55

66-hour fuel blackout at weekends

STAR 13/10/76

Mr Heunis at his Press conference today.

Miss Ingrid Border of Johannesburg took no chances early today. She filled up just in case. Mr Heunis announced a petrol selling ban from noon Friday to 6 am Monday.

Pretoria Bureau

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 containers other than in the standard tank originally installed by the manufacturers 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 new measures will apply from October 22. A Government Gazette will be published on that date and the measures will come into immediate effect.

The measures were announced by the Minister of Economic Affairs, Mr Heunis today.

They are:

- The selling hours of filling stations will be changed to 6 am to 6 pm from Mondays to Thursdays, and from 6 am to noon on Fridays.
- The storage of petrol in containers of more than 5 litres by all people is forbidden, with the exception that farmers and business undertakings needing 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 and for genuine productivity 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 anybody during closing hours other than those authorised to obtain fuel for their production purposes. They will also be required to keep a register of all petrol supplied during closing hours.

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

In the past there had been difficulty in applying speed limits effectively because of technical problems with speed-measuring apparatus and it had become obvious that the public was prone to exceed the limit.

However, with the introduction of standards for speed-measuring apparatus by the Bureau of Standards and the introduction of new regulations by the Minister of Justice it was expected that the speed limits would be applied with greater success in future.

The statement also said that in the light of constant increase in the cost of imported petroleum products, and because of the rapid growth in the number 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 than on speed.
- Commerce and industry, as well as the agricultural sector, must do everything in their power to rationalise their production and distribution with an eye on fuel conservation.

SA petroleum bill rose to R1 015-m

Pretoria Bureau

South Africa's bill for the imports of petroleum products had increased almost sixfold from R190-million in 1972 to R1 015-million last year, said the Minister of Economic Affairs, Mr Chris Heunis, in Pretoria today.

import bill" he said.

"It follows that the Republic had no other choice, but to continue with fuel conservation measures so that it can meet its obligations in regard to the rise in cost of imported petroleum products."

He said the adverse balance of payments had increased from R1 592-million for the year

been caused by the long and serious recession in the most important industrial countries; the sharp decline in the price of gold since August 1976; increased government spending, especially for strategic goods; unusually large capital expenditure by certain public corporations; the accumulation of imported goods by the private sector in the first

Energy

PETROL GOES UP 3,1c A LITRE

24/10/75 (1) 246 (2) Energy (3) 28

Cape Times Correspondent

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 Arfica 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."

HANSARD 2 Q. column 138 - 139.

14 February 1975.

(1) Energy

~~(2) 260 B~~

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 commence 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 properties 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 purchase price.

†The MINISTER OF ECONOMIC AFFAIRS:

(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 construction, it is hardly possible 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 towards April 1977.

(bb) According to expectations 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 R1 021 million, excluding working capital, interest during construction, townships and housing.

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

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

HANSARD 4 Q. column 289-290
25 February 1975.

Energy

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 cents per litre on the excise duty in respect of diesel oil.

HANSARD. S. Q. columns 357-8-9
14 March 1975.

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, but 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.

1 ~~216~~

2 Energy

Hansard 7 Q Columns 556-557
21 March 1975

Shortage of coal/anthracite in Eastern Cape

*18. 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.

1 Energy
2 ~~78 A~~
3 ~~216~~

Hansard 7

Q columns ~~556~~ 557

21 March 1975

Border/North Eastern Cape areas: Coal resources for production of petroleum

*19. Dr. E. L. FISHER (for Mr. C. J. S. Wainwright) 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.

Energy

HANSARD 7   Q. 579-80

21 March 1975.

① Energy

~~② 216~~

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) 12 856 000 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.

HANSARD 9 Q. column 682-4
11 April 1975.

(1) Energy
(2) ~~276~~

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.

F.M. 18/4/75

Energy

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 rightful 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 wearied of official exhortations to use oil sparingly, Petroleum Controller Joep 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 liftings 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 increases 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.

~~① 260B~~
② 244
~~③ 220~~
~~④ 78A~~

Germans may get uranium from SA

STAR 23/4/75

Own Correspondent

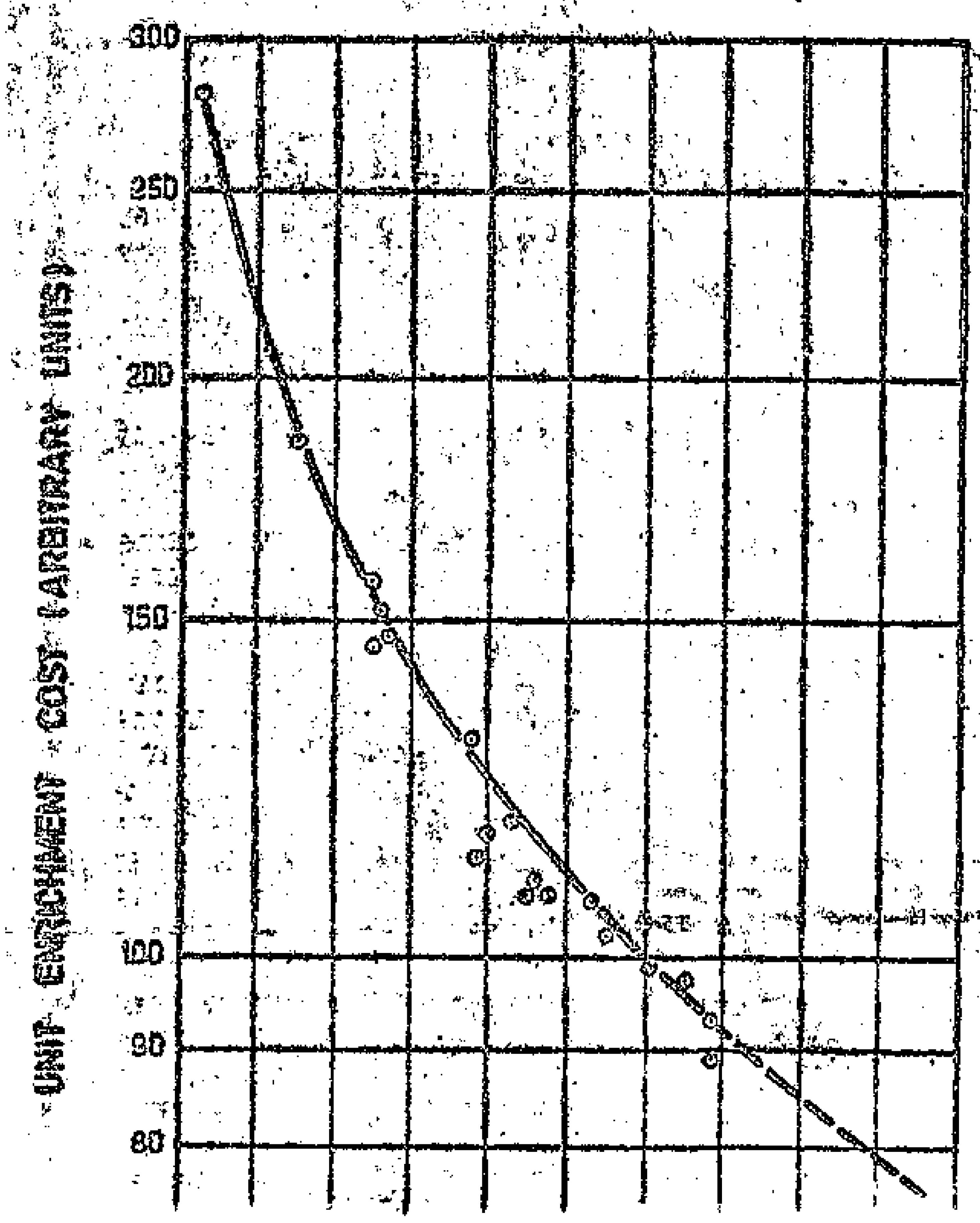
HAMBURG — South Africa has offered West Germany supplies of uranium to help the Germans over any shortage that may arise in their stocks of fissile material.

