my group, we therefore introduced representative committees on every farm. These committees are elected by the employees, and meet regularly with all the workers they represent and with the relevant farm manager.

These committees have proved invaluable in preventing misunderstanding and in providing timely warning of dissatisfaction with policies that might otherwise have reached flashpoint.

We have perhaps been fortunate in that our committees have come up only with constructive suggestions and reasonable demands, (from our point of view) all of which we have been happy to carry out. At this stage, however, they are playing a vital and useful role in our labour relations.

E. THE FUTURE

As men's wages have increased so has casual labour been more and more scarce.
Andries Koopman, 37, was born on a farm 10 kilometres away, married a woman born on a nearby farm, but she was there before he worked on 1 other farm near pay was too low. She has been doing casual work 1 or 2 days a week.

The farmers claim that work other than manual labor is not capable of being done by the unskilled to skilled work, a transition from rural to urban is the outcome of the slow transition from rural to urban. By withholding from the farm unremitting and unform task reproduction in its workers a contract between the farmer and his work force. Some work on farms whom work on a daily basis who social and economic people who, though wage labor, most conspicuously, they are a history.

Elandskloof Mission had built a local farmer, who was reared by families. The farmer took his family stayed behind to work no garden, no crops, no shelter for people who would avoid the costs of living in isolation. Many of the people of Elandskloof had grown up there, and attended school there. The personal histories below are of a community who have settled on a farm near Citrusdal. They pay R4 per month per house for wood and water (a river). Others from Elandskloof live on other farms, or have moved to Cape Town.

Martinus Fransman had grown vegetables at Elandskloof and had a 'geboude' house (in contrast to the home erected of iron and thatch). He does ordinary farm work, and has worked on various farms in Citrusdal. At present he has been 3 years on the same farm and gets R9,50 a week. Formerly he worked only for a few weeks or months at a time where there was a need. He works 5 days a week — the farm is near so he either walks to work or the farmer fetches him, and he stays on the farm during the day. — DDR. He worked as a laborer on a farm that had been sold, and was sold back to the Massy family of 27. One of the people who work for the farmer, however, the people of Elandskloof had grown up there, and attended school there. The personal histories below are of a community who have settled on a farm near Citrusdal. They pay R4 per month per house for wood and water (a river). Others from Elandskloof live on other farms, or have moved to Cape Town.

Seal Titus was born in 1949 in Elandskloof of a family of 9 children. He went up to Std. II at Elandskloof. At 18 he began work on a farm in the Kouboekkavel at R6 per week. When the family was evicted from Elandskloof, they first moved to a nearby farm but was obliged to work for the farmer.
The tax gusher

Almost half you pay for petrol goes to State

THE Government is the big winner in South Africa’s R1,000-million a year petrol industry.

Every time you pull up at the pump, nearly half of what you pay goes into State coffers, a Sunday Times inquiry revealed this week as the petrol price war began fizzling out.

The average petrol tax in the US is 20%. In South Africa it is 47.4%—nearly as much as the 50% in Socialist Britain.

Here are the details:

The price of premium petrol on the Reef is 26c a litre. The State takes 10c of this in levies and duties and the railways another 3c in pipeline charges.

Pushing up inflation

The motorist who spends R10 on petrol gives the State 2.37c, the refinery 2.89c, the garage owner 6c and the oil company 6c.

"The State takes more than seven-sixths," a petrol company spokesman laconically told this week.

South Africans see the petrol prices as a symbol of the inflation crisis. When it goes up, everything goes up.

State on petrol has more than trebled in the last five years, although the railways’ pipeline charges have more than doubled—despite nationalisation of the railways.

Last year the Railways Act of 61c per gallon was doubled to 1.60c per gallon, prompting an attack by the chairman of the Association of Independent Petrol Companies, Mr. R. T. Steyn, as "indefensible". The chairman’s committee, on the other hand, reduced the price of oil imported.

Price cut and still solvent

So nobody outside the industry knows what an oil company pays for a barrel of crude.

But State railway operating costs have more than doubled—despite nationalisation of the railways.

Only last week the Government introduced another 6d a litre levy for the National Road Fund. And the Minister of Economic Affairs, Mr. Chris Hani, revealed recently that the price of petrol from foreign suppliers had been raised into the Kruger Fund, which finances Sasol.

Under these circumstances, the State-owned Sasol has the right to have a State-owned petrol pump at every filling station in the Transvaal and Free State.

A petrol industry spokesman told me: "Garage investment works out to an average of about R27,000 a pump. But Sasol has the right to charge less than half what the State tax on petrol is not.

"If the petrol companies can cut prices, they'll be as helpless as they have been claiming!"

The petrol price has gone up 11 times since 1971—twice this year alone in January and March. From 26c a litre it now stands at 26c a litre.

Putting on the pressure

"Either petrol companies are short of cash or they have enough to fight price wars. They can't have it both ways," Mr. Koeboe argued.

He thought a truce might have been called sooner if the price war had been fought in the broad sense. The public was the loser.

"Anybody looking around the country will find that prices have not come down yet."

"In Johannesburg, the first week to discuss it.

"The petrol companies have been pushing for one fine day, and in "Johannesburg, this week to discuss it.

Price COULD come down
UK oil company in massive Tvl coal strike

BY JEREMY WOODS

THE British oil company, BP, has found an estimated R1 800-million high-grade coal deposit in the Transvaal after two years of hectic drilling around the Middelburg area.

Initial indications show the deposit, which is stretched across some 7 000 ha, could yield 300-million tons of low sulphur coal. If this deposit is developed into a mine, which seems most likely, the coal will be mined through the open-cast method and could have a life of up to 50 years. Coal production is expected to start by 1981.

Some 5 000 ha of farmland has already been purchased by BP and options have been taken out on another 2 000 hectares. But I am reliably informed that this will not be the end of BP's coal explorations in the area.

The company, which remains tight-lipped about its coal bonanza, is looking at other areas, I am told, close to its new-found deposit with a view to further exploratory drilling.

A spokesman for BP in Cape Town told me: "We are not elaborating on previous statements already made."

Asked whether this was because of a conflict of interest between BP making big coal profits in SA, and the company's close connection with the British Government with its current anti-South African stand, I was told: "You can read into it what you like. There could be many reasons why we are adopting this stance."

So far, BP has spent some R52-million on coal mining projects in the Middelburg area.

A R4-million cash payment is to be made to the publicly quoted Kan-hym Investments for a 50 per cent share in its Eikeboom coal deposit, while BP has also bought for R2.2-million the farm Hartbeesfontein, 20 km from Middelburg. The farm, which covers 2 750 ha, is understood to have rich coal deposits.

BP is also reported to have an interest in a R35-million coal-mining project in the Ermelo district, with oil company Total and Trans-Natal, where General Mining has a large interest.
JOHANNESBURG —
Petrol taxes should be increased as part of a solution to South Africa’s energy problems, the managing
director of a big oil company and a leading
energy expert in South Africa, Mr. A. R.
Hough said last night.

Interviewed on SABC he said the extent of such an increase would
depend on the money needed to finance a research programme for the creation of alternative energy sources.
Licence fees on large, inefficient cars and excise duty on tyres for such vehicles should also be increased.

Psychological shocks were needed to bring about a change in political and electoral attitudes.

He called for a new strategy of energy independence for South Africa.
There should be a planned reduction of petroleum energy and the gradual switch to alternative energy sources.

He believed South Africa could set the pace in diversifying to coal, nuclear power and solar energy research.
He had sufficient confidence in local scientists to achieve these objectives.

The motor industry reacted unfavourably to the proposal.

Mr. L. Wilking, managing director of General Motors, South Africa, said the free play of economic forces was sufficient to solve the energy crisis.
The motor industry was already experimenting with alternative energy sources — “we are even researching a car that runs on cactus juice.

“The only problem with the alternatives is that they aren’t economical.

“As present energy resources run out the alternatives will become economical and they will be introduced naturally.

“Every time the Government intervenes with arbitrary taxation it makes a mistake.”
That petrol tax increase

Reacting to the news that the Government has increased the customs and excise duty on petrol by 0.425c a litre to provide additional funds for the National Road Fund, the Automobile Association says it is gratifying to note that the increase is being absorbed by the oil companies, and not passed on to the consumer.

The AA pointed out that it had repeatedly, in the past, suggested that the whole petrol price structure be reviewed. The fact that some oil companies are offering rebates to buyers of petrol in substantial monthly quantities, or had actually reduced the price to all consumers — if only for a few days — coupled with their agreement to absorb the latest increase, suggested their profit margin was not as narrow as the public had been led to believe.

MOTORING
by
Reg Williams

Moreover, it would be reasonable to conclude that the motorist had, all along, paid more for his petrol than was really justified.

That was the extent of the AA’s comments, but there is more to it than that. As I have said before, in these columns, the Government wants to keep its cake and eat it as well.

The repeated pleas for fuel conservation, and the rather strict measures to force the motorists to use less, were successful. So successful, in fact, that the Government found one easy (for them) source of money shrinking.

It would seem the latest 0.425c increase is to go to the National Road Fund, which already takes quite a slice out of every litre sold. With fewer litres sold (at the Government’s behest, of course) there was less going into that Fund. Thus the extra 0.425c on each litre.

But another sizeable slice goes to the Sasol II Fund, and that, obviously, is also shrinking. When the Government decides to increase the customs and excise duty on petrol once again to make up the shortfall in that Fund, who will then bear the extra? Certainly not the oil companies. Certainly not the filling station and garage owners.
U.S. dollar in trouble

Financial Editor

THE U.S. dollar was again in trouble in foreign exchange markets yesterday. In Frankfurt it touched a new all-time low level. It was quoted in early trading at 2.3549 marks compared with last Friday's rate of 2.3575 marks.

The speculative attack on the dollar, in favour of the yen and deutschmark, has now been in progress for more than two weeks.

The Standard Bank's International Business Report states that the reasons for the dollar's fall are the awesome forecast of a $25 billion dollar annualized trade deficit during 1977 and the apparent complacency by Treasury officials.

It was significant that, excluding oil imports, the U.S. would register a projected trade surplus of plus or minus 20 billion dollars this year.

In other words, apart from bolstering Opec oil revenues, the U.S. was not making its much vaunted contribution to global economic recovery. Like Germany and Japan, it was accumulating large merchandise surpluses in its trade with non-Opec countries.

Large surplus

The bank adds that when it is borne in mind that the trade deficit is offset by a large invisible surplus and that the U.S. attracts substantial inflows of Opec funds on capital account, the contribution to recovery becomes even more dubious.

"The campaign by Treasury officials to force appreciations in the currencies of major trading partners has succeeded in securing a competitive advantage, which should be exploited by export-oriented concerns in America."
Mercury correspondent
NEW YORK — Increasing dependence on coal for energy will ultimately wreck the earth’s environment by increasing the global surface temperature by five degrees Celsius, disrupting food production, and raising the ocean levels by 6m, a team of scientists has warned the United States National Academy of Sciences.

Their report will seriously embarrass President Carter, who has urged a massive return to coal away from nuclear energy.

The report, which follows a two-and-a-half year study, explains the ‘highly adverse consequences’ that will follow if the world decides to depend mainly on coal for the next two centuries.

The main worry is the release of carbon dioxide into the atmosphere resulting from coal burning.

Carbon dioxide acts like glass in a garden greenhouse, which admits the sun’s heat, but does not allow it to escape. The extra heat caused by this “greenhouse effect” would cause substantial melting of the polar caps.

Cities like London and New York would ‘suffer permanent flooding and many parts of the world would no longer be able to produce wheat and corn.’
Oil firms accused of abuse

Mercury Reporter

The director of the Consumer Council in Pretoria, Mr. Johann Verheem, has accused oil companies of abusing privileges and disregarding the elements of free marketing.

Mr. Verheem said yesterday that recent developments in the petrol retailing had been so conflicting and disturbing that the question had now arisen whether the oil companies were abusing certain privileges and whether, at that time for the entire petrol marketing system to be overhauled.

"The events of the last few weeks have demonstrated the oil companies' unnecessary disregard of too many of the basic elements of free marketing," he said.

According to Mr. Verheem, that was followed by threats to cut off supplies to discount dealers which was followed by reports that oil companies were preparing to ask for further increases.

"It is true that oil companies can make dealers maintain prices without contravening laws affecting resale price maintenance. But when they begin to abuse this concession one is inclined to ask whether the entire system should not be examined in the national interest," he said.

Mr. Verheem appealed to the oil companies to voluntarily allow owners of filling stations to conduct their business on a market-oriented basis. He said this would also mean that filling stations could allow the consumer quantity and cash discounts.
Squabble delays energy project

BRUSSELS. — Torn by nationalist squabbling, the European Common Market failed once again yesterday to go ahead with an ambitious fusion energy project that promises a future free of imported oil and growing plutonium pollution.

With Princeton University hovering in the wings, hoping to lure away any of the pioneer European scientists engaged on the project, the Common Market Foreign Ministers yesterday decided only to put off a final decision until September.

Meanwhile, contracts and working credits for about 40 scientists engaged on designing the project were extended from July 31 to September 30.

But when they came to debate the subject, the Ministers could find no solution to the antagonism between Britain and West Germany over where to site the project.

If the $180-million project works as its proponents claim, it could point the way to a limitless and clean source of energy using the same sort of forces found in the interior of the sun. — UPI.
Escom happy for now over capital

By CHRIS CAIRNCROSS
Industrial Editor

THE ELECTRICITY Supply Commission does not expect to have to alter its tariff structure any further to fund 65% of its capital expenditure commitments from internal revenue. The present tariff can meet this level of internal financing if future proposed capital expenditure is viewed at 1977 prices, says Escom's general manager, Mr Jan Smith.

He said in an interview that a further tariff increase this year was unlikely. However, inflationary pressures would inevitably increase the level of internal financing required. But it was unlikely that it would be on anything like the same scale as in the past year when charges were lifted by about 70%.

Much might also depend on how successful Escom was in obtaining the balance of its capital needs from both the domestic and foreign capital markets, he said.

Escom is committed to a huge expansion programme, which it believes is at a rate which will keep just ahead of South Africa's demand for electricity. The chairman of Escom, Dr R L Straszucker, has estimated that a total installed capacity of 68 000 MW will be required by the year 2000.

Mr Smith estimates, on this basis, that national electricity consumption will increase at an average compound rate of about 6.2% from 1976 to 1986. "Therefore, it is expected that over the same period Escom's total sales will increase at an average rate of about 7% a year."

Escom is committed to capital expenditure of R2 100 million, which covers contracts already signed. These include Koeberg nuclear power station, Matla and Dwina. It is expected that this commitment will be met in the next five to seven years.

"It is anticipated that further contracts will be entered into which will increase that amount committed to date," he says. About R1 300 million is covered by extended credit facilities, which means that the rest will either have to be funded from internal sources, or an attempt will have to be made to raise loans.

The former seems more likely as the amount involved is well below the 65% level which Escom hopes to meet from its own resources.

Financing of capital expenditure in 1976 was a long way below this aim. Total spent on capital projects was R443 million, of which R158 million, or 36%, came from internal sources. External loans provided the balance.

The unwillingness of overseas institutional investors to channel large amounts of finance to South Africa is the main reason Escom is looking more to its own revenue sources.

In the past, overseas finance constituted a significant proportion of Escom's borrowings. Of the R576 million raised in 1975, R524 million was foreign finance. Last year R300 million of a total R718 million was borrowed overseas.

The servicing and repayment of these loans is a heavy drain on Escom's resources. Loan servicing charges in 1975 totalled R215 million (R165 million in 1975), which represented 32.5% of expenditure.

However, included in that amount is R57 million, which represents interest on internal loans and which, therefore, can be described as a source of internal finance, says Mr Smith.

Repayment of loans by Escom is expected to reach R250 million this year, about R30 million above 1976.

According to Mr Smith the larger capital requirements plus the shortening of certain loan terms should increase Escom's repayments in the years beyond 1977.

The picture that emerges is...
Big electricity rises unlikely

Mercury Correspondent

JOHANNESBURG—Rapid increases in electricity charges are over—for the time being at any rate—Escom's general manager Mr. Jan Smith said yesterday. There will be increases in the future but not at the steep 70 percent of last year.

Much may depend on how successful Escom is in obtaining the balance of its capital from domestic and foreign capital markets.

Escom is committed to a massive expansion programme which will keep it just ahead of South Africa's demand for electricity.

Escom chairman Dr. R. L. Strassacker has estimated that a 68 000kW capacity will be required by the turn of the century.

Mr. Smith estimates on this basis that national electricity consumption will increase at an average compound rate of about 6.5 percent over the period 1976 to 1985.

"It is expected that over the same period Escom's total sales will increase at an average of 7 percent a year," he said.

Commitments

Escom is committed to capital expenditure of R210 million on contracts which include Koeberg nuclear power station, Matla and Duvha. These will be completed in seven years. Further contracts are expected.

About R1 300 million is covered by extended credit facilities, which means that R800 million will have to be funded from internal sources or through loans.

Internal funding seems more likely as R600 million is well below the level Escom hopes to meet from its own resources.

Financing of capital expenditure during 1976 proved to be a long way from achieving this aim. Capital projects cost R643 million, of which only R189 million, or 25 percent came from internal sources. External loans provided the balance.

FOUR-HOUR BLACKOUT

Mercury Reporter

MANY parts of Westville and Reservoir Hills were without electricity yesterday evening because of a cable fault and subsequent overload on a second cable at peak hour.

A spokesman for the Durban Corporation Electricity Department said the power supply, stopped by a trip switch after the overload began, was back to normal within four hours. The various sections were linked up piecemeal, power being transferred to auxiliary cables.

The unwillingness of overseas institutional investors to lend money to South Africa is the main reason Escom is looking to its own revenue sources for capital.

In the past foreign capital has constituted a significant proportion of Escom's borrowings. Of the R570 million raised in 1975, R225 million was foreign. Last year R600 million of a total of R715 million was borrowed overseas.

The servicing and repayment of these loans is a heavy drain on Escom's resources.

For instance, loan repayment and interest in 1976 totalled R215 million (R518 million in 1975), which represented 32.8 percent of total expenditure.

Interval

However, included in that amount is R57 million, interest on internal loans which can be described as a source of internal finance, says Mr. Smith.

Repayment of loans by Escom is expected to reach R280 million this year, about R60 million above 1976 levels.

According to Mr. Smith, the larger capital requirements plus the shortening of certain loan terms should increase Escom's level of loan repayments in the years beyond 1977.

The total picture that emerges is that if South Africa does not wish to experience shortages of electricity in the future, it will have to dig deeper into its pockets.
BY TONY KONDRAKMAN

Victorian expansion

near, report warns

Energy crunch is
Sasol petrol swindle

JOHANNESBURG — Sasol has offered to pay the East Rand Administration Board R4 500 following the discovery of a petrol delivery swindle involving 28 331 litres.

Extensive shortages were noticed in the second half of last year at the board's pumps in Kwa Thema near Springs and Krielhong, Germiston.

According to an ERAB report, the Sasol driver was allegedly selling petrol and debiting it to the ERAB account after claiming to have delivered it late at night.

Sasol has offered to pay R4 500 of the total loss of R6 626.

The board has accepted the offer. — DDC.
Fuel theft pay-out

Mercury Correspondent 2/8/77

JOHANNESBURG — Sasol has offered to pay the East Rand Administration Board R4 600 following the discovery of a 23 331 litre petrol delivery swindle.

Extensive shortages were noticed in the second half of last year at the board's pumps in Kwa Thema, near Springs, and Katlehong, Germiston.

An investigation showed that Sasol was delivering petrol late at night when no board official was available to control delivery. Receipts were being signed by an unauthorised person.

According to a report on the matter, the Sasol driver was allegedly selling petrol and debiting it to the board's account after claiming to have delivered it.
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Oil companies last who should moot tax levies

I have heard some ridiculous suggestions in my time, but few that could match that of the managing of Total South Africa, Mr A. Hough, for a higher petrol tax in order to provide a fund for energy research.

Reaction to the suggestion was quick and strong, and the Director of the South African Coordinating Consumer Council, Mr Johann Verheem, said: "This is a good example of attempts to manipulate customers under cover of the pretence that it is in the national interest.

At present the consumer makes a direct contribution of 10.36 cents per litre of petrol at the pump towards the development of energy sources and other levies. This is quite apart from the indirect payments which have been made over and over because of escalation of the original contribution.

"One would like to know what Total's contribution is in this regard. If the oil companies performed their major role in the national economy to a greater extent - capital formation and, ploughed more of this back into the areas where they obtain their profits - better provision would have been made for research" he said.

Mr Verheem said while it was true the consumer would benefit from developments in this field, it was also true that when he utilised those benefits he would have to pay extra for them.

"Mr Hough compared overseas petrol taxation with that of South Africa. This is meaningless. A more meaningful comparison would be between the amounts of time a person must work to earn the price of a litre of petrol.

"Here the South African loses out badly - he must work for 12 minutes and 24 seconds to earn this, compared with the average worker in the European economic community, who works for six minutes and 39 seconds.

"Even with the allegedly massive taxation in Italy, the industrial worker there takes less time - 11 minutes and two seconds to earn his litre of petrol" said Mr Verheem.

If Mr Hough thinks so strongly about the need for a massive fund for energy research, I suggest he takes 50 per cent of Total's net profits from its South African operations and donates it towards starting such a fund. And should the other oil companies agree with him they, too, can make similar donations.

The oil companies are already in bad odour over the bulk discounts to large customers. Such suggestions as Mr Hough's will do nothing to make the air smell sweeter as far as the already overtaxed South African motorist is concerned.

May I suggest to Mr Hough that he pay up, or shut up.
AA: relax petrol curbs

JOHANNESBURG — The director-general of the Automobile Association, Mr E. Turk, yesterday called for a relaxation of the weekend petrol sales ban.

Mr Turk said fuel conservation measures in their present form were hurting the motor industry and tourism. Hotels were losing business to neighbouring countries.

"Even the Kruger National Park, always regarded as a tourist magnet, is no longer attracting visitors in the same numbers."

Mr Turk said the AA recognised the need for fuel conservation, but felt saving measures ought to be reviewed. "A compromise is necessary."

He suggested an extension of closing hours coupled with a "two-tier petrol price system" for weekends. — SAPA
Nog een maak ou olie reg

'n NUUTGESTIGDE maatskappy, Condor Oil, gaan 'n gesofistikeerde smeerolie-herraffineringaanleg in die CHAMDOOR-nywerheidsgebied by Krugersdorp oprig en bestuur. Die aanleg sal teen 'n koste van ongeveer R2 miljoen op in perseel van 2,2 ha opoprig word.

Die aanleg sal ook die aanvangsevermoë van 1 miljoen liter herraffinering olie per jaar beheer. Die produkte is beplan om in die middel van aanstaande jaar te begin.

Die ontstaan van Condor se nuwe aanleg en die produkte van motor- en nywerheidsolies sal 'n belangrike bydrae lewer tot die besparing van buitelandse valuta, asook die potensiaal behoud van die land se hulpbronne.
A major shortage of oil could confront the non-Communist world as early as 1985, according to the Workshop on Alternative Energy Strategies, a private group of 55 business, government and academic leaders from 15 countries.
Petrol-selling hours may be extended if...

PRETORIA - The Government is having a close look at suggestions for extending petrol-selling hours, and the key factor is the effect this would have on the balance of payments.

Pleas for opening pumps on Friday afternoons and Saturday mornings have come from the Motor Industries Federation, the Afrikaanse Handelsgenootskap, the Automobile Association, the hotel industry and the National Parks Board.

Pretoria sources stress, however, if extended hours mean a significant increase in petrol consumption the Government is virtually certain to reject the suggestions.

It is doubted whether the Automobile Association's proposal that petrol should be sold at a premium during extended hours would be a big enough deterrent to curb an explosion of weekend consumption. This would, of course, depend on the size of the deterrent.

The worsening plight of the tourist and hotel industries, hard hit by weekend restrictions, is the major reason for the agitation for weekend petrol availability.

The motor industry and the AA believe extended selling hours would boost car sales.

The plight of the industry is apparent from the announcement that Toyota profits during the past six months have dropped by more than R1 million.

It is claimed that only two of the 12 motor manufacturers have their heads above water as car sales continue to shrink.

There are strong economic reasons, therefore, why the Government should move to relax weekend restrictions.

The director of the National Parks Board, Dr Rocco Knobel, said normal weekend tourist numbers, outside of school holidays, had decreased by more than 40 per cent. This was directly due to weekend restrictions.

The board has suggested to the Government that pumps be allowed to stay open in the park on Friday and Saturday evenings. The suggestion was still being considered by the Department of Commerce, Dr Knobel said.

It is pointed out, however, that fuel is the biggest single drain on the country's scant foreign exchange resources - up to R1 200 million is spent on fuel annually - and any action that would accelerate the drain is virtually out," one source said. - DDC.
The nuclear prospect

The world is going to need uranium for its power needs in the coming decades, inevitable expansion shall or shall not be used, is profoundly disturbing to many other nations.

But as recent events have shown, Australia may be prepared to modify its hard line on proliferation in return for commercial concessions. It wants assured access to European markets for its beef and steel.

- A campaign of all-out opposition to nuclear power, which began in the US in the Sixties and has spread to most non-communist nations with nuclear ambi-

Nuclear power station in UK . . . in the future, a common sight world wide?

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- Governments have arrived at no conclusion on how to handle this threat to their authority. Some, like Britain, have been conciliatory to an extent that may yet threaten the security of their energy supplies in the Eighties. Some like Germany, have been unsympathetic to such a degree that major public disturbances are a risk each time a nuclear project is launched.

- Uncertainties about world uranium reserves have been brought sharply into focus since President Carter's anti-proliferation policy in April. This policy assumes that there will be ample uranium to meet a large world nuclear demand without the necessity of recycling spent fuel or using plutonium, at least for the next few decades.

US confidence appears to rest heavily on that nation's possession of 50% of the known uranium reserves of the non-communist world, and of a stockpile of between one and two years of world demand. But critics point out that the greatly increased effort in uranium exploration since 1974 has served only to con-

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nuclear politics was fast declining because of such events as the Indian nuclear bomb explosion in 1974, persuaded two more of the world's major uranium suppliers Canada and Australia --- to join it in re-asserting control. The idea that about 75% of the uranium reserves of the non-communist world are controlled by three nations, who want to dictate how the commodity shall be traded, is an old idea.

---

firm earlier estimates of reserves, not to discover fresh uranium deposits. In short, for the world at large the anti-proliferation policy is founded on a major uncertainty.

- The brief history of uranium as a major commodity offers little to encourage mutual trust at this stage between customer and supplier nations. Too often international agreements have been breached unilaterally. Since last year, Canada has been withholding supplies of oxide for several European reactors; and the US has been withholding supplies of highly enriched uranium for several European research reactors, as well as for SA's Safari 1. And although the Australian government has at last announced its decision to exploit its new uranium discoveries, the official opposition has already made it clear it may renege on any undertaking by the present administration in this regard. Only SA, of the major non-communist suppliers, is willing to continue selling on purely commercial terms, without politically inspired clauses which could affect its customers' future security in energy supplies.

These six uncertainties are not, at this stage, sufficiently amenable to quantification to make an attempt to forecast uranium demand confidently. In fact, this task is emerging as the major one for the Uranium Institute in London.

But one direct consequence of the uncertainties is that the longer time-scale now being assumed, from concept to completion, of nuclear power stations --- up to 10 years --- harmonises happily with that required to open up a large new source of uranium. Another direct consequence is that, instead of the rather alarming rate of nuclear expansion, 20% or more, forecast in the euphoria following on the big oil (and coal) price increases, a more realistic assumption today would be 14%. At this rate of growth, and given the political support so conspicuously lacking in recent years, the uranium industry should be able to plan for steady expansion until the Nineties.
Deur DAVID MEADES

MET Trek-Petroleum, vofiliaal van Trek-Beleggings, kan dit op die oomblik beswaarlik beter gaan. Hierdie maatskappy is steeds besig om sy sterk groeikoers te handhaaf. En dit gebeur in 'n stadium waar tale ander oliemaatskappe nie eens hul bestaande posisie kan handhaaf nie.


Terselfdertyd misk het die maatskappy na 'n syfer van R126 miljoen vir die lepende jaar, wat 20 persent meer as verledo jaar se R106 miljoen sal wees.

Maar hiervoor die lewe lyk aan die konservatiewe kant om 'n mens sal nie verbaas wees as R130 miljoen vandaag behaal word nie. Terselfdertyd misk die maatskappy na 'n verhoging van sowat 7 persent in sy volume, wat met 'n vergelyking van tussen 2 en 3 persent vir die bedryf as 'n geheel vergelyk.

Die skitterende prestasie van Trek oor die afgelope ses maande is ondanks 'n prysoorlog in die bedryf behaal. Sake-RAPPORT het ook al die dae dat hierdie prysoorlog heelwat kwafveld was as wat algemeen gelegs het, valer in die grootskaliemark.

Volgens mnr. Steyn het die verhoging in die prys van brandstof natuurlik in groot uitwerking op die styging in die maatskappy se omset gehad.

Maar die mooi styging in die hoeveelheid brandstof verkoop, kan uitsluitend aan die toegewyde pogings van Trek se personeel toegekry word. Met die insinking in die ekonomie is op almal 'n beroep gedaan om die hand aan die ploeg te slaan. Die reaksie was merkwaardig, se mnr. Steyn.

Die maatskappy is ook besig om al hoe sterker op die grootskaliemark te word. Net in die eerste ses maande van die jaar het Trek sowat 15 persent meer groothandelsklinte bygekry.

Vervolg op bl. 3.
A man died. Five policemen and 100 people were injured. The scene: last month's demonstration against France's Super-Phoenix nuclear reactor. Meanwhile construction of Koeberg in the Cape continues peacefully.

This article is adapted by CARE from a report in African Wildlife magazine, written by the editor, Creina Bond.

"Nothing man does, or makes, is or ever can be, 100 percent safe," Dr. A. J. A Roux, president of South Africa's Atomic Energy Board said in an interview with CARE (The Star's Environmental watchdog).

"What we have to do is to make sure those things are safe enough." And that's what the board is about — is nuclear power safe enough?

Stringent safety precautions account for one-fifth of the cost of a nuclear power plan. The precautions are necessary. Something might go wrong.

In South Africa licensing the reactors will be the job of the Atomic Energy Board — and it worries many people that this board also has the job of promoting atomic energy.

Dr. Roux says: "Our standards demand that the chances of the worst possible accident that could happen be lower than one chance in 10 million a year."

Despite official reassurances about the safety of nuclear power, the plants have a disturbing history of mishaps.

At Brown's Ferry, the world's biggest nuclear power plant, a man with a candle wandered around checking for draughts. His candle set overhead wires alight, destroying safety devices and seven hours of chaos and panic followed.

The Vermont Yankee plant had 17 major shut-downs in its first 10 months of operation.

The list goes on, but it is the danger of the plutonium that is most worrying. One particle lodged in a lung can induce cancer. Ten kg can be used to make a crude atom bomb. Worst of all — it has a half-life of 24,000 years and nobody has yet worked out a sensible way of storing it.

South Africa's nuclear waste will be sent overseas, and every metre of the way they will be a tempting target for a terrorist group.

By the year 2000, in the US alone, there will be 600 shipments of radioactive fuel each week. How do you protect that?

Bombs are difficult — but not impossible to make. Remember, nobody gave India her atom bomb.

Despite the dangers, the problems, the costs, nuclear power will provide South Africa with only 23 percent of its power by the year 2000. Consider too: Koeberg will eventually generate 2,000 MW — the potential of the Tugela River alone is about 3,000 MW.
No change in fuel curbs
— Steyn

Pretoria Bureau

There will be no changes in South Africa's fuel conservation measures. This was spelled out by the Secretary for Commerce, Mr. Joop Steyn, when he dismissed rumours that Saturday sales of petrol were on the way.

The introduction of fuel-rationing coupons was impractical, Mr. Steyn said at a press conference, adding that it would be administratively impossible to maintain such a system on such a large scale, as the present vehicle population of 2.2 million compared with the wartime figure of 800,000. It would cost R14 million a year, he said.

"Workers...

"The information available to us indicates that the possibility of achieving any meaningful saving in fuel consumption by means of rationing is not very promising, particularly if account is taken of the fact that there are so many consumers who would have to be given supplementary rations to enable them to perform their essential functions in the country's economy," he said.

The issue of coupons would also affect people who lived in peri-urban areas far from the city centre and relied on their cars to get to work, Mr. Steyn said.

"A further consideration is that our wartime experiences with fuel rationing have shown that the public develop a deep resentment to any type of State action that forces them to stand in long queues."

"Any rationing system would also restrict the basic fuel ration per motorist, to enable us to attain our fuel saving objectives," Mr. Steyn said.

"Our total foreign expenditure on all types of 'petroleum' products has risen from some R130.8 million in 1972 to nearly R1.300 million at present."
South Africa may face oil embargo

LONDON — South Africa may face an oil embargo if it does not cut alleged oil supplies to Rhodesia.

The United Nations Security Council is to be asked next month to urge South Africa to stop sending oil to Rhodesia in a bid to make sanctions effective. If South Africa ignores the plea, the country's own supplies will be threatened through pressure on the oil companies.