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

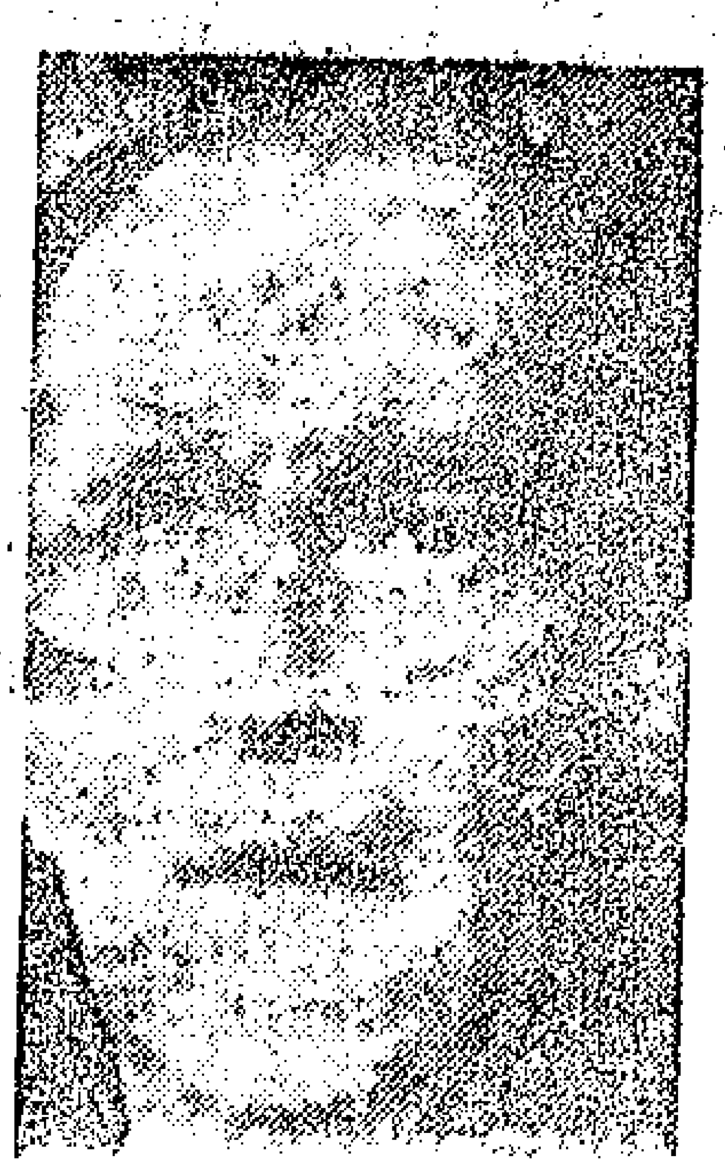
Dr Koornhof stressed the importance of South Africa as a future exporter of fissile material in an interview with the West German Press in Hanover.

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 jet-nozzle

URANIUM ENRICHMENT

Roux's teaser

F.M. 25/4/75

Uranium Enrichment Corporation (Energy) 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.

SA to drill 8 oil wells off Cape

STAR 1/5/75

Own Correspondent

CAPE TOWN — Soekor is preparing to drill up to eight wells off the southern Cape coast, in its South African oil search, "and we think the chances are reasonable of finding oil there" a senior official of the exploration company said here yesterday.

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 healthy knowledge of the geology of the offshore St Francis Basin area, and the company "feels a lot better than before" about further exploration there.

Through 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 off-shore rig Sedco 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 off-shore exploration:

Expert teams assisted by overseas experts were involved in the exploration.

Dr Graham also said more off-shore drillings would probably be made off the west coast.

Speaking about an off-shore gas find referred to recently by Dr P Koornhof, Minister of Mines, Dr Graham said the site was in a "generally hostile environment." The cost would probably be "rather high."

Optimism on oil ban

Raymond Whitaker

PARIS — A spokesman for the Organisation of African Unity is "optimistic" that Iran, South Africa's main oil supplier, can be pressed to stop fuel exports to South Africa.

Mr Dramane Quattema, the OAU's New York representative, said this yesterday following calls from a world anti-apartheid conference for the OAU to seek 100 percent enforcement of the oil embargo imposed by OPEC.

Mr Quattema said the OAU had decided recently at Dar es Salaam to make such an approach to OPEC and was seeking UN backing to broaden support for the measure.

"I am aware that Iran has entered some kind of special relationship with South Africa, but I am confident that the OAU can bring sufficient contrary pressure to bear," he said.

The OAU has appointed a member of its secretariat, Mr Venant Wege, to liaise with all anti-apartheid organisations. He said he was hoping to contact Whites in South Africa who oppose apartheid, and to establish relations with anti-racialist bodies there.

There were two main areas of cooperation between the OAU and anti-apartheid groups, in his opinion.

"We will tackle them in the African states in which they operate," he said, "and on their home ground — western Europe, the United States and Japan."

HANSARD. 13. Q. columns. 898–99
6 May 1975

Energy

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) (i) 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-producible 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.

(244)

Oil explorers head south

Sun Times (Bus Times) 11/5/75

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 R40-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, Tricentral Corp, has had to appeal to the British Government for relief from the heavy tax and 51 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'Acquitaine. Final terms of the lease agreement will be settled in Paris on May 19.

"Approval of the deal by the South African Government won't be a problem," Mr Buckley said.

The lease is a 3,5-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 minimum cost of operating a drilling rig offshore in the North Sea was nearly R56 000 a day.

244

Canadian coal men to visit SA

Business Reporter STAR 12/5/78

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.

HANSARD 14

Q. 954-5.

14 May 1975.

Energy

~~2. 216~~

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.

244

Uranium has R400-m boost for industry

Sun Times (B.T.) 1/6/75

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. (Ampie) Roux, president of the Atomic Energy Board and chairman of the Uranium Enrichment Corporation, said this in a special interview on the constructional 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 he made in the interview were:

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

Dr Ampie Roux . . . There's gold in uranium.

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

Questions and replies in the interview were:

Q: How much of the uranium enrichment plant do you expect will be locally made?

A: It is difficult to give an accurate percentage because tenders will be invited both locally and overseas, but it is estimated that at least 60 per cent will go to local industry.

In addition to having geographic advantages, local industry is in a strong position to compete because it already has experience of the sophisticated manufacture called for in the nuclear field.

This experience has been gained over 14 years, starting with the building of Safari 1, the Atomic Energy Board's experimental nuclear reactor, and subsequently by involvement in the construction of the pilot uranium enrichment plant at Valindaba, next to Pelindaba, near Pretoria.

A commercial uranium enrichment plant will create an opportunity to follow up this experience on an even larger scale.

Q: Assuming that it is nearly all locally made, what sort of capital expenditure do you expect to incur locally — in very approximate figures? Presumably the heavy engineering, construction industries and Iscor will benefit most?

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 sum does not take into account the effects of inflation and is expressed in October 1974 money values.

Although heavy engineering and construction will benefit most, other sectors of the engineering industry such as the electrical industry will also benefit directly or indirectly.

Q: I presume construction

Uranium h
R400-m bo

Sunday Times (Bus. T...

Continued from Page 1

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 slow industry ... will the orders

of the pi... African ... they could ... exactin... standards,

Q: The co... plant will ... ary indust... sumably i... convenient ... equipment ... as well as

A: During ... stage it w... ent to hav... near equ... material s...

This is, ... economic ... for the wh... ating life ... will be v... on low-c...

...this experience has been gained over 14 years.

Uranium has R400-m boost

Sunday Times (Bus. Times) 1/6/75

Continued from Page 1

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 slow industry down or will the orders ... can cope without difficulty?

A: Experience gained during the construction of the pilot enrichment plant leads 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? What about the skills, such as welding, employed in building the plant?

A: The plant will be characterised 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 sited conveniently to sources of equipment and materials, as well as power?

A: During the construction stage it would be convenient to have the plant sited near equipment and material supplies.

This is, however, not the economic optimum, since for the whole of the operating life of the plant it will be vitally dependent on low-cost electricity, ... by siting the plant in the immediate vicinity of a pithead, coal-fired power station.

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 financing of the construction?

A: Although exploratory investigations have shown that financing the plant is unlikely 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 over-supply had ended and predicted that demand would continue to rise more steeply.

This augurs 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.

244

E Transvaal will get second Sasol

Sun Times 1/6/75

SUNDAY TIMES Reporter and Sapa

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: coal mine shafts would be sited on the farms Brandspruit and Bosjesspruit or in their immediate vicinity.

"The intention is to site the industrial complex on the farms Twistdraai and Goedehoop, 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 Goedehoop 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 Goedehoop 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 85,6 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. Kalmeier, 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."

(244)

Village agog over Sasol II

RDM 2/6/75

By JOHAN BUYS

WHILE TRICHARDT, the Eastern Transvaal hamlet of 600 inhabitants, is agog over the news that the giant R1 000-million Sasol II plant is to be established in the district, farmers who have to make way for the project are heartbroken.

The secret which has had the country guessing ever since the Sasol II project was announced, was broken at the weekend when Sasol's chairman announced that the multi-million rand project is to be built near Trichardt and Evander.

Sasol bought nearly 5 000 ha for the new project. Farmers in the Trichardt area who have sold their property to Sasol will have to be out by October.

One of the most prominent farmers affected is Mr Hilton Allen, 71. He runs a maize and cattle empire on a 1 074 morgen farm with his two sons, Brian and Graham.

Mr Allen senior said: "My dad came here in 1912 from the ERPM mine. He brought land at £3.12.6 a morgen.

"I bought the neighbouring farm in 1928 at £8 a morgen. Everyone told me I was mad. But look at the way prices have soared today."

UNHAPPY

Mr Allen said Sasol offered him R300 a morgen "plus improvements". He added that some farmers in the area were not happy over the prices offered to them.

Another farmer, Mr Henry van Druten, 54, will have to leave after living on his 600 morgen farm for 25 years.

Mr Van Druten said he was not satisfied over the price paid for his land. "I expected R500 per morgen but got only R421."

● See Page 3

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 mineshafts would be on the farms Brandspruit and Bosjesspruit, 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 Twistdraai and Goedehoop, to the north of the mineshafts, 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 fully 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.

RDM 4/6/75

244

Cool it, Sasol warns Trichardt

By JOHAN BUYS

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 Voortrekkers, had visions of undreamt of wealth and prosperity with the announcement that the R1 000-million Sasol project would be established on four farms close by.

Land prices rocketed and speculators overran the area for the "kill" 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.

RETURNED

Trichardt was getting ready for the "boom", and neighbouring towns looked on with envy.

Then the Mayor Mr Jan Schabort 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."

"It was made quite clear at Sasolburg on Monday that the whole Sasol complex would be handled by the Sasol people. Do not expect abnormal development, we were told."

Mr Schabort was echoing the warning by Sasol's managing director, Mr Dawid 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 1 000 per cent. Stands previously offered for R500 are now going for R5 000.

"A lot of people are going to burn their fingers," Mr Schabort said.

There will naturally be a quickening of business activity in Trichardt, Mr Schabort said. Construction workers on the Sasol project would come in to town to do their shopping and some would look for housing in the town and nearby Evander.

"But there would not be such a phenomenal development in Trichardt as some had made out.

"There will be a slump in the property world later and business will return to normal again."

Another dream that was shattered at Monday's meeting was that Trichardt might one day merge with the Sasol complex to form one big city.

Mr Schabort said: "We were told amalgamation with the new Sasol town was out of the question. There is a rich coal seam between Trichardt and the farm where the town will be built eventually and Sasol want to exploit this."

"Sasol managing director, Mr De Villiers, told us it would not be wise to build on this seam. So it seems we will have our own towns — with the Sasol town away from us."

Trichardt — a reluctant boom town

IAN REID REPORTING

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 into the air over the second coming of Sasol. They have enough trouble keeping pace with the present cost of living as it is. And all they can see on 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, so the price of everyday things will increase because they will be in short supply.

And if you didn't have any money yesterday, then how can tomorrow's boom benefit you anyway? You didn't have the R300 four years ago to buy a plot in the town to sell today for R5 000. And if you do own a R9 000 house which you can sell now for R30 000, so what?

You still have to have somewhere to live and another house is going to set you back R30 000-plus.

The farmers in the vicinity might be getting good prices for their land. But they are today's ruling prices so they won't have much change left over after buying other farms.

But the news of the site for Sasol II has certainly put a spotlight on the area and it raises an interesting "Test the Team" question.

Who was the Scottish surveyor who long ago named the towns in the vicinity? And it could only have been a Scot.

Consider. There is Kinross, Leven siding, Leslie and Devon. And don't let the "Devon" fool you — it is not named after the county of Devon in England.

It is named after the River Devon which runs into Loch Leven, which is beside Kinross.

But does anybody know who it was who brought those Scottish names out here?

Getting back to Jo'burg, but still speaking of names, I wonder if the Stock Exchange has any plans afoot to ask the city council to change the name of the street where they are building their new headquarters.

"Hollard Street Firms" looks all very nice in a headline.

But somehow I don't feel that "Diagonal Street Firms" will do much to restore the faith of a shaken stock holder.

It's just a thought.

HANSARD 18 Q. 1123-4

10 June 1975.

Energy

Nuclear power station at Duynefontein

*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?

STAR 12/6/75

244

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 African shareholder in the company.

At present ISASA had Ucor and the Industrial Development Corporation as shareholders, but Dr Koornhof said: "I trust that organisations from the private sector will grasp this opportunity to undertake uranium enrichment on a large scale together with the state."

The Minister indicated that feasibility studies for the plant were complete.

These studies, in conjunction with expert opinion from other industrial countries, gave confidence that the full-scale enrichment plant was not only feasible, but was justifiable on purely economic grounds.

South Africa was always willing to share its knowledge on uranium enrichment with friendly countries and to tackle uranium enrichment as an international undertaking.

Dealing with the significance of the large-scale uranium enrichment plant, he said its initial capacity would be about 5 000 tons a year. At R50 a kg, the plant would earn about R250-million a year in foreign exchange.

LAST LAUGH FOR SUN POWER MEN

The Argus Bureau

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.

Oil crisis: U.S. to spend millions on solar energy

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 ice rinks 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 recognised, not only by scientists, but also by commerce. A few modest solar energy converters are already 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, supported by the Ford administration's programme to make the U.S. independent of foreign energy resources within 10 years.

In fiscal 1975, the Federal Government will spend up to 50-million dollars (about R35-m) on solar power research and development.

This is small compared to the 499-million dollars (about R349-milion), earmarked in the same year for the development of a nuclear breeder reactor. But it is a lot more than the 13-million dollars (about R91-m) allocated to solar energy work in 1974 and vastly more than the average of 100 000 dollars (about R70 000 a year that was spent from 1950 to 1970.

Even greater expenditure is proposed for next year under two Acts passed by Congress in 1974. The Solar Energy Research Development and Demonstration Act provides for 75-million dollars (about R52-million) to be spent in 1976, and the Solar Heating and Cooling Demonstration Act calls for 60-million dollars (R42-million) 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 power 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 orbiting the earth, converting sunlight into usable energy and sending it, by microwaves, to receiving stations on earth.

One respected solar energy technologist, for instance, speaks seriously of assembling giant solar-cell collectors in space.

But first scientists will have to develop the shuttle spacecraft that would transport the construction crews and materials.

In the meantime more immediate attention is being given to exploiting the sunshine that reaches the earth. That is not inconsiderable in itself.