The move — almost certainly with Commonwealth backing — will be a precursor to a British request to the Security Council for a UN peacekeeping force to be sent to Rhodesia.

It became clear yesterday that the oil weapon will be wielded against Prime Minister Vorster to put pressure on him to force Mr Smith to accept Anglo-American proposals to be put to him in Salisbury by Dr David Owen.

It seems the mechanics for this new move will start in London on September 3 when the recently constituted Commonwealth Committee on Southern Africa meets to consider the feasibility of giving teeth to sanctions.

The committee on sanctions will meet in New York on September 8 to decide the possibility of enforcing oil sanctions.

Mr McBailey, who has drawn up a comprehensive plan which is already before the Commonwealth committee said yesterday: "I believe the matter will then go to the Security Council with American State Department backing. Every indication we have had is that they are keen on some form of oil embargo against South Africa.

"Although there is no formal link between the Commonwealth and UN committees, it is clear the Commonwealth decisions will be passed to New York for consideration and the British Government has a place on both committees and in the Security Council."

Mr Bailey said his plan involved putting pressure on the oil companies themselves not to supply their South African subsidiaries if they believe oil is crossing the Rhodesian border.

Only if that fails does he suggest an all-out formal embargo against South Africa.

To put maximum pressure on the oil companies, Zambia, which sits on the Commonwealth committee, has already issued writs claiming thousands of rand against the companies for breaking sanctions, and these have been supported by similar writs issued in London by Mr. Tony Rowland's Lonrho company.

In detail, the plan says the parent companies should be required to ensure strict compliance with the sanctions by their subsidiaries; to facilitate supervision of the subsidiaries' parent companies should appoint a director on the subsidiary board with special responsibility for ensuring compliance; where a subsidiary has, as a result of coercion, contravened sanctions, the supply of oil to it should be absolutely prohibited.

Mr Bailey said: "By going for the companies themselves, we steer clear of the long process of trying to enforce an embargo against South Africa in such.

"However, I believe that the United States could bring sufficient pressure to force the Shah of Iran to stop supplying the South African Government." — DDC.
PIETERMARITZBURG — The Bantu Housing Board was attacked yesterday in the City Council for opposing the provision of electricity at the Sobantu African village because it was a luxury.

The board said it would not approve a loan from the Department of Community Development for the rewiring of houses at Sobantu.

Mr. Mike Woolam said it was absolutely shocking that the board could regard electricity as a luxury. He pointed out that the Drakensberg Bantu Affairs Administration Board had recently bought a building in Pietermaritzburg for R235 000. R40 000 earmarked for refurbishing it could have paid for the Sobantu rewiring.

He said there were also complaints that the Government interest on the proposed loan stood at 13 percent whereas the Government had made a loan with interest of 1 percent to save the Jan Richter youth hostel in Pietermaritzburg.

Mr. Peter Harwood pointed out that the board was opposed to a loan being granted for electricity on the grounds that the money should be used to build more houses.
COAL SET FOR A COME-BACK

Peter Rodgers in Istanbul

COAL is back in favour. Experts at the World Energy Conference in Istanbul dismissed with deep scepticism such alternative power proposals as sun, wind and waves (at least until the year 2020) and downgraded nuclear energy to an equal importance with coal in meeting future needs.

Whether the world really requires the vast numbers of new power stations most governments at present assume will be necessary clearly is becoming the subject of fascinating argument might not consumers switch massively and permanently to gas as ways are developed to make it cheaply again from coal and so safeguard supplies when natural gas runs out?

With such questions, more than 4,500 delegates (many with wife and family in tow) spent a hot week trying to decide how to avoid the next energy crisis, underlined with nice timing by daily power cuts in the city.

It is now common ground that there is a risk of a serious shortage of oil, and of more price rises, soon after 2020. This conference's 1985 key report on oil said: "The years 1985 to 1995 seem critical. If the demand for petroleum continues to grow at that time — if there is not sufficient coal and nuclear electricity — there will probably be a shortage and oil prices will rocket uncontrollably."

A new emphasis on coal was foreseen in President Carter's energy policy in April and is the main change since the last conference, in Detroit, in 1974. That was shortly after the oil price explosion of 1973, when nuclear power was industry's answer to shortages.

Since then, a number of hurried and sometimes ludicrously optimistic projections of nuclear power expansion have been discarded.

The Detroit conference, in an ambitious project, set up a commission to examine not merely what can be done by the end of the century — the usual span of such studies — but also prospects to 2020. Its report, prepared by Dr Richard Eden and the Energy Research Group at Cambridge, said that by 2020:

- Power stations will burn six times more fuel than now.
- Nuclear power will provide less than 60 percent of electricity.
- To bridge the remaining gap, annual coal production will have to quadruple, at least. Will the coal industry swing into action fast enough to meet the demand, which Eden says will rise rapidly from the mid-1980s? The job is difficult. A second key report, prepared by the West German Coal Research Institute, took great pains to spell out the enormous problems merely of trebling present world coal production over 40 years.

Customers, particularly power stations, are not willing to pay enough now to make big new coal investments attractive, most coal delegates thought it could be done only with government intervention, and particularly with long-term guarantees. Unless colliers begin to replace oil tankers, coal will be a help only to nations already rich in it.

The theory that it will be cheaper to use coal to make gas than to burn it in power stations did not go down at all well when it was put by Robert Hackett and Aubrey Lloyd Dodd, of British Gas.

They said that growth in electricity should be reserved for powering machines or lighting and other specialised needs rather than for heating. This would stop the waste of fossil fuel burnt at only 25 percent efficiency in power stations and minimise the safety and amenity problems of nuclear power.

Nobody feared a shortage of coal reserves. With present technology and economics there is enough for more than 200 years at current mining rates. Indeed, total world resources could last 3,000 years according to the West German Institute's figures.

The real problems are the everyday ones of investment, manpower, environmental effects and, particularly, stagnant demand. Even after the price explosion, oil is still competitive. Coal will get moving only after another big oil price rise. Edwin Phelps, president of the big US company, Peabody Coal, ironically commented: "When there ain't no other thing than coal, then the price is goin' to be right."
For immediate release

FUEL CONSERVATION MEASURES

Press statement issued by the Minister of Economic Affairs

Although I cannot overemphasise the necessity for us to continue to save as much fuel as possible, I must point out that it has always been and remains the Government's objective to apply the existing fuel conservation measures in a fair and reasonable manner.

I have recently received a considerable number of applications from parents of national servicemen in their initial training for the granting of petrol permits to them in order to enable them to attend special parents' days which are periodically arranged by the Defence Force. While it is not possible for me to grant open permits to national servicemen and their parents to visit each other regularly, I am nevertheless, of the opinion that there is merit in the requests that in exceptional cases, such as the special parents' days arranged by the Defence Force, the parents of national servicemen should be accommodated to some extent in the form of granting petrol permits to them.

I have, therefore, asked the Controller of Petroleum Products to arrange with magistrates that parents of national servicemen who receive written invitations from the Defence Force to attend such special parents' days,
days, may be granted petrol permits for this purpose on presentation of such invitations.

I nevertheless trust that, as in the past, we can continue to rely on the whole-hearted co-operation of all our people to use fuel sparingly and to observe the prescribed speed limits.

ISSUED BY THE DEPARTMENT OF INFORMATION AT THE REQUEST OF THE MINISTRY OF ECONOMIC AFFAIRS

PRETORIA

2 SEPTEMBER 1977
**Chemico só geknow**

Deur DAVID MEADES

AS die Regering voortgaan om sy daadwerkelike stuur aan die herraflinieëing van gebruikte olie kleiner — te maak, kan dit die einde betekens van ’n strategiese bedryf wat maar pas op dreef begin kom. Hierdie bedryf begins nou eers betekenisvol ontwikkel en het staatskontakte broodnodig.

**Oorskok**

Intussen is die oliepys van ruolie telkens verhoog en ’n mens kan die vraag vra van dié keerkeurs in ruolie, so onthou. Vindt die laastea in ruolie, in die stad. Chemico moet afkloppies van die gebruikte olie in ’n baie laer prys aan die mark. Dit was ’n 50% daal van die prys van die gebruikte olie.

**Opgelos**

Weens die gestigte onderneming van die saalas was uit die ingevolge produusie reeds deel van die bedryf verkoop. Dit is bekend dat daar op die onderzoekswêreld 35% van die gebruikte olie uit die natuurlike staatsmeelekomst afkomstig is.

**Ons se...**

MNR. DONALD MASSON en ander manne in die bedryf vir die herraflinieëing van gebruikte olie het reg om ongelukkig te voel wanneer die staat kontak treed. Die handel is traditioneel via hulle self gegoed, maar die wette en regulasies het dit moeilik gemaak. Die staat kontak het die reg om die gebruikte olie te koop, maar dit is ongelukkig te voel.

Maar die daal van die prys het ’n positiewe invloed. Die daal van die prys het ’n positiewe invloed. Die herraflinieëing van gebruikte olie is geknow en die staat kontak is beter.”

**SASOL**

**SASOL** se blou pomp werk nou oorig. Die gestig in die westelijke omgewing en in die hawe van die industriële area. Die bedryf is werklik in die stadscontrole en in die westelijke omgewing.

Daar is toe dat die oliepys van ruolie daal, maar dit het geen invloed op die gebruikte olie. Die staat kontak het die reg om die gebruikte olie te koop, maar dit is ongelukkig te voel.

**Blou pomp laat rol**

MNR. DON MASSON, bestuurende direkteur van Treks-Beleggings, het volgens oog getroug oor wat ’n mens byna helemaal misstaan het.

Met die aanleg van ruolie en die gebruikte olie het die staat betrokke. Het die staat kontak het die reg om die gebruikte olie te koop, maar dit is ongelukkig te voel. Die staat kontak het die reg om die gebruikte olie te koop, maar dit is ongelukkig te voel.
The risk of failure is basic requirements such as other inputs, at the and the difficulty of white farmers.

Placed in this situation, it is not worth the skill to cultivate and little return, he will he should. Even though unemployment, it is at from migrancy than from (The Ceylon Report rec.

This outcome is not The heavy loading of many potentially viable of cheap labour and cash stay in business. These resources and a distor.

THE COMPLETION of the massive R1 900-

million Sasol II oil-from-

coal complex at Secunda in the Eastern Transvaal will significantly increase South Africa's ability to indefinitely survive any oil embargo imposed by the OPEC countries, which control about 67 percent of the world's known crude reserves.

When the project comes on stream in 1981, it is expected to slash the country's oil import bill by R550-
million a year at today's prices.

South Africa spent R1015-million on imported petroleum products in 1975, the last year for which figures are available.

The oil-from-coal operations at Sasolburg in the Orange Free State and at Secunda will, it is predicted, supply about 21 percent of the country's total demand for petrol by 1985.

Oil, according to the latest estimates, currently accounts for 27 percent of South Africa's total energy consumption. Of this, only 34 percent is refined to petrol-driven engines.

By 1980, say the experts, only 25 percent of the country's energy needs will be derived from oil.

Most of the energy will be generated by coal (74 percent), while the balance will be supplied by nuclear power (two percent) and hydro-electric power (one percent).

The new Sasol plant will itself produce about 12.6 million tons of liquid fuel a year, as well as 150 000 tons of ethylene, 50 000 tons of chemical substances, 180 000 tons of tar products, 100 000 tons of ammonia and 75 000 tons of ammonium.

Even now this country, like Israel, has been described as only "moderately vulnerable" to oil sanctions by an American expert, Edward Krapels, although oil supplies to South Africa have been officially embargoed by the Organisation of Arab Petroleum Exporting countries since 1973.

Krapels, formerly with the United States Federal Energy Administration, says in a report "Oil and Security," prepared for the International Institute of Strategic Studies, that South Africa has sufficient refining capacity to meet current domestic demand.

He points out that neighbouring states cannot deprive the country of petrol and petroleum products without first destroying its refining facilities.

He adds that while the country is vulnerable to a shut-off by suppliers, it continues to receive about 250 000 barrels of crude oil a day from sources which he fails to name.
SA may face oil sanctions

LONDON — South Africa may soon have to pay the price for her continued economic support of Mr. Ian Smith's Rhodesian Government.

The momentum to enforce international sanctions against South Africa significantly increased yesterday with news that the full Commonwealth Committee on Southern Africa will meet in London within the next 10 days to ratify a plan to enforce the key oil embargo on Rhodesia.

The plan apparently provides for tough oil sanctions against South Africa to oblige Mr. Vorster in turn to put a stranglehold on Mr. Smith.

The announcement of a full committee meeting to ratify the findings of a smaller Commonwealth "working group" on sanctions came out of the blue and means that the working group has been told to find solid proposals soon.

— DDC

GN AFRICAN WORKERS IN RHODESIA

1972-75

<table>
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TABLE 7.

FOREIGN AFRICAN WORKERS IN RHODESIA

1956-75

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As an ...........
Cutting costs of wiring buildings

PRETORIA — The Bureau of Standards has announced that new systems for the electrical wiring of buildings, which may save millions of rands without sacrificing safety, are being investigated by an ad hoc committee.

"Should any of the systems produce the same results in South Africa as in the overseas countries where they are now operating, the financial implications for the large-scale provision of electricity in major complexes like Soweto and other urban areas will be very favourable," said the Bureau.

A report of a tour to West Germany and Britain last year by one of SABS's chief scientists, said certain electrical wiring systems investigated in those countries involved installation costs some 35 per cent lower than the corresponding costs of existing systems in South Africa.

The ad hoc committee has been formed under the auspices of the National Development Fund for the Building Industry, and includes representatives of SABS, the Department of Labour, the Association of Municipal Electricity Undertakings, the Electrical Contractors Association, Escom, the CSIR, and representatives of organised labour. — SAFI
FROM THE ACTING RECTORY

CONFIRMATION

FR. 77.

For the benefit of the parents of the Confirmation candidates, I would like to let them know that the Confirmation will take place on Sunday, 28th October, at 5.00 p.m. The candidates will be confirmed by Bishop Patrick Moloney, who will also celebrate a Mass. All those not confirmed will make their first communion at this service.

It is important that the candidates show up for the classes and Mass regular. They need preparation for their Confirmation, because some of the candidates have only been to Church once. This is why I appeal to all the parents to come with them to Church on Sunday morning, to encourage them and to continue to do so after they have been confirmed. So that they will continue to be regular communicants, even after they have been confirmed.

Probably the main reason why some of the candidates remain faithful after they have been confirmed is because of the lack of advice from many parents. You as parents can set a good example by showing your children how to be regular worshippers and encourage them to be regular communicants. This can be done during the instruction period and after they have been confirmed. Young people require guidance and encouragement otherwise they tend to drop out and this is why so many have been confirmed.

I therefore appeal to parents to encourage the candidates to be regular in their attendance at Mass and at classes during their preparation and to continue to do so after they have been confirmed. In this way you will be able to influence them to become regular and faithful members of Christ's Church.

INTENTIONS

Mon. 1st: Prayers awaiting execution
      2nd: "Political" prisoners

Tue. 2nd: "Political" prisoners
       3rd: "Political" prisoners
       4th: Sr. Mary, in whose care 200 prisoners are
            under guard. May the Holy Spirit help her
            to fulfill her mission. Amen

Wed. 3rd: "Political" prisoners
       4th: "Political" prisoners
       5th: May the Holy Spirit guide and inspire all who share a vision of the
           world in which men are called to live together in peace and
           harmony. Amen

Sat. 6th: May the Holy Spirit guide and inspire all who share a vision of
           the world in which men are called to live together in peace and
           harmony. Amen

July: May the Holy Spirit guide and inspire all who share a vision of
       the world in which men are called to live together in peace and
       harmony. Amen

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Price of Oil Falls

- Reduced prices for oil fall in the wake of reduced demand.
- Benefits for suppliers and consumers alike.
- Savings for households and businesses.

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B. P. W. 1965

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20
Durban firm gets world-wide rights

Electronics deal a pleasant shock

BILL FAILL "MERCURY BUS" 9/9/77

A DURBAN firm has just signed a contract giving it exclusive world-wide rights to manufacture electronic equipment with a potential value of tens of millions of rands.

A local inquiry for 500 of the units — voltage inverters — worth about R400 each has already been received.

Colourtel Electronics, after negotiations with the Swiss inventor of the inverter, are now going ahead with manufacture on a small scale but are planning early expansion to factory production.

One of the reasons why the contract was awarded is that manufacturing costs are very favourable in South Africa, said Mr. Dave Smiley, marketing director of Colourtel Electronics.