DESERT

According to a recent study by the Ford Foundation, the solar energy that falls on the Saudi Arabian desert each year is about equal to the world's entire proven reserves of coal, oil and gas.

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

The solar thermal converter, which uses the sun's heat to make steam to turn turbines, is only one of several ways in which solar energy can be exploited.

Another proven method is photovoltaics, the system used to generate electricty for the Apollo spacecraft to the moon. It involves using semi-conductors 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) for conversion 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 to have an impact on the U.S. energy situation,' said Dr H. Guyford Stever, director of the National Science Foundation.

According to him a recent survey listed 68 solar-heated buildings completed or due to be completed soon in the United States.

Completed projects include large school buildings in Minneapolis, Boston and Baltimore.

Some firms are already marketing solar heating equipment for houses.

Nevertheless, it is estimated that only 12 percent of America's buildings will be heated and cooled by the sun by the year 2000.

COMPETITIVE

But Dr Stever points out that heating and cooling of buildings represents about 20 percent of United States fuel consumption. If only 10 percent could be supplied by solar energy by 1980, the United States could save the equivalent of one-million barrels of oil a day.

One survey estimates that solar heating and cooling of buildings will have become competitive with conventional systems in the United States by 1985.

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

INDUSTRY

Power for industry, and lighting seems most likely to come from solar thermal conversion. One drawback, however, is that this system takes up a lot of space, for it involves the use of batteries of mirrors or other devices to collect the sun's heat.

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

Dr Stever estimates that by the year 2 000 solar thermal conversion could provide about one percent of the country's projected energy needs, but a far higher proportion in the south-western 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 Stever.

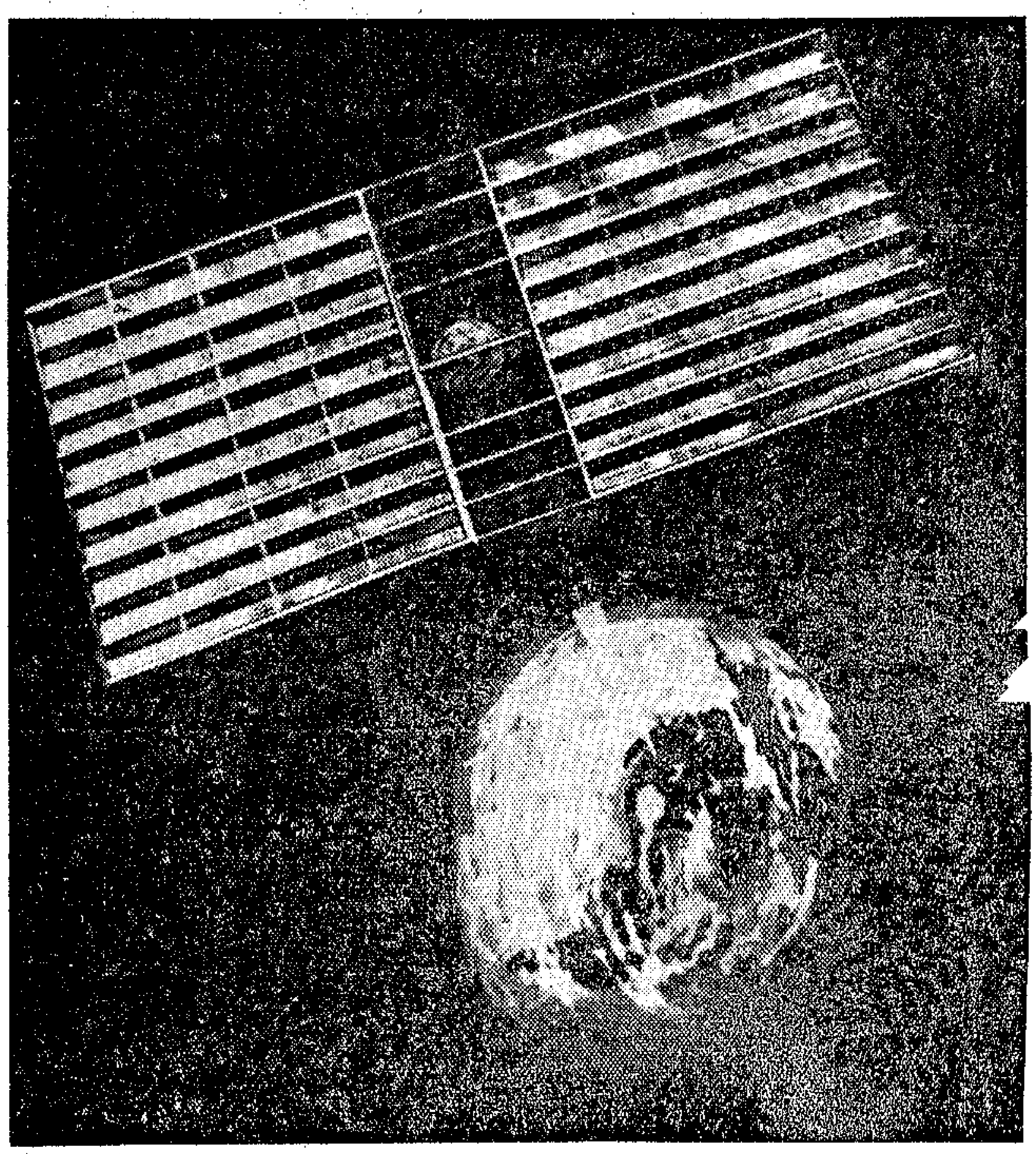
There are several reasons why solar energy will not be providing plentiful and cheap power for many years yet. One is that it will take vast capital expenditure before solar energy can compete with conventional power sources.

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 gigantic satellite solar power station. The massive unit, measuring 4km high by 11km long, would weigh 9-million ***kilograms. The station would beam solar energy to Earth where it would be converted to electric power.***

HANSARD 19

Q. 1191-3

17 June 1975.

Second oil-from-coal complex

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

(1) What is (a) the area of land required for establishing the second oil-from-coal complex, (b) the estimated cost of acquiring such land and (c) the method of acquisition;

(2) (a) what stage has been reached with the planning and (b) what is the expected (i) commencement and (ii) completion date of the project;

(3) what is the estimated cost of (a) the project, including the cost of the land, and (b) providing the land and housing for employees of the project;

(4) (a) what is the estimated total number of employees to be employed, (b) how many houses will be required for them and (c) where will such houses be situated.

The MINISTER OF ECONOMIC AFFAIRS:

(1) (a) 4 645 ha have been acquired thus far. Detail planning may, however, reveal that additional land is required.

(b) R1 996 000 (mineral rights excluded).

(c) Private treaty.

(2) (a) Priorities have been determined for the mining of coal deposits based on completed geological surveys while environmental and soil studies have also been completed. This enabled SASOL to determine in broad outline the location of mine shafts, the factory site, industrial township and residential area for Whites and to proceed with detail planning.

(b) (i) and (ii) As stated in my reply to the hon. member's question No. 39 of 14 February 1975, except that the provision of services is now expected to start towards the end of this year.

(3) (a) R1 021 million based on 1974 cost levels, excluding capital escalation, working capital, township development and housing.

(b) Depending on the mining method which will be followed R106 million including the cost of township development, housing and working capital.

(4) (a) 1 860 Whites and 2 250 Blacks—excluding mining personnel—the planning in respect of which could not yet be finalized, because the best mining methods are currently still being investigated.

(b) Please see my replies under (3)(b) and (4)(a).

(c) In a White residential township approximately 5 km south-west of Trichardt and 7 km south-east of Evander. The location of non-White housing is currently being investigated in consultation with the authorities concerned.

~~H. 260 B~~

2. Energy

1. 204

3 problems for Sasol II planners

RDM 16/6/75

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 Lourenço Marques 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 R1 000-million project is tackled.

To add to the initial planning problems, the Driefontein African township with its 5 800 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.