The DC-AC voltage inverter, which incorporates a new approach, has high efficiency and gives a stable output. From a 24-volt battery source of direct current, for example it gives 220 volts of alternating current at 50 Hz, with 1 Kw of power.

This is only one of the many systems that are possible.

The inverter’s practical uses include all situations where alternating current is needed but is not available — caravans (for running a TV set perhaps), boats, buildings without mains electricity, or as a standby in case of power failure.

Following an extensive survey, American experts assessed the value of the U.S. market for the inverter at 20 million dollars a year — over R1.7 million. They took into account its unique design, which involves soft commutation, silicon controlled rectifier technology, with stabilised, tuned converter circuitry.

The contract resulted from a contact made with the inventor’s son by his friend, Mr. Peter Heldt, technical manager of Colourtel Electronics.
No power hike for Border

JOHANNESBURG — Most Border electricity consumers can breathe a sigh of relief — prices are to be increased an average 15 per cent in the New Year, but not in the Natal and Border undertakings.

But the Free State undertaking which supplies Barkly East and Elliott among other areas will up its prices 16 per cent.

The increased tariffs will range from 26.7 per cent for the Orange River undertaking to 3.3 per cent in the Western Cape.

The increase in the densely-populated and industrialised Rand and Free State area will be 10.3 per cent. In the Eastern Transvaal prices will go up 16.5 per cent and in the Northern Cape by 12.4 per cent. The Eastern Cape undertaking will put up its tariff by 14.3 per cent.

An Escom spokesman said last night the increases applied to the commission’s standard tariff charges. He could not say which municipalities would pass on to consumers in the way of increases.

Announcing the increases, Escom said they provided for the maximum level of internal financing of the commission’s capital needs permitted in terms of this year’s amendment to the Electricity Act.

Because of the serious financing difficulties experienced over the past two years, the tariff increases for 1976 and 1977 had been applied approximately equally to all undertakings.

As anticipated, the establishment of the national supply network had led to a progressive narrowing of the cost differences between undertakings over the years.

These factors had resulted in considerable differences between the tariff increases, to the various undertakings in 1978.

“The advantage of the three coastal undertakings — the Cape Western undertaking (increase 5.3 per cent), Border undertaking (no increase) and Natal undertaking (no increase) — is evident,” Escom said.

— SAFAP.

it will provide a lot of the
will make you very suitable
S.A.B.C. or elsewhere.

rformers Diploma or Combined
ru will find the technical
and camera quite easy. We
techniques.

J.A. degree courses given
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with the S.A.B.C. or else-

vice of the S.A.B.C.; Film
vice to the Secretary, Depart-
rre, Orange Street, Cape Town
UK assurance over oil boycott

PRETORIA — The Foreign Minister, Mr R. F. Botha, has been assured by the British Government that Britain does not make authoritative statements on hypothetical situations such as a possible oil embargo against South Africa.


This quoted a Foreign Office spokesman as saying the question of oil sanctions against South Africa was connected to a Rhodesian settlement.

Mr Botha said yesterday he had taken note of the British viewpoint on making authoritative statements about hypothetical situations.

"I do not think that any further comment is necessary," he said.

A communication received from the British Embassy here yesterday set out the Foreign Office's replies to questions at Monday's conference on a report that Britain would not veto such a resolution.

A spokesman for the Foreign Office's news department had said he was not aware of any resolution tabled at the United Nations concerning oil sanctions against South Africa.

Meanwhile, US officials are studying the possibility of an oil boycott.

A State Department spokesman replied yesterday to a direct question: "The United Kingdom plan is still under consideration and we are not going to have any comment while this is so." — SAPA-DDC.

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Why do you wish to follow this proposal?

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If you disagree, write to the Royal Dutch Shell Co., P.O. Box 955, The Hague, and the Shell Co. will be advised to hold.

Environmental considerations:

The absolute minimum enclosed in the months of July and August. Where the mean daily maximum temperature of Amsterdam is 30°C, the mean daily minimum temperature is 15°C. When the mean daily maximum temperature is higher, the mean daily minimum temperature is lower.

January: The month with the highest insolation is also the hottest.
Canelands seen as big source of energy

Bus, N. Mercury

The canelands of Natal could become a major source of energy for South African industry, according to Professor D. A. H. Taylor of the Department of Chemistry at the University of Natal.

Professor Taylor was addressing a public lecture on "The canelands and the oil crisis," which was attended by approximately 60 people at the University last night.

The professor explained that large quantities of bagasse collected from the cane fields could be turned into an alternative source of energy.

Bagasse is used to manufacture the chemical sylvan, from which an oatmeal substance called sylvan can be manufactured.

Fuel substitute

Sylvan can be used as a substitute for petrol.

A furfural plant has been established at Scottburgh by C. G. Smith and Chemicals; it is understood that the plant is only marginally profitable.

However, Professor Taylor feels that another substantial rise in the price of oil could alter the position drastically.

Bagasse is not the only source of furfural and Professor Taylor estimates that with the utilisation of other agricultural waste such as corn cobs, South Africa has the potential to produce one million tons of furfural a year.

This figure could compete with Sasol's potential, said Professor Taylor.


Andeneo, p. 87.
nuclear project

Worker hovers over Koeberg

Concern voiced

heading for trouble
Britain cagey on UN oil sanctions

The Foreign Minister, Mr. Pik Botha, has been told by the British Government that Britain does not make authoritative statements on hypothetical situations such as a possible oil embargo against South Africa.

The British reply follows an urgent South African request for clarification of a London report. This quoted a Foreign Office spokesman as saying the question of oil sanctions against South Africa was connected to a Rhodesian settlement.

Mr. Botha said he had taken note of the British reply and did not think any further comment was necessary.

The British communication said that the spokesman for the Foreign Office news department had said he was not aware of any resolution tabled at the United Nations concerning oil sanctions against South Africa and that, in any event, Britain did not make authoritative statements about hypothetical situations.
Escom keeps public in the dark

In spite of being a statutory body reporting to Parliament, Escom seems to have a predilection for cloaking its affairs under a veil of secrecy, reports KEVIN STOCKS of The Star's Insight Team.

Morale on the staff is also said to be low, he is told.

The Electricity Supply Commission (Escom) seems to operate largely in secret, and to regard itself as answerable to itself alone.

It does have a statutory requirement to issue an annual report and to report to Parliament, and this requirement it fails.

Opposition MPs claim, however, that it is almost impossible to get information not contained in the report.

Last week Escom officially:
Refused to answer allegations about cost overruns, the viability of the nuclear power project, computer blunders, low morale in key sectors of the organisation, and lax control of costing.

This week Escom formally:
Refused to answer allegations that it had awarded a major project overseas when a South African consortium was prepared to undertake the work at a competitive price.

"Rumours"

Escom's public relations chief, Mr. J.C. Uys, branded the allegations as "rumours" and said the commission would not react to them.

The Star pointed out to Mr. Uys that Escom was a publicly-owned undertaking and that the public had an interest in knowing what went on.

He replied that Escom was not publicly-owned in that it did not take money from the taxpayer but raised its own finance.

Mr. Uys agreed that Escom had been set up by Act of Parliament and was therefore a statutory organisation — and then immediately indicated that there was no point in carrying on the conversation.

Sources with knowledge of Escom told The Star this week that despite two major re-organisations in the last five years morale within Escom's engineering and design departments was low.

Tenders

Tender awards, it was claimed, were sometimes handled haphazardly and that this could lead to increased costs.

In one instance to do with equipment for the Matla power station certain recommendations by an investigating engineer had been altered by the engineer's superior.

The alteration meant that equipment offered by one tenderer, which would have been disqualified in terms of the engineer's recommendations, was brought within the scope of the specifications.

This tenderer was actually awarded the contract.

The Star's sources emphasised that the decision to change the recommendations could have been justified in engineering and economic terms at the coal-price ruling at that time.

However, as the change
ESCOM'S EXPANSION PROGRAMME

Power for the future

HE GROWTH in the generation of electricity in South Africa is well ahead of the growth rate of the country's economy. This state of affairs will continue until the end of the century, according to the Electricity Supply Commission.

The power sector was placed in the hands of a French consortium.

The Koeberg nuclear power station, near Cape Town, will have two reactors each with a capacity of 222 MW. Construction is proceeding and the first unit is due to be commissioned at the end of 1987. The second is due to be commissioned in 1988. Two years later.

Hydro electricity, due to climatic and geographical reasons, will never form a major part of ESCOM's generating capacity.

The Drakensburg power station, when complete, will produce 1,500 MW within the next five to six years. The total potential of hydro power in the country is about 5,000 MW. A similar pumped storage scheme near Tulbagh, northeast of Cape Town, could add a further 1,000 MW.

During 1977, ESCOM acquired 245 MW of electricity from the Cahora Bassa scheme in Mozambique on a commercial basis. This will eventually increase to 500 MW by 1980. ESCOM also supplies power to Mozambique, Lesotho, Swaziland and Transkei.

ESCOM, faced with the challenge of providing enough power, not to hinder economic growth in any way, plans to add 1,000 MW to its generating capacity. The complexity of this planning, in terms of financial and technical expertise, is fully realized when it is considered that by 1982 ESCOM will have an installed capacity of 20,000 MW, that is, at the end of the century 75,000 MW.

The complex financial problems caused by inflation in the price of capital equipment, the rise in the coal price, finance costs and production costs, were the factors which caused ESCOM to embark on a self-financing scheme which is yielding satisfactory results. As a policy objective which obtained, in the 53 years of its existence, loans from South African, European and American sources it now plans extensive self-financing through allocations of funds accruing from tariffs.

Three internal funds — the Capital Development Fund, the Redemption Fund and the Reserve Fund will ensure ESCOM's generating capacity when it is ready for operations in about six years' time.

NEW PROJECTS

There are prospects for the development of major capital expenditure projects presently being undertaken including Koeberg nuclear power station (1,506 MW), Matla power station (coal-fired, 3,600 MW) and Doorspruit power station (coal-fired, 3,600 MW).

ESCOM's capital expenditure for the financial year 1976/77 is estimated at R250 million, of which 25 per cent was obtained from internal sources.

In respect of contracts already placed, extended credit facilities for 66 per cent of the total amounts have been successfully negotiated.

The role which ESCOM plays in the national economy of South Africa has been described as an important one.

Electricity contributes 20 per cent to the total energy consumption in this country — which means that ESCOM provides approximately 17.8 per cent of the total energy consumption.

With assets worth R3,000 million, distributed throughout the country, it is among the first three organisations in South Africa in terms of capital investment.

Construction prices down

Construction and engineering prices are now about 10 per cent cheaper than they were a year ago in spite of standardisation of steel and other price rises, states Mr. Len Taylor, joint managing director of Bentley and Taylor Structural Engineering, Durban.

Mr. Taylor says that tender prices are being quoted at lower costs. In order to keep within turnover some companies were operating at costs, which, he says, was not the norm a year ago. There was little alternative and only the established, efficiently run companies, with sound financial backing, would survive.

"The recession in the construction industry is as true in Britain as it is in South Africa. I sometimes feel that we are more affected by it because people are stronger. We have to deal with our own problems, with our own weaknesses, not with the weaknesses of others," he said.

"The Government and business leaders should make a positive approach to the present construction industry. There is a great deal of publicity surrounding the present construction industry, but there is little action. The Government and business leaders should come up with positive programmes to help the industry," he urged.

A PLAN of the Drakensburg R310 million pumped storage scheme, in northern Natal, which will add 1,000 MW to ESCOM's generating capacity, was made at the end of the century.
We have faced much and let’s not forget the massive attack on the UN. The sanctions, as many think, were ineffective.

This bogey is causing strength at the UN, but SA is by no means as

Oil Sanctions
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Urgent: Import protection

Finance Reporter 3/10/79

Please made to Government

The following congress

...
WORLDWIDE LACK OF INTEREST IN FUEL SAVING

By ESMOND FRANK

AN ECONOMIC method of extending the world's rapidly dwindling reserves of liquid fossil fuel, such as oil, is being hamstrung by international indifference to fuel conservation.

This allegation is made in a statement released in Tribune Finance in Johannesburg this week by the British Perkins Engines group.

The company claims that the production by refiners of wide-cut fuel from crude oil and coal plus the development of economical "injected stratified charge" engines will dramatically conserve available resources.

There is says the statement, a worldwide preoccupation with the status quo.

The lack of a clear cut international policy, it adds, will in the long run endanger fuel conservation, lead to poor production continuity and escalate production costs.

Depletion

"Improved fuel economy, reduced fuel quality requirements and vacuum-tube availability from crude oil demand in the area of alternative fuels and electrical energy," the statement says.

"It must be noted however, that the potential to do this by the use of fuel oil lies in the developing countries and at the moment the political will to do so is lacking in the advanced world.

"Recent events in a number of oil producing countries have demonstrated the need for a total lack of indifference to the possibilities of ground testing and development of alternative energy sources and materials of which the most promising appear to be nuclear.

"And the regulations and the regulations that may be imposed are so complex that the net conversion of a total lack of indifference could be impossible."
How safe are power stations?

If you like coal fired power stations then you'll love nuclear power stations...

JAMES CLARKE of CARE compares their records.

An American environmental medical scientist, Dr Merrill Eisenbud, says he would rather live next door to a nuclear power station than a mile away from a coal-fired one.

He said in a scientific paper recently that radioactive readings near conventional coal power stations are about 400 times higher than in nuclear plants.

It is quite a thought for those living in the Witbank-Middelburg region. There are now eight power stations in the area.

I hear no more will be built because the stagnant winter air just can't take much more smoke and gas. Radioactivity is not a problem I was assured (at least there is no evidence that it is).

It is sulphur and carbon dioxide in the air that worries the Department of Health.

In the Witbank region which produces 60 percent of the current in Eskom's grid, some stations burn more than 30,000 tons a day.

Camden Hendryns, Arnold and Adriaan alone burn 120,000 tons of coal daily - producing 16,000 tons of ash a day and 1,300 tons of sulphur dioxide.

Conventional power station... rather the devil you know?

So every year 500,000 tons of sulphur dioxide is passed into the local environment.

It makes one wonder why we are not more enthusiastic about nuclear power.

Professor Michael Golan of Massachusetts Institute of Technology's engineering department makes the old-fashioned coal power station seem even more menacing.

"Depending on how cleanly the coal is burned, seven to 10 people die each year from emphysema and other lung ailments aggravated by the pollution released into the air by a 1,000 Mw coal plant."

That is about half the output of Koeberg nuclear power station.

Koeberg if it were coal fired would need more than 5 million tons of coal a year. Under American coal mining and coal transporting conditions that would cost the lives of 10 men a year.

Dr Eisenbud said recently that with 1,000 nuclear plants now operating around the world "only six or seven deaths have been reported due to radiation leaks - the last one 15 years ago."

"At the same time thousands of civilians have died from respiratory ailments brought about by fossil-fuel pollution to say nothing of the hundreds who have died in mining and transporting coal."

One recalls the deaths of 483 coal miners at Coalbrook in the Free State in the 1961 disaster.

There is little doubt that at the moment the safest form of power is nuclear.

One really important issue is the one that Dr Eisenbud did not discuss: The problem of nuclear waste removal and disposal.

Some countries have relatively safe disposal sites, salt mines being the safest bet. A spokesman for our own Atomic Energy Board told CARE we have safe disposal sites but declined to say where.

Some nations have not. European countries, for instance, are extremely worried about it.

The reasons for public concern are now centreing on the argument that the nuclear programme should wait until safe disposal is assured. A group of nuclear scientists agree.

"Until then it would be a case of rather the devil you know."

The annual output of Koeberg nuclear power station is about 5 billion tons of carbon dioxide. This is equivalent to the annual output of 30,000 tons of coal.
Standard petrol price call

Primary Sources

Once again the call has gone out to the Government for a standard petrol price throughout the Republic. This time it has come from Assocom in a submission to the Board of Trade. If it is agreed to, then those at or near the coast will pay more for their petrol, and those inland will pay less. Such a move would be of benefit more to the Reef than anywhere else.

Fine. Why not bring in a standard petrol price and steel price, and a standard price on all those other commodities made or mined on the Reef?

If there is to be an equalisation of the price of any commodity, it must also be applied to all other commodities. One of the reasons for the abnormal electricity rates on, for instance, the border, is the high cost of the coal paid here compared with the Reef, where much of it is mined.

The Transvaal already has much. It must not be too greedy.

Secondary Sources

Green, P.

Nepos

Thucydides

Andocides

Aristophanes

Fros, age 12 (with Flo)

Picol de la Croix, René

The Rise and Fall of the Prussian Order

Isocrates

Secondary sources in Hellenic sources etc.

Westlake, H.D.

Alcibiades, agis and deeds. (by V. de H.)

On the Constitution of THE FIVE THOUSAND in the Athenian State

Haigh, J.J.

A. The extent of the primary sources. B. References from the secondary sources.

H. 679085 6.2. 2108 1472 772 92 (1972) pp. 115-127
Urgent need to save power

SIR,—The other day some Government bigwig said what I knew for years. He said that Escom will, in the near future, be forced to cut off the electricity current to non-productive sectors. I agree one hundred percent.

I want to point out to Escom, to all Government departments at all levels, and to the private sector, the following waste areas where millions of rands worth of electricity is wasted daily.

1) In all offices all over the land and factories, shops, military bases, etc. multiple batteries of lights are burning all day long. Like Father Christmas was paying the bill.

2) The street lights are sometimes left on for several days. On Durban beachfront, the lights and expensive floodlights are switched off only at 6.30 a.m. after 30 minutes or more of heavenly daylight.

WASTE

I am very sparing in electricity usage. Not that I cannot pay for it. I realise that tons of precious coal are wasted just to light up the sunny days. This state of affairs cannot continue for long.

I never switch on the lights in my office during the day. I switch off the lights in the corridors and toilets during the day and my colleagues think I am mad. They say “Why do you care, you are not paying?”

When I tell them that the day must come when they will not be able to afford the electricity in their homes, and that the offices will be lightless during the day by decree they think I am sort of a maniac.

Lastly, artificial light is very bad for the eyes. This is why more than 70 percent of South Africans wear spectacles.

MARTIN A. DONALDSON

Glenwood
ENERGY SUPPLIES

World over a barrel?

Meeting in Paris last week, the energy ministers of the major industrial countries issued an urgent warning that the world is in danger of running out of oil around the middle of the next decade.

US Energy Secretary James Schlesinger warned his colleagues in the International Energy Agency that "unless we start rapidly reducing the oil-dependent part of our economies, we face a crisis in a few years' time that will shake the political and economic bases of our free societies".

In an attempt to head off the crisis, the 19 IEA member countries agreed on a three-point plan for reducing their growing dependence on imported oil and developing new energy sources. It involves:

- Limiting their combined oil imports to no more than 26m barrels a day by 1985. Although this is about 4m barrels a day higher than now, it is some 6m barrels below the level currently forecast on the basis of existing energy policies;
- Introducing tighter energy policies based on a new set of "oil commandments", which envisage increased reliance on nuclear energy, realistic energy pricing, more use of coal, and more research into the development of new energy sources; and
- Submitting their national energy policies to rigorous annual examination by the IEA, which could then recommend additional measures if necessary.

Whether or not this programme is implemented depends largely on US Congressional enactment of the Carter energy programme, which is designed to reduce US oil imports by a third — from 8.9m barrels a day at present to under 6m barrels a day in 1985.

Although Schlesinger underlined the Carter Administration's determination to see its programme in force, Congress has already made major changes to the proposed legislation and most ministers at the IEA meeting were openly sceptical of America's ability to reduce consumption.

Another problem is the increasingly successful campaign which environmental groups everywhere are mounting against nuclear energy. As a result of the delays which these lobbies have forced on power plant construction, the IEA has sharply revised downwards — from 350,000 MW to 240,000 MW — its forecast of the amount of nuclear power which will be available in 1985.
Nations start a search for new energy sources.
They don't need our bunkers.
Dit sukkel lekker!

TERWYL Suid-Afrika afstuur op 'n ernstige energiekrise, gaan dit maar broekeker om die oor- blyvende steenkooltydse te administreer, te beheer en beleid te implimenteer. Slegs skets gevaarlikheids by vandeesweek se energie-simpotium in Pretoria die prentjie in private gesprekke.

Die Departement van Mynwe se vir die mynnas- skappe: Jong, julle moet meer steenkool uit die grond haal.

Maatskappy: Goed, maar dit sal my soveel kos. Mynwe: Jammer, ek het niks met die prys te doen nie. Dit word deur die Departement van Handel bepaal.

Handel maak die prys. By die gehele gehele waarde van die handel, met behulp van die mynnas- skappe, deur die begrip van die mynnas- skappe, die prys is laag. Steenkool is goedkoper om die daad te hou as stutwerk. Net 30 persent van die steenkool word uitgehaal. Die resterende 70% vorm ondergronds, vir die land verlore.

Dr. Frans Quass voorheen van Seckor, is in die debat kwaad vir die mynnas- skappe. Deur hul herwinningskoers op te stoot na 50 persent, die Amerikaners se milieumpunt, is daar geen genoeg steenkool vir dekades en dekades in Suid-Afrika. Hy wil die mynbase Sibe- rie toe stuur.

Dr. Bill van Rensburg wys hom daarop dat die Amerikaners se 50 persent "n mite is. Dis nader aan 14 persent.

Etkom, groot-groot aankoor van steenkool, is deur wet verpligt om sy steenkool tot goedkoop- se aan te koop. Die Preiskontrol Commissie skerm die prys nie nie vir hom nie.

By die laaste. Die myn moet kostes sny om wins te maak. Onder die grond groei die steenkool- lare.

Ons moet 'n sentrale energie-bureau, waarin wat soos ontwikkel dat sterk sek- sionele belanggroep nie die ewig versteur tussen prys en die mijn- koste nie, sê 'n man oor 'n kopjie tee. Karo, ons is 'n kapitalistiese land.

Daar word nou gesê ons is oor vyftien jaar in die pekel met ons steenkool. Die uitvoere gaan opge- stoot word. Mag dit gebeur, vra 'n man met druiwesap in die hand.

Verdere jaar verstregel die beplanningskabel heet. Die Depart- ment van Handel stel die Gerdenerde Kamer van Nywerheid in kennis: Slegs asbied vir jou. Redde hulle moet by olie bly. Hulle moenie oorvanste na steenkool nie, ons het nie genoeg nie.

Suid-Afrika het bitter min goeie steenkool. Die bietjie hoëgraadse steenkool wat daar is, moet vir metallurgie deeleline- des benut word.

Van lewens moet 'n opdrag aan die verbruiker kom: Jy moet 'n steenkool met 'n hoë as-inhoud ge- bruik, die ander is brood- nodig vir die verwerking van ons staal en ander produkte.

Die opdrag kom nie. Dit is lewens verstregel in aanbevelings en kom- missieverslae, sê 'n ander.

Die bietjie mense wat ons moet om dinge bymekaar te help pluk, is verspried en die koördinasie nie altyd van die bestie nie.

Daar is 'n handvol by die Departement van Re- planning se sektoriaat; hoploos te min.

Daar is 'n paar by die staatsmyningentjie se kantoors. Hulle kyk na veiligheids- en gesond- heidsaspekte by die steenkoolmyne.

By Geologiese Opnames is 'n paar geologies wat kyk na die geologiese aspekte van steenkool. By die Atomicgrootraad kyk 'n paar na uraan.

Die private maatskappy het die heel wat meer mense en heel wat meer kundig- heid in sake soos geolo- gie, mynhoed en steen- koolverdeling. Maar hulle word nie betrek by die beleidsaspekte nie. Lewens moet daar een, sentrale liggaam kom. En 'n nasionale ener- giebeleid.
Energie: 'n Krisis

WANNEER kry Suid-Afrika eendag 'n nasionale energiebeleid? Hoe lang nog voordat daar uitsluitlik gegee word oor die Petrick-kommissie se belangrike aanbevelinge oor die steenkoolbedryf? Wan-
neer word die gebrekkige koördinasie en fragmentasie beëindig wat heers tussen die mense wat besluite moet neem oor die benutting van Suid-Afrika se lewens-
obligte aanbbring van sou-
verwarmers in staatsge-
boue, hospitale, slagpla-
se, miskien belastingte-
gewinge aan die mense
wat dit wel aanbring. Dis
reeds die geval in Rhode-
sië, waar die belangrikste
drogedrukkrag beskikbaar is.
In Israel word reeds 25 procent
die huisvoude warmwater op die manier verskaf.

Maar daarvoor soos die antwoord op die vraag van dr. Anderson is 'n
nasionale energiebeleid nodig.

Die gebrek aan 'n ener-
giebeleid gee nou aanleid-
ning tot ernstige kritiek.

Prof. Bill van Rensburg,
voorsitter tydens hierdie
oorsig, wys op die
stelling reeds gemaak deur die Atoomkrag raad se
mnr. K. T. Brown: "Deur
Koeburg-rektoers te ge-
bruik, die enigste wat
vandag se tegnologie kan
lever, sal ons uuranre-
serves daai tot 20 persent
van die steenkoolreser-
ves. Hulle vreet net te
veel krag.

Sonkrig is 'n hulp, maar
gaan nie antwoord nie. Deur
sonverwarmers op groter skaal te bring wil die
verhitting van water, kan
min as 1 persent van
die huidige geleverde
Energie-
ker-energie
word, sê die kenner by
die WNNR se bounavor-
singsinstituut, mnr. W. N.
Cawood.

Prof. Dr. David Kotze het die antwoord gegee: "Die gebrek aan
gelaars en perfektie van die
studente van Suid-Afrika se
universiteite moet die vennoot-
spiekte van ons se mantelbrein geneem word.

Die huidige oorkope-
sen van megamotorkrag, wat be-
staan uit 'n Kabinetkom-
mittee vir energie, 'n be-
leidkomitee vir energie wat bestaan uit verteen-
woordigers uit die staat-
en semi-staatssektore, en
'n sekretariaat in die De-
partement van Beplan-
ing en die Omgevings-
visie, is tydens die algemeen soos die Petrick-kommissie
aanbeveel, het die
instelling van 'n stuur-
rende komitee vir energie-
nasionale energiebeleid.

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lesen van megamotorkrag, wat be-
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Die huidige oorkoepelen-
sen van megamotorkrag, wat be-
staan uit 'n Kabinetkom-
mit tee vir energie, 'n be-
leidkomitee vir energie wat bestaan uit verteen-
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en semi-staatssektore, en
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rende komitee vir energie-
nasionale energiebeleid.

Daar is nie voldoende ka-
nale vir raadpleging met
die privaat sektor nie en
baie belangrike besluite
oor energie kan geneem
word sonder dat die ener-
giebeleidskomitee gene-
neeg deelgeneem is.

Ek het die hoë agting vir die
werk van die sekretari-
aat, maar hy is hopeloos
toe om al die besluite te
tael. Daar is selet of sewe kenners, sê
hy later. Vergelyk dit
geur met die sowat 100
beroepspersoneel in diens van
die Departement van
Landbou.

Wat steenkool betref, het
hy geplet vir 'n nasionale
steenkooldatabase sodat
volledige inligting oor
eerste enierskeappe vir
alle soorte Suid-Afrikaanse
steenkol op deurlopende
basis beskikbaar sal wees. "In in inventaris is
tydens die dienstdyperk
van die Petrick-
kommissie ondanks, maar
om die te bring gene-
neeg op datum gebring of uitge-
hou nie. Intendeel, die
"grootkolk" verwaarloos.

Dr. Pieter Krog het die
op om hierdie probleme
to ondersoek nie. Ons
publiek en beleidsmakers
hul belastingtegengewings
aan die mense die
tasak van neps- en opper-
vlaagontwikkeling.

Daar is nie voldoende ka-
nale vir raadpleging met
die privaat sektor nie en
baie belangrike besluite
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hou nie. Intendeel, die
"grootkolk" verwaarloos.

Dr. Pieter Krog het die

sonder beleid

Suid-Afrika se steenkoolbronne gelas, moet hulle vasstel dat die Regering se Steenkooladvisiesraad 'n aantal jare lank geen enkele vergadering gehou het omdat hulle daaroor is in die oorspronklike verslag gemaak, maar in 1969 in die gepubliseerde uitgawe weggelaat. Die ondersoek is onder leiding van prof. Van Rensburg gedoen.

Daarop is die Van Rensburgverslag bevestig en hom sterk ten gunste van die bewaring en 'n algehele hersiening van die priisbeheerstelsel van steenkool bepleit.

Die verslag het in 1976 verskyn. Daarop is dit na die energiebeleidskomitee verwys vir kommentaar.

Die energiebeleidskomitee het op sy beurt 'n werkgroep aangestel wat 'n aantal verslae geskryf het oor die implementering van die Petrickaanbevelinge. Intussen het die Minister van Mynwese 'n komitee aangestel met 'n feitlik identiese opdrag as die van dié werkgroep, sê prof. Van Rensburg.

Vandag, agt jaar na die oorspronklike aanbevelinge, sit en wag almal nog op die verslag wat so 'n belangrike deel van 'n nasionale energiebeleid moet uitmaak.

Die waarskuwings dat ons oor vyftien jaar steenkooltekorte gaan hê, is op die Petrick-verslag geëgrond. Intussen is daar planne om die uitvoer van hierdie kosbare bron van energie nog verder op te stoot.

Dis een van die redes waarom 'n nuwe energiebeleiding nou so dringend bepleit word.

"Ons het," sê prof. Van Rensburg, "reeds jare en honderde miljoen ton steenkool vermor."
The first course describes the aims and methods of prehistoric archaeology—that is, the way in which archaeologists set about reconstructing the life of groups of men before the first appearance of written records. This part of the course describes the progress made by man from the origins of tool-making about 3 million years ago up until the rise of the first civilizations about 3000 B.C. Emphasis is placed on the techniques of excavation, analysis and interpretation as well as on the narrative of prehistory.

The subject of the second course in archaeology is the prehistory of Africa. Here, an attempt is made to describe the achievements of man on the African continent from his earliest appearance until almost the present day. Much of this sequence lies within the Stone Age, but attention is also paid to the recent Iron Age peoples of Southern Africa, their origins, spread and present distributions. A series of lectures on metals and ceramic technology, taught by the Department of Metallurgy and Material Science, is included in the course.

In both course I and II the focus is on hunters, herders and agriculturalists rather than on the more recent large-scale flowerings of civilizations such as those in Greece, Egypt and the near East. Although these are legitimate branches of archaeology, they are not taught at present within the Department of Archaeology.

Archaeology III was introduced for the first time in 1976, changing the Archaeology major from two years to three. The course is offered in both the Arts and Science faculties and focusses on the investigative techniques of the archaeologist in the field, in the laboratory, and in writing prehistory. The course includes some practical training in museum methods, photography, mapping, and the like, but has a heavy emphasis on the applied science techniques employed by archaeologists. Fieldwork is required.

In Additional Archaeology (taken simultaneously with or subsequent to Course III) students with exceptional aptitude and interest pursue individual original research projects involving scientific applications in the analysis of archaeological materials, and participate in a research seminar. Laboratory and fieldwork are carried out as each project requires.

COMPARATIVE AFRICAN GOVERNMENT AND LAW I:

The material for this course is derived largely from Southern Africa with comparative reference to case studies in the political systems of East and Central Africa. The course includes an introduction to the comparative study of the politics of race, class, and ethnicity.

Comparative African Government and Law I may not be taken in the first year and Political Science I must be completed beforehand. It is suggested that the following course or courses should be taken prior to or concurrently with Comparative African Government and Law I. The suggested courses and their times of meeting are given below:

- Political Science I meets at 9.25 a.m.
- Economics I meets at 10.20 a.m.
- Sociology I meets at 11.15 a.m.
- African History I meets at 8.30 a.m. (this course cannot be taken by a first year student)
- Social Anthropology I meets at 8.30 a.m.
Capital told of hydro-power plan

PIETERMARITZBURG — A detailed report on the possibility of storing hydro-electric power for use during peak demand periods is likely to be prepared for the City Council.

The idea had first been put forward by the City Electrical Engineer, Mr. J. C. Waddy, in 1958, and a report had been submitted to the council then.

He had said water could be pumped into the Henley Dam during off-peak periods, and then, when the demand for power reached the peak, the water could be used to power a hydro-electric plant which could supply most of the city's electricity.

In 1958 Mr. Waddy had estimated that the initial profit would be more than R100 000 a year.

In a report to the Trading Committee yesterday Mr. Waddy suggested the council update the 1960 report on the scheme "in view of the likelihood that Escom's charges will increase still further in the future."

The committee recommended that the council look into Mr. Waddy's scheme.
SUID-AFRIKA se dringende behoefte aan ’n nasionale energiebeleid word helder verlig deur Johannesbug se Carlton-Sentrum, grootste gebou in die Suidelike Halfrond. Sy ligte brand dag en nag. Dit is goedkoper om die ligte nie af te skakel nie.

Só word die land se lewensbelangrike steenkoolreserves daagliks vermors omdat die bewaring van energiebronne nie deel is van Evkom se opdrag nie, sé mnr. Mike Johnson, navorsor by die WNNR in Pretoria.