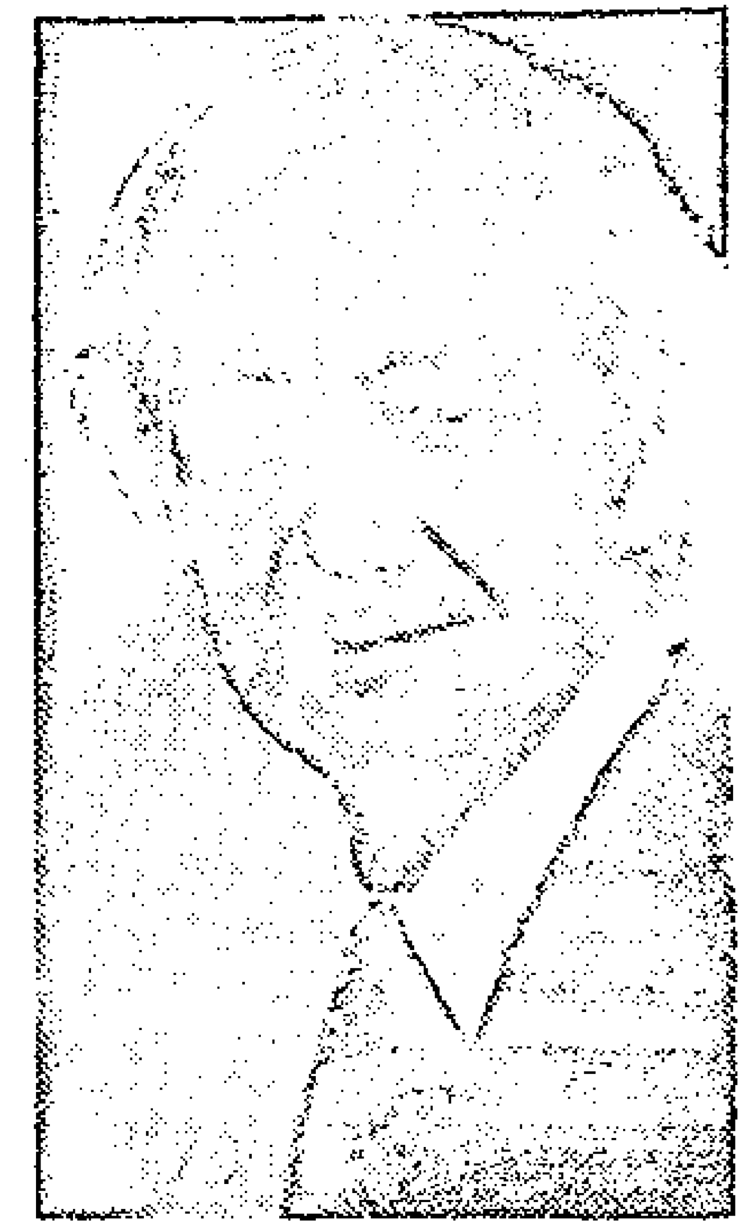
Sasol planners will initially move into the house of Mr Graham Allen, on the 1 074 morgen farm "Goedehoop" it has bought from Mr Hilton Allen and his two sons.

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.

C.T. 18/6/75 (244)

Shell considering R500m investment in Southern Africa



Mr K L G Geeling

SHELL is considering capital projects in Southern Africa which could involve expenditure of up to R500m in the next decade.

This was announced by the chairman and chief representative, Mr K L G Geeling, at a banquet to mark Shell's 75 years in Southern Africa, held in Cape Town last night.

Mr Geeling also announced that Shell's local oil interests would become completely independent on June 26, thus joining the existing 100 percent owned chemicals, coal and metals companies in the Royal Dutch/Shell Group in Southern Africa.

Projects

"On June 26 the historic value of our asset investment in the Republic, South West Africa, Botswana, Swaziland and Lesotho will stand at some R250m.

"We aspire to play a continuing and developing role in the economies of these countries and we are at present evaluating new major projects which may well involve capital expenditure of up to R500m over the next ten years.

"By the end of that period, therefore, the cost of **our asset investment in Southern Africa could be some three-quarter billion rands.**

"**Oil will continue to dominate the energy business for some years. In the years immediately ahead,** our oil business will see an emphasis on equipping and improving manufacturing facilities to meet a changed pattern of product demand which followed the steep rise in oil prices."

Refining

Normal capital expediture of several million rands a year on tankage, modernization, the protection of the environment and to improve services to customers in all categories, would be augmented by a two-stage **expansion of the group's refining facilities, the biggest in Africa in both capacity and capital investment, at Durban.**

To enable more petrol and gas-oil to be produced from available crude oil, the catalytic cracking plant would be improved and a new complex was being designed to make gas-oil available in place of the fuel oil. This would enable the country's needs to be met with less imported crude oil and **improve flexibility. In addition, a new feedstock preparation unit was on the drawing board.**

These facilities would cost the group R25m.

The group was also involved in the development of an ethylene cracker for the production of feedstock for South Africa's plastics industry. Preliminary estimates indicated a total capital investment of R100m of which the group's share again would be R25m. The plant would make South Africa independent of plastics feedstock importations for some years.

Aviation

Investments to produce aviation gasoline and special products for industrial purposes in the Republic were also being studied. In the more distant future heavy investment was envisaged to improve both the quality and yield of marketable products from crude oil.

Considerable additional investment would also be made in chemicals, coal and metals.

Shell Chemical, which began operating in South Africa 26 years ago, now had four main divisions — agricultural chemicals, industrial chemicals, polymers and consumer products — and its investments represented a significant proportion of the group's net capital employed in the Republic.

Its epikote resin plant, the first on the African continent, which represented a capital investment of more than R2m, produced 4 000 tons a year — more than sufficient to meet South Africa's present needs.

Agriculture

The company operated formulation plants for agricultural chemicals, paint and lacquer solvents, polyurethane chemicals, and consumer products, at Durban, Wadeville, Cape Town and Port Elizabeth and manufactured polyurethane products mainly for building and refrigeration.

In the thermoplastic **field Shell know-how was used to manufacture more than 10 000 tons a year of a range of polystyrenes and plans for a new plant to increase production to meet South African current** and future needs were being considered.

"A R50m polypropylene plant is being planned and we expect it to be in production in the second half of 1978," said Mr Geeling.

"The new plant to be **built at Durban will have a design capacity of 50 000 tons a year, which will make South Africa self-sufficient at that time and open up significant possibilities for polypropylene."**

Coal

Turning to coal, Mr Geeling said that experience gained over several decades in the search for oil — including expenditure of R2m in the Republic — had enabled Shell to develop significant resources in manpower and exploratory techniques which were being used to search for coal in Southern Africa.

"Collectively our skills in exporation, transportation, and as a world-wide energy marketer, together with our ability to design, co-ordinate and find the money for major projects on an international scale, place us in a unique position to locate, develop and market coal," he said.

Shell Coal had been active for several years in "grass roots" coal exploration in various parts of the Republic and had

Shell

C.T. 18/6/75

Continued from page 12

tion, involve investments of hundreds of millions of rands," Mr Geeling said.

Atomic

Referring to Shell's 50 percent ownership of General Atomic, developer and manufacturer of the high temperature gas-cooled reactor (HTGR), Mr Geeling said that that association made know-how on the most advanced international nuclear technology available to the group.

"The HTGR is considered to be particularly suitable for South African conditions and preliminary studies now in progress would lead to the introduction of this more

conditions and preliminary studies now in progress would lead to the introduction of this more advanced reactor in the late 1980's," he said.

"We have also entered the minerals field and through our wholly-owned subsidiary, Billiton Exploration South Africa, are actively prospecting for base metals such as zinc, copper, nickel and lead, in various parts of the Republic. In time we hope to extend our activities into other sectors of the metals industry.

"In our 75th year in Southern Africa the independent Shell group stands on the threshold of transforming from a petroleum supplier into a great energy producer with expanding interests in chemicals and metals."

tive for several years in "grass roots" coal exploration in various parts of the Republic and had located significant reserves.

"Detailed feasibility studies are being made for mining, transporting and marketing coal from a new mine in the Witbank-Bethal area in equal partnership with Transvaal Consolidated Lands, a company in the Barlow Rand Group.

Exports

"We are negotiating with the Government in connection with the long-term export of coal from the Republic and expect to be able to satisfy any conditions placed on future exporters," said Mr Geeling.

The group held special prospecting licences to look for coal, oil shales and radio-active minerals in Botswana and Swaziland and began exploratory work in both countries in 1974.

Wherever feasible, coal deposits would be developed by the most modern strip mining methods which would include the preservation of the environment by reclamation and replanting. An order worth more than R30m for draglines had already been placed

"We are acknowledged experts in the technology of transporting solids through slurry pipelines. Detailed design studies are being finalized to transport coal by pipeline to Richards Bay, where the Railway Administration is building facilities to enable the export of coal in large vessels.

"We are also deeply involved in major research on the efficient and economic conversion of coal into hydrocarbon gases and liquids. Laboratory and pilot studies are expected to lead to processes showing improvement over current technology.

"The viability studies we are undertaking on coal mining, solids piping and coal conversion will, if they come to fru-

Continued on page 11

18/6/75

N/M Mercury Reporter

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. K. L. G. Geeling, the company chairman, said in a speech read on his behalf that the two-stage expansion programme would cost R25-million, and the new plant R50-million.

"To enable more petrol and gas oil to be produced from available crude oil, the catalytic cracking plant is to be improved and a new complex is being designed to make gas oil available in place of fuel oil.

"This would enable the country's needs to be met with less imported crude oil and improve 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-1978. It would have a design capacity of 60 000 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 26, thus joining the existing 100 percent owned chemicals, coal and metals companies in the group in Southern Africa.

"We aspire to play a continuing and developing role in the economies 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 cost of our asset investment in Southern Africa could be some R750-million.

See also Page 28.

244

70

(2) 216

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SHELL TO COMPRISE 12 FIRMS IN S.A.

18/6/75

Natal Mercury Correspondent

CAPE TOWN — When Shell in Southern Africa becomes an independent oil, chemical, coal, metals and nuclear group within the world-wide Royal/Shell Group on June 26, 1975, it will consist of 12 companies in South Africa, South West Africa, Botswana, Swaziland and Lesotho.

Shell (Petroleum Supply) Ltd., will be the major company. A new company, Shell Southern Africa (Pty.) Ltd., will provide financial computing, corporate planning, personnel, and trade relations services to the whole group.

The present oil company in South Africa, Shell South Africa (Pty.) Ltd., will change its name to Shell Oil South Africa (Pty.) Ltd.

Other companies will be: In South Africa: Shell Chemical South Africa (Pty.) Ltd.; Shell Coal South Africa (Pty.) Ltd.; Billiton Exploration South Africa (Pty.) Ltd. (metals);

In Botswana: Shell Oil Botswana (Pty.) Ltd.; Shell Coal Botswana (Pty.) Ltd.;

In Swaziland: Shell Oil Swaziland (Pty.) Ltd.; Shell Coal Swaziland (Pty.) Ltd.;

In Lesotho: Shell Oil Lesotho (Pty.) Ltd.;

In South West Africa: Shell Oil South West Africa Ltd.;

Shell Coal South Africa (Pty.) Ltd., will be responsible for the group's nuclear activities.

In addition, the Shell group will retain a 50 percent interest in Sapref, the Durban refinery which is operated under a service agreement with Shell Internationale Petroleum Maatschappij, The Hague; a 50 percent interest in African Bitumen Emulsions (Pty.) Ltd.; a 25 percent interest in South African Lubricants Manufacturing Company (Pty.) Ltd. (manufacturers of base oils for lubricants); a 17.5 percent interest in Trek Beleggings Ltd.; and a 36 percent interest in Prices (South Africa) Ltd.

BP staying out of oil hunt

Sun Times (Bus. Times) 22/6/75

By JON ABBOTT

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

He said BP was unlikely to rejoin the search for oil in South Africa because the experts were "not over-encouraging".

But, he added, oil had a funny habit of being found where the experts said it could not be found — and vice versa.

BP, which is to sever its long-standing link with Shell next week, was in a consortium with Shell, Mobil and Total which drilled off the coast in the Port Elizabeth-East London area in 1972.

"We exercised our right withdraw after one hole been drilled," said Mr pler.

said they did this se they had better cts in the North ff the British coast, n Alaska.

first of BP's North ells is expected to into production later ear.

e BP may be wrong South Africa's oil cts, he said, he felt vernment was abso- right to spend on drilling. What spent so far may ge to the South axpayer, but it nodest sum by dards.

ernment recent- ed that it has R18 million for ing operations

er said that he saw no reason why BP in South Africa should not become a public company in a few years' time. But the company would first have to establish its own track record as an independent operator — no longer tied to Shell — before this could be considered.

"It will take two or three years for our new organisation to shake down," he said.

He said that, in the main, Shell liked to do things on its own, while BP preferred partnership arrangements with local companies. Because of this, BP was to some extent partly public already in South Africa.

Wayne "Simon" Templer . . . "State is right to continue the search."

They're Shelling out R500 million with emphasis on coal

244

Sun Trib (Fin) 22/6/75

Financial Editor

K. L. Geeling

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 feasability 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 all 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.

(244)

1 78

2 216

3 244

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25/7/75

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 rands 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 is a strong probability.

This figure may appear large in relation to the South African economy. But it is not unduly big in terms of energy costs. The fourfold increase in the oil price, for example, is costing South Africa an extra R700-million a year, a Government spokesman announced recently.

Higher price

Centring 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 24,70 dollars to 34 dollars (R24,28) a ton f.o.b at 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 Richard's Bay. They add that 34 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 fob price was fixed at R8,48 a ton rising to R9,62 a ton by 1983.

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 R300-million a year.

Sun Trib 27/7/75

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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 roused 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.

By EUGENE HUGO

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 breakthrough 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 R250-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 official level.

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

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

But none of them can be traced in any Government position, nor can any explanation be extracted from American officials.

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 in March that a CIA agent, Mr Robert Jaster, 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 1967, when Russian spy Loginov was captured by security police under General H. J. van den Bergh, the 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 sudden 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 comment was forthcoming from Pretoria yesterday.

The Minister of Foreign Affairs, Dr Hilgard Muller, said: "I am sorry, I can't help you."

Silence

The American Ambassador, Mr William Bowdler, would not comment. "I don't know where this information came from, but I don't have any comment at all on 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 Banda of Malawi. Mr Holmes, however, denied he had ever been a CIA agent.

244

Huge cut in uranium costs on the cards

Sun Times (Ext 7) By ADAM PAYNE 10/8/75
Mining Editor

METALLURGICAL advances, equalling in economic importance the announcement this week on improved platinum refining, are possible in uranium oxide production.

Atomic Energy Board scientists at the National Institute for Metallurgy and metallurgists working for Anglo American Corporation and other mining houses are engaged in experiments with technologies which, if successful, will heavily cut down capital and working costs in uranium production.

Because these projects are promising and decisions — for or against — will not be possible for about a year, new multi-million rand uranium plants are unlikely to be launched in the next year, even if financial planning is well advanced.

Companies that are expected to undertake uranium expansion programmes are Randfontein and Southvaal, both of which have high uranium values in their reefs.

A further new uranium producer will be Afrikander Lease, in the Klerksdorp area, whose mine will treat uranium primarily and gold as a by-product.

If the experiments on improved processes are successful, not only will extraction be more efficient but capital costs will be about two-thirds of those now incurred on conventional filtration systems.

Experiments are taking place on alternative processes and with different sections of the technology. High-pressure, high-temperature leaching is one aspect of the trials. With this process extraction rates of more than 90 per cent are expected compared with 75 per cent now accepted on some mines.