Al waarin Evkom tans belangstel, is dat sy kragsentrale heedag vol-uit moet werk, want hoe meer elektrisiteit verbruik word, hoe beter word sy kapitaaluitgawes aan kragowers benut. Só sal Evkom voortgaan om die land se ,,goedkoop”-steenkol op te brand, indien daar nie daadlik vereis word dat die bewaring van ons energiebronne ook van Evkom se doelstelling moet wees nie, sé mnr. Johnson.

Kennis wat verlede week die energiekongres van die WNNR bygewoon het, meen ons steenkoolreserves sal in die huidige trant minder as dertig jaar hou. Mnr. Johnson was een van die sprekers en het op ’n vraag gestel dat hy en die WNNR se Bouavorsingsinstituut nou besig is om die hele kwestie van die Carlton se kragverbruik te onderzoek.

Mnr. Arthur Horn, die sentrum se ingenieur, het aan RAPPORT bevestig dat die gebou so ontwerp is dat daar nie eens in elke vertrek ’n ligskakelaar is nie. Die besparings aan skakelaars en ligbuise — wat langer hou as hulle nie kort-kort aan- of afgeskakel word nie — is groter as die besparing wat hulle sou hé indien die ligte saans afgeskakel word. Deur die elektrisiteit op hierdie manier te gebruik, kom hulle boonop in aanmerking vir ’n laer Evkom-tarief.

“Oor hierdie praktysé sê mnr. Johnson: „Ek kan nou al sê dat Evkom geen aan- of afgedrag skenk aan die besparing van ons energiebronne nie. Dit is nie deel van sy huidige opdrag nie. Al wat van Evkom vereis word, is dat hy volop elektrisiteit so goedkoop moontlik moet verskaf.

**Suiniger**

Evkom doen geen navorsing op die gebied van energiebesparing of alternatiewe energiebronnie nie, sé mnr. J. Normon, Evkom se hoofingenieur. Ook dit is nie aan hom oogodra nie.

Die wetgewer se opdrag aan Evkom moet dringend gewysig word — om energiebesparing in te sluit, sé mnr. Johnson. Bes moontlik moet tariewe vir sekere verbruikers drasties verhoog word om vermorsing te ontmoedig en om geld vir navorsing te kry.

Daar moet daadlik begin word om vooruit te beplan en om alternatiewe energiebronne te ontwikkel. Tot dusver is daar nog net van afgegaan gepaard van kragoorsenas en vrede met ons swart buurstaat sodat ons hul groot hydro-elektriese bronnie kon benut, sé hy.

Sover vangestel kon word, is Pretoria die enigste stad in die land wat reeds stappe gedoen het wat tot moontlike elektrisiteitsbesparing kan lei.

Deur ’n nuwe tariefstelsel word huishoudelike verbruikers aangemoedig om ’n toevoerpunt met ’n kleiner vermoe te aanvaar. Só word die verbruikers verplig om suiniger met sy krag te werk. Die stad se kapitaaluitgawes word op hierdie manier gesnoer en die stad hoef minder duur elektrisiteit van Evkom af te kry.
MIF asks again for petrol on weekends

Own Correspondent

EAST LONDON. — The annual congress of the Motor Industries Federation (MIF) in East London yesterday unanimously passed a motion that the Federation approach the Government again for a change in petrol trading hours.

And speaking after his re-election as president of the federation, Mr G Hall associated himself fully with the motion.

"Motorists do not want to be without a vehicle over weekends. The result is, commercial travellers now come back to their home base on a Thursday to fill up before the pumps close at noon on Friday," he said.

"Then the ordinary motorist, who may have some small matter to be attended to on his vehicle, will not bring it in for attention on Thursday or Friday for fear that it will not be available to him over the weekend.

"If petrol could be supplied on Saturday mornings, commercial travellers could work a full five-day week, get back on a Saturday morning and still fill up. This would not mean a greater petrol consumption, but would mean greater productivity," he said.

"And the ordinary motorist would be more likely to bring his car in for attention on a Thursday or Friday, thus enabling the motor trade to work a full five-day week — or even a five-and-a-half-day week — again.

Another important factor in the motor trade was consumerism, he said.

"In the future a lot of commerce and industry will be using automotive commodities as less leaders.

"I think South Africa must learn from other countries. We would be falling in our duties if we did not warn consumers against over-reacting which would lead to millions of rand being wasted on so-called protective measures."

If consumerism got out of hand it could lead to the formation of another Government department and all its attendant costs which would have to be borne by the taxpayers, he said.
CABORA BASSA

Generating confidence

Veteran sceptics of Cabora Bassa's worth to SA will probably have to swallow their words during the next few months as Africa's much-maligned and single costliest project (around R600m) beats all odds to finish on time.

Latest indications are that the 16-company Zamco consortium will switch on as scheduled the full 1 800 MW, agreed with the Portuguese a decade ago, from the remote Mozambique section of the Zambezi gorge 1 400 km to Pretoria's Apollo receiving station.

Zamco's progress (if it comes off) can only be described as phenomenal after floods, Frelimo, civil war and international politics (a few of the frustrations) had the whole ultra-ambitious project at least 12 months (FM November 12, 1976) behind only a year ago.

Since then Cabora has (beginning in March) supplied regular power to the SA grid — now running at about 960 MW (reduced to 830 MW through line losses by the time it reaches Apollo) and this will be raised in January to 1 440 MW (1 300 MW at Apollo) when the second phase of the south bank's five-generator powerhouse is switched on.

At the same time further rectifying and converting equipment at Cabora and Apollo will come on stream to raise the DC transmission line voltage from 266 kV to 400 kV.

As the second-phase fourth generator is already running regularly (as a supplement to the first phase's three generators) the only question remaining is when will the final generator be switched on to the grid?

By the end of next year — still within the original January 1, 1979 agreed finishing time — says a site source. Only materials hold-ups could delay it a few weeks.

As the giant construction consortium's pièce de résistance another 30 MW will be wired direct to Beira and about 20 MW consumed locally.

Off-site progress isn't quite so spectacular with Hidroelecrica de Caboral Bassa (HCB — the Portuguese eventual sole operating company) and Escom representatives in Lisbon this month for a Permanent Joint Technical Committee meeting.

HCB President Antonio Martins tells the FM the get-together was to "review a better spirit of co-operation and diverse problems current with the project".

This covers everything from still bargaining over the price Escom will pay for the power (the Portuguese have long been pressing for much more than the 0.3c/kWh agreed years ago) to seeing that supplies, including food, get to the dam site.
South African Coal, Oil and Gas Corporation Limited

Chairman's Address delivered by Mr D P de Villiers at the twenty-seventh Annual General Meeting of the Corporation, on 27 October 1977.

"A project of the magnitude and extent of Sasol II could not have been undertaken without the skills and experience of Sasol's team of dedicated men and women."

This twenty-seventh Annual General Meeting is the first to be held since the retirement of Dr F E Rousseau as our chairman. Firstly I would like to thank him for his willingness to serve a further term on the Board. The continued availability of his advice during the critical phases of the Sasol II project means much for the peace of mind of us all. Dr Rousseau considered Sasol the most important task of his life and this organisation bears the imprint of his absolute thoroughness and persistent drive. Sasol shall always be grateful to him for this.

The past year was again a good one for Sasol. Group profit before tax was R76.9 million and after tax profit R53.7 million. Sales turnover of group products rose to a record of R881.3 million from R582.4 million in the previous year. A preference dividend of R720,000 and an increased ordinary dividend of R9.8 million have been declared.

In June this year the formidable task of compiling the detailed and definitive estimate of the capital cost of the Sasol II project was completed. The previous estimate of the cost of the factory and mine which was made late in 1975 when the final process scheme had been decided, was R1 550 million, based on October 1975 prices, or R2 458 million allowing for escalation up to project completion. I am pleased to say that the definitive estimate shows that the end-of-job cost of the project, excluding all other costs including the cost of the township and housing, interest during construction and working capital, should remain within the previous estimate of R2 458 million.

In last year's Chairman's Address it was pointed out that a large part of the retained profits and other cash flow from existing operations would be applied to the Sasol II project. During the year under review a total of R65.3 million was invested in the establishment of the Secunda township, in housing and in working capital. The Sasol II factory and mine will be financed from three sources in accordance with the programme agreed upon with the Government. Loan finance in the form of export credits will constitute R492 million. R300 million will be obtained from Parliamentary appropriations for which share capital will be issued and the balance of the funds which has also been earmarked as equity capital, will be provided by the State Oil Fund.

Apart from continuing our research to improve existing Sasol processes for the production of oil from coal, longer term work is concentrated mostly on the development of alternative processes for converting coal into liquid fuels.

One of the alternative processes on which Sasol is doing a great deal of work is the solvent refining of coal known as SRC. This process gives either a liquid or a solid product, depending on process conditions. The product referred to as SRC can be used as such as a pollution-free fuel or it can be broken down further to yield motor fuels. However, it is still our belief that 8 to 10 years will be required before the SRC process for the production of motor fuels will be ready for full-scale commercial application.

Although our SRC work is primarily directed towards the production of motor fuels, there has been a very interesting spin-off in that it was found that the Sasol process is eminently suited to the upgrading of Australian brown coal to a solid SRC product as a substitute for high grade coking coals used in the Japanese steel industry. A collaboration agreement has been concluded between Sasol and a consortium of Japanese companies, known as Komink. Under this agreement further pilot plant work will be done in Sasolburg and as soon as this phase has been satisfactorily concluded, a demonstration size plant will be built in Australia, before proceeding to a full-scale commercial plant. Sasol will have no financing responsibility, but will naturally secure licensing fees for the know-how made available to the venture.

Sasol's expertise in the field of coal beneficiation continues to be in demand in many countries of the world. Sasol will this year run a full-scale gasification test in Sasolburg on Texas lignite. Advisory services also continue to be provided under agreements with four consortia of American gas distribution companies concerning the construction of gasification plants to augment their dwindling natural gas resources.
Despite the region's relatively small oil reserves, the continued exploration and development of the country's offshore oilfields holds significant promise for the future. The South African government has outlined ambitious plans to increase oil production in the coming years, with a focus on developing new fields and improving existing infrastructure. The region's geology is well-suited to oil production, and recent discoveries have shown that the area has the potential to become a major oil producer.

However, the successful development of these fields will depend on a number of factors, including the availability of funding, the willingness of private companies to invest in exploration, and the ability of the government to provide regulatory and financial support. Despite these challenges, the potential rewards are significant, with the potential for new jobs and increased economic growth in the region.

The government has taken steps to support the development of the oil industry, including the creation of a special economic zone in the region. This zone is designed to attract investment and provide incentives for companies to explore and develop new fields. The zone has already attracted several international companies, which have expressed interest in investing in the region.

In addition to these efforts, the government has also worked to improve the regulatory environment for the oil industry. This has included the creation of a new regulatory framework that is designed to be more flexible and responsive to the needs of the industry. This framework has been well-received by industry leaders, who have noted that it is more conducive to investment and development than the previous regulatory system.

Overall, the future of the oil industry in the region looks promising, with a number of new opportunities for exploration and development. However, it will be essential for the government to continue to work closely with industry partners to ensure that the full potential of this industry is realized.
Sasol profit climbs, No 2 plant advances

By CHRIS CAINCROSS
Industrial Editor

THE SOUTH African Coal, Oil & Gas Corporation notched up a remarkable 78% growth in taxed profits in the year to June, marking a continuing ability to accumulate needed to fund an increasing proportion of its capital commitments from internal sources.

In his chairman’s address yesterday, Mr D P de Villiers, said that Sasol’s taxed profit climbed to R3 700 000 compared with R300 000 in the previous year.

Pre-tax profit for the year was R78 900 000, an improvement of 51% on the previous year’s R52 400 000.

However Sasol has adopted the last in-first out method of stock valuation.

And Mr De Villiers suggests that to put a more realistic picture on profit growth, a R51-million difference between last year’s pre-tax profit and that of the previous year would give the result a better perspective.

“A further factor attributing to the improvement, according to Mr De Villiers, is that tax has been materially reduced through the provision of higher investment allowances on new plant.

Sasol’s earnings were achieved on turnover of R681 300 000 (R560 400 000). To give some perspective to the stock valuations, an amount of R281 600 000 representing purchased feedstocks, can be deducted from turnover, the remainder representing the value added to the raw materials and feedstocks processed.

It is apparent that Sasol is keeping to the Sasol 2 cost estimates made a year ago.

Mr De Villiers says that the end-of-job project cost, excluding the Secunda township development, interest on loans and working capital, should remain within the estimate of R468-million.

At an energy-related industry meeting, Sasol’s oil-from-coal technology seemingly makes more efficient use of bituminous coal. Its main source of raw materials—than does electricity generation, from power stations.

Mr De Villiers said: “The amount of energy in the products of Sasol 2, which is obtained from a ton of coal is in fact about 30% more than the energy which is obtained from the same ton of coal in the most up-to-date coal-burning power station.”

Work on Sasol 2 has reached an advanced stage, with engineering design 50% complete at the end of the year under review. At least 90% of all the engineering should be completed by the end of 1977, says Mr De Villiers.

“Procurement has advanced to the stage where all major contracts and purchased orders will have been placed by the end of 1977.”

By the end of the financial year, 226 contracts had been placed with South African contractors and consultants, and Mr De Villiers estimates that at least 57% of the total capital cost of the project will be spent in South Africa.

This should counter much of the criticism that too much work is going to foreign companies.

Sasol’s gas-manufacturing expansion programme faced severe difficulties during the year. This will mean that additional gas supplies which should have become available by the end of this year are now only scheduled to be pumped into the system some time in 1978.

Mr De Villiers says the main problem is on difficulties in completing gasification equipment, which is being fabricated outside South Africa.

“Hurry up arrangements had to be made for equipment on order for Sasol 2 gasification plant to be diverted to Sasolberg to minimise the loss of production as much as possible,” he says.
Sales turnover up for Sasol II

SASOLBURG — The main object of Sasol II was to diminish South Africa's dependence on imported petroleum. The estimated saving in foreign exchange at full production was R350 million per year, Mr. D. P. de Villiers, Sasol's chairman, said here yesterday.

Speaking at the company's annual meeting he said should the crude oil price continue to rise, as was widely predicted, the saving in foreign capital would increase.

Sasol II would also become more profitable and its value to the country would be enhanced. Any increase in crude oil prices would harm the national economy and add to the heavy burden on foreign exchange resources.

In South Africa, with relatively low cost coal and a proven, oil-from-coal technology readily available, we were fortunate to have been able to proceed with a major coal to oil conversion project so soon after the oil crisis of 1973.

"Over the last few years a stronger awareness has developed of the need to use to the best effect our main source of energy — that is bituminous coal."

The past year was again a good one for Sasol. Sales turnover of group products increased from R562.4 million the previous year to R681.3 million.

After tax profit increased to R53.7 million and profit before tax to R78.9 million.

Although the continuos increase in profits is a source of great satisfaction to the people of Sasol, it is only fair to remind shareholders that this year's profits, which increased by R23.6 million after tax, and by R26.3 million before tax, are not comparable with last year's profits. (Sapa)
Suid-Afrikaanse Steenkool-, Olie- en Gaskorporasie Beperk


"'n Projek van die grootte en omvang van Sasol II sou nie aangedurf kon word sonder die kundigheid en ervaring van die toegewyde span manne en vroue van Sasol nie."

Herdie sewe-en-twintigste Algemene Jaarvergadering is die eerste wat ons nou sedert die uitrede van P E Rousseau as ons voorvader Voral wil ek hom bedank vir sy gewildheid om nog nimmer in die Direksie aan te bly. Die feit dat sy advies nog steeds beskikbaar is wanneer die Sasol II-projek soms deur kritieke stadiums beweeg, bevestig wat ons almal geëmirld het. Dr Rousseau het Sasol as sy lewensaarde beskou en hy sy stempel van absolute deeglikheid en onversookke doelsettingsvermoë op die organisasie afgedrukt. Hierdie sal Sasol hom eldens danleer bly.

Die afgelope jaar was weer in goeie vies vir Sasol. Gekonsoliderde winste was vir belasting R78,9 miljoen, en wins na belasting R53,7 miljoen. Die verkoopsomset van groepprodukte het gestyg van R562,4 miljoen die vorige jaar tot 'n rekord van R581,3 miljoen. 'n Voorkeur dividend van R70 000 en 'n verhoogde dividend van R9,8 miljoen op gewone aandeel is verklaar.

In Junie van die jaar is die gedegte laak van die sameslag van die gedetailleerde en omvattende beraming van die kapitaalkos in R1,3 miljoen. Sasol II is die enige wat in 1975 beëindig is nadat op die finale proses 35% van ons kapitaal is. Deur die afgelope jaar is die vorige jaar tot 'n rekord van R581,3 miljoen.