Anglo American Corporation's metallurgists did considerable research on these processes 18 years ago and were making good headway when the uranium market slumped and the experiments were discontinued.

Now that the price of uranium oxide has risen from $6 a lb to $20 a lb experiments have been resumed among the mining houses.

244

W/E ARGUS 16/8/75

Financial Staff

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 koppie.

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 soon as it can spare men from other work.

Satellite

An American satellite survey over the Graaff-Reinet district pinpointed the find at Marais Siding, in the south-west.

A geologist visited the hill and noted rich deposits that could be mined by quarrying.

Extensive lime deposits were found during drilling for oil on the koppie and the uranium is reported lying under this area.

The 200-morgen site is part of a farm sold years ago. The oil company offered R100 000 for the mining option. The bid was later raised to R250 000 and at R1-million the owner signed the contract.

Oil search

The Karoo's uranium rush got under way two years ago when Soekor, the State-sponsored oil exploration company, reported extensive uranium finds after eight years of drilling for oil.

Soekor's uranium find measured 52 000sq km. If payable values could be found over 1 900sq km, 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.

So far no consent had been issued to start mining, he said. Several prospect-

(Continued on Page 2, col 9)

Sun. Trib. (Fin) 17/8/75

By CHRISTOPHER MORRIS

Borrow abroad: Horwood gives signal for industrial spending spree

SOUTH AFRICA is poised to enter t 1980s on the back of a R10 000 million ca ital spending spree that will entrench t country as the industrial powerhouse Africa.

And to underline the urgency of this mas capital generation, Minister of Finance Horw this week encouraged big business to borrow abr

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

However, a prerequisite for large cash infl from overseas is investor-confidence in the futur South Africa.

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

Senator Horwood: He's made it easier to borrow on foreign money markets

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 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 050 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 semis 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 Sapref R60 million between 1976 and 1979.

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

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

COAL-BASED chemical plant at Sasolburg: AE & CI 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 R178 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 (R82 million).

Containerisation will involve huge sums. It entails buying 10 large and four small ships and upwards of 500 000 containers plus handling equipment. Saldanha Bay's dock complex is estimated at

ENERGY

Cost of oil worries SA says Heunis

27/8/75

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 a resultant effect on South Africa's balance of payments position. This would in turn effect other prices.

Mr Heunis was speaking at the Transvaal National Party Congress.

He turned down a resolution asking for the speed restriction of 80km on freeways to be raised to 100km for light vehicles.

He said that, when the oil crisis arose 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 way as rationing would have cost R5-million a year to administer.

Mr Heunis said the question of the availability of oil supplies were not as topical 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 17 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.

Sunday Times (Bus. Times) 7/9/75

244

ENERGY

Caltex spending R96-m in Cape

By GORDON KLING

Picture by TERRY SHEA

Bill Marshall Smith . . . Expanding refinery capacity.

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 buoancy 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 105 000 barrels a day (5-million tons a year).

This indicates that Caltex is looking for a growth in petrol consumption of nearly 7 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-BP, Sapref, 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.

(1) 244
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Jobs for 800 men from homelands

Dispatch 10/9/75

EAST LONDON — There will be job opportunities for about 800 men from the homelands on the construction of a R96 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 61 000 barrels a day (3 million tons a year) to 105 000 barrels a day (5 million tons a year). The expansion is expected to result in a foreign exchange saving of about R30 million a year.

— BUSINESS EDITOR.

Dispatch 11/9/75

R75m for oil probe

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 — R25 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 north-west 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 vie[illegible] 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.

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GENMIN IN NEW GIANT COAL DEAL

Trans-Natal after R45-m a yea

By ADAM PAYNE
Mining Editor

GENERAL MINING'S Trans-Natal Corporation is negotiating an export coal contract worth about R45-million a year.

The contract will run into several hundred millions as it will continue for many years under a Government permit which will enable Trans-Natal and overseas partners to export 100-million t over 20 years.

This is the first big development since the Government announced earlier this year that it was making provisional allocations for large-scale exports of steam coal to mining groups and overseas partners. These include several big oil companies.

Trans-Natal is taking steps to meet the strict conditions imposed under these allocations. They fall under such headings as the employment of foreign capital and foreign technicians so as not to strain South African resources, and they include provisions for the gradual phasing in of exports.

The tonnage

Trans-Natal's contract is believed to be for a tonnage slightly less than 4-million a year, compared with a provisional allocation of 5-million.

The financial conditions laid down by the Government will be met by the provision of overseas finance in collaboration with two partners.

The contract has not been completed but good progress has been made in the negotiations.

A successful outcome will be a brilliant stroke by Trans-Natal's coal division, since it will lift this corporation into a much higher earnings field than that provided by the old Escom contracts, to which it is largely tied — although its latest Escom contract, for the big Matla power station, will be on a much more profitable basis that earlier contracts.

Other mining houses which have been granted provisional export allocations are Barlow-Rand and Anglo American Corporation.

These companies are also considering export projects and holding discussions with the Railways and other authorities.

The allocation

Another company with a provisional allocation is South Cape Corporation headed by Ben Schoeman, the former Minister of Railways.

It is reported that South Cape may join up with American interests. But the success of its pipeline scheme — for piping coal to Richards Bay — will depend on whether it can gain the co-operation of other exporters.

The piping of coal over a distance of 500 km is unlikely to be economic unless at least 15-million tons of coal a year are dispatched.

If the Trans-Natal deal is signed, an underground mine — as opposed to open-cast workings — devoted entirely to this export contract will be opened in the Eastern Transvaal, on one of the large blocks of land over which Trans-Natal holds the coal rights.

It will take about two and a half years to establish the mine, so that exports will not begin until 1978. Prices will be between two and three times those received for domestic coal. The domestic price is R4,64 a ton at the pithead.

Sun. Times
Bus. Times
14/9/75

Giant coal deal

• Continued from Page 1

while no new mines are being opened.

The Government, committed to an anti-inflationary policy, will find it difficult to justify price increases on domestic coals beyond those needed to cover the added costs of the five-day week and higher working costs.

Yet the industry needs price increases over this level to enable colliery companies to earn sufficient to justify equity investment in new mines.

The Government's dilemma is that a lack of stimulus will bring on a coal famine, while the granting of logical price increases will lay it open to the charge of stoking inflation.

The mines which benefited by two recent price rises, of 35 per cent and 33 per cent granted in September last year and May this year, are expected to show exceptionally good profits for the three months to September 30 and the six months to December 31.

These figures will be misleading if compared with those in the September quarter last year, when the mines were struggling before the first price rise.

They will also be misleading when compared with the last quarter, during which the increase granted late in May had little impact.

The correct assessment of these price rises and their effect on profits will not be possible until the beginning of next year, when costs will again be closing the gap with earnings.

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for foreign exchange. decreases. When the Reserve
Bank buys securities or the banks the deposit
accounts of the comme the Reserve Bank will be
credited. When the Re securities commercial bank
deposits will decreas en the Treasury receives taxes
or the proceeds of lo overnment balance with the
Reserve Bank increase f the commercial banks decrease.
Accordingly the money . The opposite results occur
when government spen nment balance is substracted
from the domestic se the Reserve Bank one gets what
may be called the ne position of the Reserve Bank.
I.e. Money Base (MB) ts (FA) + Net Domestic Assets (NDA).

The money base over onds to changes in the sum of
the foreign assets a tic assets of the Reserve Bank.
As suggested previous ey base increases the money
supply will tend to i the banks prefer to hold excess
cash reserves. Howeve may well run the other way
because of the opport count houses and banks have
to borrow from the Re the money supply expands
independently of the banks will require extra cash
reserves to meet the reserve ratios. To do so the
banks will recall fu count market and the discount
houses will inturn a rve Bank for additional assis-
tance. If the Reserve additional reserves in this way
or if the banks and start reducing their holdings
of Treasury Bills an nt securities and redemptions
of government debt e ssues, government balances at the
Reserve Bank will de oney base will increase. In
such circumstances c ey supply will have led
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dependence of the mo money base. Clearly, if the
Reserve Bank did not serves in the way indicated,
or if the Treasury d redeem debt, or if the Reserve
Bank provided additional reserves only at penal rates, the banks

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 with the Shell Company has a provisional allocation of 7,5-million t a year.