Indien toelating gemaak word vir die uitvoering van die Rand en eskasie in die koste van materialen toerusting en arbeid waarop Sasol geen besonder benodiging het nie, dan demonstreer die omvattende beraming wees. Sasol het in 'n toepassing van minder as 10% van die kapitaalkos wat in 1974 voorgestel is. Die regering was die besluit om die projek voort te gaan, en het 'n besluit genoem dat die ekonomske lewensvatbaarheid van die Sasol II-projek afhanklik is van die handhewing van die Suid-Afrikaanse Steenkool-, Olie- en Gaskorporasie Beperk.
Het woord 'die verkoopsomsetting van chemischekwaliteit R212,5 miljoen, wat vol- te gelegenheid bij R25 miljoen, wat in 1984 verlegde van R8,4 miljoen verliezen, die meeste van ons ontvouw was hoe smetpunt Fischer-Tropsch-was waarvoor de aanbieding ge- doneerde jaar vijfgen toegevoegd.

Bemerkende de aanbieding aan R25 miljoen, wat de huidige financiële jaar voortduur. In de geval van Geesko wordt de houd betrekking tot de aanbieding gericht op de gevolgen van de te verduurzaamde industrie gebied van Olijftannoten, wat sedert de derde kwartael van 1977 gevoel van Geesko bedoel.

Finales resultaten

De winst voor beitsing van R76,9 miljoen, waarna de winst verwacht om te verdergaan met de vorige jaar. Hierdie voorgestelde stijging in winst gee aan ons te bereiken hoe voorspelbaar. Dit is egter slechts 449,2 miljoen van ons uitvoere en bedoelde aan verkoop van de volgende jaar. Hierdie voorgestelde stijging niet alleen bedoeld te bereiken hoe voorspelbaar. Dit is egter slechts 449,2 miljoen van ons uitvoere en bedoelde aan verkoop van de volgende jaar. Hierdie voorgestelde stijging niet alleen bedoeld te bereiken hoe voorspelbaar.

Navoring en ontwikkeling

Gedurende de jaar het Sasol II se behoort weer eens de hoogste prioriteit in ons navorings- en ontwikkelingsakteelt genest. Besonder de jaaropvolging is gemak met de ontwikkeling van 'n skema vir die behandeling van beitsing om dit stof en hierdie stof een uittreksel in verkoelsingswater omkoper.

Verdere navoring is gedaan in ons Sasolburch-laboratoriums.
VEREENIGING. - African Cables expects a continuation of present reduced demand during the current year which again commenced, with a lower order book, chairman, Mr W N Randell said in the annual report.

He said that with township development, building and local authority spending at a low ebb and apparently likely to remain so for the next 12 months, trading prospects are not bright.

The group had a taxe profit of R4,4m in year ended July 31, on sales of R39,9m.

Projects such as Sanol 2 are alleviating the position to some extent but this is insufficient to significantly alter the overall market prospects.

Electrification of black townships could likewise provide some relief but even if a decision to proceed with present proposals is taken soon, it is unlikely any early benefits will accrue to the electric cable industry.

The board has decided to cancel part of the group's outstanding authorized expenditure. The balance is being proceeded with, albeit at a slower tempo than originally envisaged, so that adequate capacity will be available when there is an upturn in the economy, he said.

\[ \text{Reuter} \]

and C of courses listed on pages 6 to 7 course, preferably two, from column C A B to make a total of at least FOUR $ B and C. (In other words, one or two of four senior courses.)

mns B and C must be preceded by all courses leading up to them. For example, Psychology III (in column C) must be preceded by Psychology II (column B) AND Psychology I (column A). Similarly, Social Anthropology II (column C) must be preceded by Social Anthropology I (column A).

3. At least FOUR of the courses in your curriculum must be courses which are UNDERLINED. (These are Faculty of Arts courses.)

4. There are some special notes (see page 8) following the columns of subjects. Read them carefully if they refer to any courses you have chosen.

5. AUXILIARIES - courses which go well with certain other courses. A list of recommended auxiliaries is to be found on page 9.

6. Not more than FOUR courses in the following subjects can be taken in the curriculum:

| Applied Maths | Physics |
| Botany       | Physiology |
| Chemistry    | Zoology |
| Geology      |         |
| Maths. Statistics |         |

7. Having selected nine (or more) courses and having checked the requirements mentioned above, now divide the courses into three separate years. The courses do not have to be spread evenly over three years, and you are strongly advised to take FOUR courses in the first year. You will have to complete a first course before going on to a second course, so don't, for example, put English I and English II down for the same year. READ AGAIN the note under DEFINITIONS concerning FIRST COURSES. Check that you have NINE (or more) courses.

8. TIME-TABLE. In the columns of courses you will see figures in brackets. These represent the time-table periods. For example, (4)= fourth period.

NOW CHECK YOUR CURRICULUM YEAR BY YEAR TO ENSURE THAT YOU HAVE NO TIME-TABLE CLASHES. (See MODEL CURRICULUM on page 4)

For example, French I and Botany I are both in period (1). If they are both to be included in a curriculum, they will have to be taken in different years.

9. MAXIMUM NUMBER OF COURSES:

(i) You may not take more than FOUR courses in any one year.
(ii) You may not take more than TWO COURSES concurrently with a Major (column C).
'Nobody will stop nuclear development'

Own Correspondent

CAPE TOWN — Nobody would stop South Africa in its endeavours to develop its nuclear industry for peaceful uses, the president of the Atomic Energy Board, Dr A J A Roux, said at Stellenbosch today.

Addressing a "Farmers' Day" gathering on Dion Donne Farm, he said South Africa would continue with its efforts in spite of the fact that it was being hampered "on many fronts" in the field of nuclear energy.

Dr Roux said it was a pity that political considerations were often so important to countries that this was the reason why South Africa could not make its desired contribution to scientific and technological development in the world.

Recently South Africa, a founder member of the International Atomic Energy Agency, had been voted out of this body after 20 years. Apart from voting against the move, not a single Western power had resisted what was "a flagrant violation of the statute."

Dr Roux said when the Soviet news agency Tass recently alleged that South Africa was about to explode a nuclear device, this was immediately grabbed by the United States and other Western countries as a stick to be used for beating South Africa.

Apparently proof for the allegation was not needed, for it seemed that when it came to attacking South Africa any allegation was good enough — even if it came from behind the Iron Curtain.

By refusing South Africa access to the industries of developed countries, attempts were being made to prevent South Africa from developing its enrichment process on the biggest possible scale.

The question arose whether at least one of the aims was not to prevent South Africa from becoming a rival for the United States and other western countries in the enrichment market of the world.
Iran trades oil for nuclear power

Ibrahim Noori

Iran is to negotiate with France to barter at least R5 000-million worth of its oil for four nuclear power plants.

The proposed deal will give France, already a major beneficiary of Iran's development boom, an even larger share of its oil wealth.

Only last May Mr Jean-Pierre Ponnelle, then Minister of Supply, and Regional Development, said the French oil market was not suited to bartering. But former Interior Minister, Mr Michel Poniatowski, sent here recently by President Valéry Giscard D'Estaing for talks with the Shah, said France saw advantages in a barter deal.

"When the question of oil bartering was first brought up we saw only the difficulties involved. But after thinking things over we see there are certain advantages. For example it saves the setting up of important projects," he said.

However, Mr Poniatowski excluded the possibility of bartering arms for oil. Iran has bought rifles, missiles from Britain and helicopters from Italy in exchange for oil.

France buys Iranian oil through Western companies operating in Teheran. But the barter oil will be bought directly from the state-owned National Oil Company (NIOC).

Thai deal

News of the proposed barter follows the successful conclusion, after more than three years of negotiations, of another Iranian-French deal worth R2 800-million.

Under the Thai deal France will supply Iran with two 600-megawatt nuclear reactors and 16 Franco-German airliners.

Mr Poniatowski's visit saw the deal through, apparently facilitated by R1 800-million French loan. He said the package would "handsomely contribute to correcting France's trade deficit with Iran."

France is Iran's fifth most important trading partner after the United States, Japan, West Germany and Britain. But the balance of trade is weighted heavily in Iran's favour.

French imports from Iran were worth R1 200-million, last year. Oil accounted for 40 percent of them. French exports to Iran were worth about R530-million last year.

Trade has soared since 1971 when French imports from Iran were valued at about R141-million and exports to Iran were worth about R160-million.

Iran plans to have 20 nuclear power stations by the end of the century with a total generating capacity of 23 000 megawatts.

Western

The French are believed to be anxious to clinch the proposed barter deal quickly to help correct the trade deficit and to catch up with West Germany in securing a slice of Iran's nuclear programme.

West Germany was the first Western country to win a contract to supply two reactors and four reactors said negotiations had begun (for two more).

France has already secured a major share of the rapid development programmes begun in Iran since the quadrupling of oil prices in 1973.

French organisations are involved in the planned Teheran metro network, several road and rail projects, housing programmes and the construction of a steel mill, power stations and luxury hotels.

The Citroën and Renault car firms have set up assembly plants in Teheran, all major French banks are represented there and France has sold its colour television system to Iran—Sapa-Reuter.
The new dark age

SA power ‘time bomb’ has only a 15-year fuse

By MARTIN CREAMER

Rensburg

He says there is no ready solution to the looming crisis. But there is one way to forestall it — conserve.

And in South Africa’s case, coal conservation is the key. Coal supplies 75 per cent of the country’s total energy needs.

But less of this vital commodity is being wasted by mining methods and exports of high-grade coal, is continually increasing.

South Africa exports 12-million tons of coal a year. This figure is scheduled to increase to 20-million tons with the completion of Phase 2 of the Richards Bay scheme.

Experts in other countries are concerned that the world faces a critical shortage of energy.

Yet in this country, we seem to be blissfully unaware of what is going on,” Prof Van Rensburg said.

Two separate estimates of South Africa’s coal reserves have shattered a long-held myth that we had sufficient to last us thousands of years. The Coal Advisory Board warned in 1969 that unless more coal was extracted, the country was going to be in trouble fairly soon. The Petrie Commission said the same two years ago.

Now 1980 is officially regarded as the year when coal production will begin falling short of the country’s needs.

Prof Van Rensburg said that although there was about 90-billion tons of coal in the ground, only 25-billion tons could be extracted by existing methods.

Prof Van Rensburg favours the establishment of a central energy body to ensure that the best possible methods are used to extract as much coal as possible.

“‘At the moment politicians of the West lack the guts to do what is necessary because most of the steps that have to be taken would be unpopular.

“They may escape now, but God help the politicians who are in power when the crunch comes, because then people will be asking why nothing had been done.”

Could South Africa be committing national suicide by exporting too much top-grade coal at a time when it is under international attack?

Prof Van Rensburg believes that if the pattern of sales continues, we are heading for trouble.

Concentrated research

“If we could export one average grade South African coal then 20-million tons a year would not be excessive.

“But we are selling the high-quality coal which is needed on the grades of coal that can be exported.

“Otherwise what will remain will be lower and lower in quality.

“We may even be in the situation where we have to get people used to using coal of a very much lower grade than at present.”

“Why do you rule out solar energy? I think we should do a lot more on it. But it was recently pointed out that even with Government assistance and legislation, it could replace only about one per cent of Escom’s power by the end of the century.”

“What can the individual do? “He must begin to realise that all the pleasant jaunts he does over weekends are on borrowed time. There must be more responsibility in the use of all energy.”

Designers had a responsibility to build less energy-intensive equipment.

Smaller cars, electric cars and better public transport would have to come...
ABU DHABI — The United Arab Emirates (UAE) and Saudi Arabia have agreed on the stand they will take over oil prices at next month's price-fixing conference of the world's major oil exporting countries in Caracas, Venezuela.

This was disclosed yesterday after talks here between the UAE President, Sheikh Zaid Bin Sultan Al-Nahayan, and Saudi Arabia's oil minister, Sheikh Ahmed Zaki Yamani.

The UAE was Saudi Arabia's only ally at an Organization of Petroleum-Exporting Countries (Opec) price-fixing conference 11 months ago which resulted in a split, with the majority opting for a larger price rise than that accepted by the two states.

The split was healed before Opec ministers held their mid-year meeting in Stockholm.

"There is complete and full coordination between the two countries concerning all important matters, including oil prices," Sheikh Yamani told the UAE News Agency.

"We always try to maintain Opec's unity as we have done in the past in spite of differences in views. We are now trying to avoid them from the beginning." the Saudi minister said.

Oil consumption by major non-communist industrialized countries rose 2.3 percent to 386.5 million tonnes in the second quarter this year, compared with the same period last year, the International Energy Agency (IEA) said yesterday. This was a significant slowdown from the growth rate of 3.9 percent in the first quarter this year. — Sapa-Reuter
Fears of rise in oil price

Pretoria. - Fears of another rise in the price of fuel early next year are mounting as the Opec countries prepare for their biannual meeting.

Although government sources in Pretoria decline to comment on the issue, a moderate rise in crude oil prices is considered likely early next year.

Preparatory to the meeting of the Opec oil ministers in Caracas, Venezuela, on November 20, Opec's economic commission is currently meeting in Vienna trying for a price consensus among the 13 States which form the organisation.

Although most agree, according to Pretoria sources, that the purchasing power of oil revenue continues to shrink because of inflation it is likely that only a moderate increase in the price will be agreed on.

Saudi Arabian delegates are said to favour the continuation of the present freeze but others are reported to be demanding increases of up to 15 percent. Against a background of growing surplus and continuous efforts in the big consumer countries to find energy substitutes, it is not expected that an increase of more than five percent would be agreed to.
Halt Koeberg
A plant call

BY KEN OWEN

SOME top public servants in Pretoria want the Government to cancel the gigantic Koeberg nuclear power project in the wake of the UN arms embargo.

This is the most dramatic and far-reaching riposte which has been suggested as the Government weighs its best response to the embargo which has — presumably — halted the delivery of four French-built warships.

The main contract for the R1.5-billion Koeberg project was won by a French-led consortium in the face of fierce competition from American and other European bidders.

However, it has been a prime target of anti-apartheid forces abroad and it is peculiarly vulnerable to further boycotts.

"The question about Koeberg," one top official said, "is whether we really need it."

Another official called it "the plaything of the Atomic Energy Board" and "a potential white elephant."

A third argues forcibly that South Africa would be better served by using coal to generate power in the Western Cape, possibly using South African coastal traffic to ship the coal from Richards Bay to Saldanha, close to the Koeberg site.

A variety of arguments are put forward for cancellation:

- The Koeberg project is ruinously expensive, both in money terms and in foreign exchange costs. It was conceived and launched during the period when South Africa was recklessly squandering its so-called "gold dividend."
- The project is highly vulnerable to further sanctions. As in the case of the half-built warships in France, the power project could conceivably be halted halfway to completion.

**Enriched**

- There is no guarantee that South Africa would receive the enriched uranium required for Koeberg. The US has already reneged on its treaty obligations to supply South Africa with nuclear fuel.
- South African enrichment technology may not be able to fill the gap in time.
- Coal-burning power stations would make South Africa much more self-sufficient, would stimulate jobs internally, and by preempting some of the coal supplies now exported, would begin to exert mild counter-pressure on the fuel-hungry Western powers.
- Last, but not least, it would be a highly visible signal to the West that South Africa is reaching the end of its tolerance.

For this purpose, the cancellation of Koeberg is seen as a better move than some of the alternatives which have been discussed — such as a refusal to co-operate with the West, or Rhodesia or even South West Africa.

South Africa itself has a vested interest in the outcome in these two territories and the consequences of non-co-operation might escalate incalculably. The consequences of cancelling Koeberg are, on the other hand, finite and calculable.

The principal reason South Africa is holding back, according to one official, is basic lack of nerve. "You must remember it is a new experience for us to have all the big five Western powers suddenly descend on us like this," he said.

**Removed**

But one of the principal reasons for restraint — fear that South Africa might be declared a threat to the international peace in terms of chapter VII of the UN charter — has now been removed.

Officials say they see no chance that the finding will be withdrawn, since the Soviet Union would veto any attempt to do so. On the contrary, it is bound to be used to launch further sanctions.
Breintrust vir energie bepleit

WEENs die geweldige belangstelling wat gevolg het op Rondalia se beroep op die daartelling van 'n jaarlikse energiepyrs van R100 000 of selfs meer, is daar besluit om hierdie idee nou heelwat verder te voer.

Die plan is om nou sterk, voorbrand te maak vir 'n Energie- en Verpoertrust wat as katalisator kan dien om al die idees oor energie en die verpoer- torre te onderzoek.

Volgens mnr. C. M. Smith, ontwikkelingsbestuurder van Rondalia, het hierdie idee sy ontslaan te danke aan die geweldige reaksie wat Rondalia ontvang het sedert hy die instelling van 'n energiepyrs bepleit het.

Hierdie belangstelling het van die overheid-sowel as die private sektor gekom en Rondalia ontvang steedsbyna daagliks reaksie daarop.

Einstein

Rondalia se voorstel vir die energiepyrs spruit uit 'n pleidooi om alternatiewe energiebronne te ontwikkel, deur middel van die mededeling van die Sekretaris van Handel, mnr. Joel Steyn, vroeër vandeesmaand by 'n simpozium van die Instituut vir Meganiëse Ingenieurs in Oos-Londen gelever het.

Rondalia het toe voorge- stel dat daar jaarliks 'n spesiale pryse toegeken word aan die beste voorstelle en ontwikkelinge op die energie-gebied.

'n Akkie moet gelede word. Bo na navorsers, ont- werpers, tegnici en al die belangstellende tot innovasie-voorstelle op die gebied sal aanspoor.

Daar word egter nou gevoel dat hierdie basiese idee met groot vrug baie verder gevoer kan word. Soos mnr. Smith sê, daar loop waarskynlik 'n hele paar Einsteinse of Marconi's in Suid-Afrika rond en so'n breintrust se doel moet wees om hulle te vind.

Topmanne

Hierdie trust moet so verteenwoordigend as moontlik wees en moet in sy raad van direkteure van die land se voorste navorsers en sakemanne, hê-sowel as die topmanne van die openbare sektor.

Dit moet sy funksie wees om 'n oop wedstryd vir enige idee. Mnr. Smith sê dat daar 'n sterk behoeft te vriej in die land is wat in simpatie is oor al die voorstelle en idees moet hê. Daar sal uit die aard van die saak die voorstelle kom wat aanvanklik onsin- nig, onuitvoerbaar en mal kan voorkom. Maar dan moet 'n mens dit alltyd in gedagte hou dat talle groot nuwe ontdekings of ontwikkelinge hul oorsprong juis by idees gehad het wat in 'n stadium as "mal" bestempel is.

Die tyd is ook in die huidige stadium met al die felle aansluiting van buite teen die land uiterlik nie nuwe idees. 'n Man dink die beste met sy rug teen die muur en mnr. Smith glo dat ons werklik nou groot ontwik- kelinge kan verwag.

Staatstun

So 'n trust sal uit die aard van die saak sterk fondse agter hom moet hê. Hier meen mnr. Smith dat daar op elke inwoner van die land sedert een jaar gedrukt moet word. Behalwe staat- steun, kan ook nog verder gegaan word met en elke motorwyf gevra word om by die petrolpomp 'n paar sent by te dra elke keer wanneer hy sy tank vul. As alternatiew kan daar ook na die sterk fondse van die Strategiese Oliefonds gekyk word.

Hierdie fondse sal die trust nodig hê om in verdienstelike gevalle toeken- nings te maak om iemand met 'n nuwe idee geldelik in staat te stel om dit verder te voer.

En by die ontwikkeling van nuwe idees kan universiteite en ander tegniese organisasies steeds ook ingezpan word om te help en kan die trust ook aan hulle aanvullende toekenning maak.
Here is some text from the document that can be read naturally.
Olie: Hoop

Yulke fashion in see opponent
**Baie diep**

Die jongste gasvonds is deur die olieboorplatform Sedco K, wat na Port Elizabeth sou verhuis, is aangemoedig om hul reeplings te konselleer.

Man. David de Villiers, voorstander van Soekor, het gestepte plaas naby Gansbaai bevestig dat "bemoedigende" tekens van gas gevind is. Hy het gesê dat dit nog te vroeg is om te sê wat die omvang daarvan is, of of dit ekonomies omvangbaar sal wees.

Dr. Piet van Zyl, bestuursvoorsitter van Soekor, het gestepte plaas naby Gansbaai bevestig dat dit is so dat op gas afgekom is, maar dat mense nie te gou optimaaliteite moet raak nie.

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**Hoop vlam op vir olie**

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**Gevaarlik**

Soekor, wat sedert 1965 meer as R90 miljoen in die soektoestel na olie besteed het, sal waarsynlik nou nog sterker op die Agulhasbank aan die Kaapse Suidkust koncentreer.

Na vele dae word, wat die druk van die gas wat nou raak geboor is, so sterk dat die situasie in een stadium as gevaarlik bekuur was. Die gas is intussen versel met modder wat daarin gompen is.

'n Deskundige op die gebied, mnr. Rod McDonald, in Kanada, wat op Sedco K werk, is dadelik na die diepont in die Agulhasbank geboor. Vir die volgende drie weke sal monsters genomen word en seismografiese onderzoek in die omgewing gedoen word.

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**Weinig nut**

In 1969 is die eerste gas op die Suid-Afrikaanse vasteiland plat naby Plattenbergbaai deur die Amerikaanse Superboor-groep gevind. Hier is 'n baie groot gasreserverew bevoorraad. Daar is egter toe gedagte dat hierdie gas weens die gevoelige koste om dit na die land te bring, net ekonomies ongeldig sou kon word as nog een of twee gasvondes in die same omgewing gedoen word.

As die jongste gasvondes dus aan die verwagtings voldoen, raak die kans al hoe groter dat die konsolidering in die Ons-Kaapland en groot energiebron van omset kan word. Die gas op sigself het egter geen onmiddellijke voordeel vir die land nie. Gas is van weinig nut vir die vervoersktor en net 'n ru-olieveld kan hier help.

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**Baie duur**

Gas kan oor die lang termyn wel aangewend word om ons steenkoolbronne aan te vuur. Selfs dan sal dit steeds baie duur wees. Die jongste vondes is ook heelwat verder van die land af geboor as die van die Superior-gat in 1969.

Oor die geurige dat die jongste gasvondes so sterk is dat die gas by die olieboorplatform uitspuie, het mnr. De Villiers gees dat dit heel normaal is. Gas wat onder druk onder aardkors is, sal altyd na boontoe buur as dit raak geboor word. Daar kan dus geen besondere waarde hieraan geheg word nie.

Die meeste en die minste wat 'n mens in hierdie stadium oor die jongste vondes kan sê, is dat dit bemoedigend is en 'n beloning vir die toegewytheid van die Soekor-mense. Dit is die mnr. De Villiers gesê.

The boorgat waarin die gas gevind is, het nou die diepte bereik waar hy van 'n vooringenomen sal word. Dit sal waarsynlik nou een gas gedenk word voordat verder geboor word.

Dit kan dan nog van ses weke tot twee maande duur vir die boorgat voltooi word. By elke boorgat word na die seismiese navorsing tot 'n sekere diepte besluit en word die gas dan tot daardie diepte geboor.

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Plettenberg Bay gas

strike

is small

Soccor's gas find near Plettenberg Bay has been disappointingly small and will not cause a change in the corporation's offshore drilling programme.

'But the giant Sedco K rig which drilled into what is officially called a 'gas presence' will drill deeper into the sediments for another three weeks in the hope that there is oil below the gas.'

The latest gas find is much smaller than the two other gas strikes made at sea.

They were the Plettenberg Bay strike in 1969, only 20 km from the latest strike, and a high-pressure field, near the Orange River mouth.

According to Soccor's public relations official, Mr. Mike Leibbrandt, the latest gas find is disappointing for several reasons.

Early indications were that the reservoir is quite small and uneconomic.

It produced 'dry gas', so-called 'gas', without the oil condensate found in the 1969 Plettenberg Bay gas strike. There is also no proof that the two gas reservoirs are linked.

'Officially we cannot call this a big strike,' Mr. Leibbrandt said today.

The Sedco rig is following up the find by a number of tests. Among them are loggings to establish the size of the gas reservoir and the permeability of the surrounding rock.'
Stored gas may boost city electricity

Power from mines?

Compressed air and gas stored in giant mine shaft caverns may help generate peak-hour electricity for Johannesburg in the future.

The Johannesburg Electricity Department is opposed to a move to build a 1500 megawatt (Mw) coal-fired power station that would cost R900-million. Instead, in a report to the city council early next year, it will recommend sophisticated power-boosting methods. The biggest and most imaginative of these is a R100-million project to store compressed air and gas.

The alternative methods recommended by the department to boost peak-hour capacity would limit power bought from Escom and could save the city millions.

There is only one other project like the mine shaft scheme in the world — at Huntorf in West Germany.

This is how the scheme would work:

- Two caverns would be excavated in hard rock, from the side of an unused mine shaft, hundreds of metres below the ground.
- Compressed air would be stored in one cavern, and Sasol coal gas in the other.
- A dam containing water would be built on the ground above the caverns, with pipes leading down to the caverns. This water would keep the air and gas compressed at pressure 70-times greater than atmospheric pressure.

**Turbine**

- At night, when electricity was not needed, air and gas would be pumped into the caverns, raising the water level.
- In the morning, when peak-hour power was needed, the gas and air would be released by valves.

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**Plan for power boost**

From page 1

Lenasia and 30 other municipalities.

The electricity department has already embarked on a R25-million scheme to install three 50 Mw gas turbines for emergencies, and to use during peak periods.

Of the move to build a R900-million 1500 Mw power station, Mr Barnard said: "It is not in Johannesburg's interests to build it. I am advising against it."

The city council will consider a preliminary report early next year, advising against applying to the Administrator of the Transvaal for permission to build a power station.

This follows a motion by a city councillor, Mr Max Neppe, last year, and unanimously accepted by the council, that the need for a new city power station be investigated.

At present the council generates nearly two-thirds of the city's power consumption at Orlando and Kelvin. The rest is bought from Escom, and this amount bought from Escom is increasing yearly.
The City Council is increasing tariffs in the wake of the substantial Escom increases announced earlier this year.

The unit cost of electricity in Germiston will rise by 5% from 0.475c to 0.5c.

The surcharge payable on the cost of the electricity used will increase from 69% to 87.5%.

For example, at the current rates, 1,000 units of electricity cost R4.75 plus 69% giving a total of R7.83.

Under the new system, 1,000 units will cost R5 plus 97.5% giving a total of R9.87.

There will also be tariff increases for commercial and industrial consumers.

These will range from 25% to 77%, depending on the type of consumer and when the electricity is used.

The biggest rise, 77%, will apply to electricity used in off-peak periods between 9 pm and 7 am.

The present tariff per unit for off-peak times is 0.675c. It will increase to 1.2c from January.

The Escom increases will push up the City Council's electricity bill by 22% to R5 821 137 between January 1 and June 30 next year.

Meanwhile, the water supply system to central Germiston is to be improved at a cost of R100 000.

The council feels the small pipes now in use are inadequate because of the rapid development of the area in the past 20 years and subsequent fire-fighting requirements.

The project will be spread over a number of years.
Petrol: we're exporting it!

Considerations other than the well-being of SA's hotels and tourism may force Economic Affairs Minister Chris Heinrich to ease stringent clamps on petrol trading hours.

Refinery operators told the FM this week that consumption of motorgas (petrol) had dropped to the extent that noticeable surpluses were developing at some plants. This had necessitated the export of several parcels of petrol in recent weeks.

The volume of exports is a closely guarded secret, but it is known that a limited number of shipments have been made in 20,000-dwt clean product tankers to overseas countries which are unable not to be identified.

Acting Secretary for Commerce Jaap van der Walt confirms the exports, and comments: "The position has now been reached where demand for diesel means that small surpluses of petrol occur from time to time. This has been exacerbated by demand by Railways (harvest time) and road transport."

The foreign sales have been made at rock-bottom prices, so the exercise has limited significance from a balance of payments point of view.

This development, foreseen by the FM earlier this year, does not imply that overall crude oil imports have declined in line with a drop in petrol consumption. On the contrary, they may even have to increase if the upward trend in gas oil (diesel) consumption continues beyond the point refinery configurations can tolerate changes in consumption patterns on a given barrel.

Oilmen expect the seasonal increase in petrol sales as people make off somewhere for Christmas holidays, but they say the downturn will resume as soon as motorists' tanks become empty.

Although restricted pump trading hours do inhibit sales, it is clear that after seven big hikes since 1973, petrol has become price sensitive. Oil marketing experts are confident that a partial lifting of the week-end sales ban will not make much difference to the overall hydrocarbon requirement.

And while the short-term position may be uncomfortable, the long-term one will be untenable if Heinrich continues to choke up consumption.

The reason is that three of the country's major refiners - Mobil, Shell/ BP and Caltex - are spending more than R160m on the installation of secondary processing plants designed to up-grade the barrel and increase yields of petrol, among other things.

For example, when the country was hit by the oil crisis at the end of 1973 more than 20% of refinery yields were in the form of heavy fuel oil or ships' bunkers. The reopening of Suez and the tanker trades slump has cut bunker sales 40%. It is largely that portion of the barrel that oil refiners now wish to up-grade.

What will they do with the surplus petrol if Heinrich persists with conservation measures that no longer fit changed circumstances? Operating as they do under a fixed price formula designed to give a certain return on capital employed, the first thing they will do is to seek a price rise to maintain such returns even though it may have the self-defeating effect of killing the market.
SA's got petrol—and for export

Own Correspondent

SOUTH AFRICA, one of the few countries in the world which enforces strict petrol restrictions—yet there is a surplus of petrol here—and is being exported.

In an interview on this bewildering development from Pretoria yesterday, the acting Secretary for Commerce, Mr Tjaart van der Walt, explained that it had come about because of an increased demand for diesel relative to the country's petrol requirements. The oil refineries produce various products from a barrel of crude oil and they cannot vary the ratios at will. A recent upsurge in the demand for diesel has caused the refineries to push through crude to meet this.

But the price of petrol, coupled with the conservation campaign has produced a slower growth rate in consumption.

Accordingly, the throughput for diesel has been automatically producing more petrol than is needed locally.

Mr Van der Walt said the surplus petrol was being exported but he could not reveal where. The price?

"I would think we're not making a loss," he said.

He said there was no possibility of stockpiling the crude rather than refining it because this would then mean a shortfall in diesel production.

On the other hand, "one can import diesel and the oil companies will have to determine the most economic means of supplying the local market."

"It's difficult to make forecasts," he added. "But I can't see it developing into a big thing because we certainly won't create refining capacity far beyond our own requirements."
Surplus petrol exported

Mercury Correspondent

CAPE TOWN — There is a surplus of petrol in South Africa and it is being exported.

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Surplus

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The price? "I would think we're not making a loss."

He said there was no possibility of stockpiling the crude oil rather than refining it because this would then mean a shortfall in diesel production.

On the other hand: "One can import diesel and the oil companies will have to determine the most economic means of supplying the local market."

He didn't believe there was great scope for varying the ratios of diesel and petrol, but the companies were aware of market trends for the various products.
SA exports surplus petrol

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He said there was no possibility of stockpiling the crude oil rather than refining it because this would then mean a shortfall in diesel production on the other hand. "One can import diesel and the oil companies will have to determine the most economic means of supplying the local market."

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"It's difficult to make forecasts," he added, "but I can't see it developing into a big thing because we certainly won't create refining capacity far beyond our own requirements."

Industry sources say diesel, like petrol, is at the lighter product end of the barrel and refineries have been boosting this end. It was unlikely that new facilities such as the CalTEX expansion at Milnerton would have difficulty in coping with the increasing popularity of diesel. — DUC.
SA oil, defence
bill R1 700 million

JOHANNESBURG — South Africa seems set to spend R1 700 million in 1977 on oil and military equipment.

That compares with estimates of around R250 million for 1973, R840 million for 1974, R1 170 million for 1975 and over R1 500 million last year.

These figures are obtained by comparing the official import figures given by the Reserve Bank and provisional figures supplied by Customs and Excise.

The Reserve Bank figures include oil and defence imports while these are excluded by Customs.

The Reserve Bank says imports in the nine months, January to September this year, totalled R3 187 million.

Customs and Excise put the figure at R3 905 million. That leaves an approximate R1 280 million for oil and defence.

The provisional nature of customs figures, however, mean that the oil and defence figures can only be an estimate.

Even so, the figures are accurate enough to suggest that about R140 million must presently be added to the customs import figures each month to get a proper idea of South Africa's full import bill.

In the first nine months of 1976, the Reserve Bank put figures at R5 671 million and Customs at R5 414 million, leaving an oil and defence shortfall of R157 million.

In spite of reservations about the exact calculations, the figures show that spending on oil and defence is still increasing. Other imports however, are running at about 15 per cent down in volume and about 25 per cent down in value on 1976 levels.

The value of net gold output for 1977 will be at least R400 million more than in 1976. This will easily cover this year's extra overseas spending on oil and defence. — BBC.
BY GEOFFREY BERIDGE

Cut EScoms’s Growth May End in Demand May

SUNDAY TIMES, BUSINESS TIMES, DECEMBER 25, 1977.