If these contracts are entered into, the three groups will export between 8-million and 9-million tons of steam coal worth at least R100-million a year.

The line

The Richards Bay line will have a capacity, when more loops have been added in the next two years, of up to 20-million tons a year, of which the Transvaal Coal Owners' Association and the Anthracite Producers' Association will be entitled to 12-million.

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

The TCOA has sold a total of about 6,9-million tons on the export market and the Anthracite Producers' Association about 3-million, so there is still spare allocation for the TCOA, members of which are quoted companies.

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 by Trans-Natal will cost about R50-million but this will not be a burden to the company because of arrangements being made overseas.

This is in sharp contrast to the situation facing the colliery companies in opening new mines to supply the domestic market, since the price for domestic coal is too low to stimulate further investment.

Demand is growing fast.

• Continued on Back Page

STAR 15/9/75

244

The Sasol story

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.

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 Soekor, 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 mealie farming as the basis of the economy.

Sasol has already invested R400m 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 R1 021m, 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 so 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 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 wasting 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

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.

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 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 40 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 warding 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.

Natal Mercury 17/9/75.

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(2) 244

244

TRANSKEI'S MASSIVE HYDRO PLAN

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 dammed. 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 interdependent 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.)

ENERGY

S.A's oil import costs to soar

① Energy ② 78A

Mercury 30/9/75

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 Sonarep 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 1 680 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 (Sdrs), 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 4,5425.

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-Reuter.)

ENERGY

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 coun= tries 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 accor= dance 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

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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 com= panies 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.

Mercury 11/10/75

(244)

ENERGY

French go-ahead with S.A. N-aid

(244) (79)

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 "Electricite 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 Rall 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 R260 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

ENERGY

Star 1/10/75

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 that 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 Klopfer, 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 2-3c (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 0,6 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 greater. Transport companies, 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 Polascek, 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 estimate oil accounts for 10 to 15 percent of South Africa's import bill.

IMBLANCE

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 refining 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

Mercury 13/6/75

Energy

Mercury Correspondent

PRETORIA — The Minister of Economic Affairs, Mr. Heunis, is expected to announce higher fuel prices within the next few days, it was learnt yesterday.

The Price Control Administration is completing its study of the price submissions made by the oil companies and the recommendations are expected to be taken to the Cabinet at the latest by next Tuesday.

23 PERCENT

The submissions are supported by the more than 23 percent devaluation of the rand in the past six months, and by the increase of 10 percent in crude oil prices imposed by Opec.

The price rise is expected to be about 3 cents a litre unless the Government carries part of the increased costs.

The new price will also incorporate relief for petrol retailers.

Earlier this year Mr. Heunis rejected claims by the Motor Industries Federation for an increase in profit margins from six to six and a half percent on delivered cost to 10 percent.

But it is certain that the price increase agreed to will, in terms of the Government's anti-inflation action programme, include a sacrifice of 30 percent of what the price controller has found to be justified.

It is not known at this stage whether the Government is prepared to carry part of the 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 increase 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 drain away many millions of rands a year in foreign exchange.

Authorities in Pretoria claim that unless there is a big improvement in 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 - Eastern Transvaal Road.

It looks as if we have timed things well in this country

By BILL FAILL
Science Correspondent

Within the next 25 ears nuclear power sta- ions, according to the present programme, will e supplying this country with close to a uarter of all electricity — 15 000 MW out of a otal installed capacity f 64 450 MW.

Yet contracts to build he first station, Koen- erg A on the farm Duynefontein in the Cape, vill not be awarded until ext year and the twin eactors will not be com- missioned until 1982.

To meet the 15 000 negawatt estimate, now lescribed as possibly onservative in a Govern- nent report, implies the onstruction of at least ix more atom-powered tations of the size — 000 MW — of Koenberg A.

This side of the year 000, there is really no lternative to this costly programme. Countries all ver the world have nade similar calculations imed at phasing the use f increasingly expensive nd scarce crude oil out f their economies.

Yet this represents only the beginning — nd an uneconomical one t that — of the nuclear age. For the type of eactors selected for Koenberg make use of only two percent of the energy content of our uranium reserves.

The next stage will certainly be the fast breeder reactor which can tap 60 to 70 percent of the energy content while paradoxically pro- ducing more core fuel — plutonium — than it uses.

The Escom choice of the light water reactor as a starting point for the nuclear programme was a sensible one. At a recent count, of the 374 power reactors in opera- tion in over a score of countries, 273 were light water types, indicating a proved and effective technology.

But expensive though the programme will be, it can only be an interim measure, for it does not, in the long term, provide a solution to the energy crisis.

The light water reactor requires enriched ura- nium, making use of only a small fraction of the pellets which fuel it. If this type of reactor was the key unit in a long- term plan, the world's reserves of uranium ore would be used up in a few decades.

All the reactors at pre- sent in use, with the exception of a few experimental models, use the uranium-235 fraction of the naturally - occur- ring ore. This forms only 0,7 percent of the depo- sits, which consist mainly of uranium-238.

The enrichment pro- cess, as far as power reactors are concerned, doesn't aim at producing pure, 100 percent ura- nium-235. This is the stuff that A-bombs are made of. All that a reactor needs is ura- nium-238 boosted by enrichment until it con- tains three percent of 235.

This, incidentally, is the reason why, what- ever dangers may lurk in nuclear power, the risk of an atom-bomb type explosion is not among them. Three percent ura- nium-235 is just not an explosive.

The future lies with the fast breeder reactor, which makes use of ura- nium-238 as a jacket around a core of plu- tonium. As the core dis- integrates atomically, it causes changes in the "jacket," ultimately turn- ing the U-238 into plu- tonium, in greater quan- tity than that lost in the initial disintegration.

In this something - for- nothing operation, the outer plutonium can then be collected as fuel for further fast breeder reactors.

Why, it might be asked, should South Africa become involved in the first phase of nuclear power at all? After all we've got ample coal to see us through to the turn of the century and beyond, and oil, expensive though it is, will not dry up over- night. Why not wait a bit longer and then jump straight into fast breeders rather than bother at all with the U-235 first generation reactors?

The official explana- tion for making the earlier move hinges on simple economics — nuclear power, in areas remote from the coun- try's main coalfields, will be a competitive proposi- tion. This why the Cape has been selected for the first venture.

Some mind-boggling statistics show why this is so. If the modern coal- fired power station at Kriel in the Eastern Transvaal is anything to go by, a 2 000 MV station like that proposed at Duynefontein would need 16 000 tons of coal a day — 400 truck loads or 16 full trains.

By opting for nuclear, this logistic load is reduced to around 100kg of enriched uranium-238, an amount which could easily be moved on a porter's trolley.

There is also a security angle to the decision to go nuclear, if the latest Government report on energy in South Africa is anything to go by.

"Compared to coal, uranium is very energy- intensive and quanti- ties of uranium with a large energy content could in practice be stored fairly easily. This fact gives uranium a potential advantage over coal, since electricity pro- duction by nuclear power staions would to a lesser extent be subject to labour unrest than would be the case for coal-burn- ing power stations," it says.

Although not explicitly stated anywhere, there must also be the con- sideration of acquiring technical know-how on a simpler reactor before tackling the much more complex fast breeders.

There is no question of getting involved with fast breeder reactors right away. While all the major industrial coun- tries overseas have dem- onstrated these devices, only France is offering what it claims to be a commercial proposition.

This is the Phoenix — suspiciously enough a model which France itself turned down for its own use.

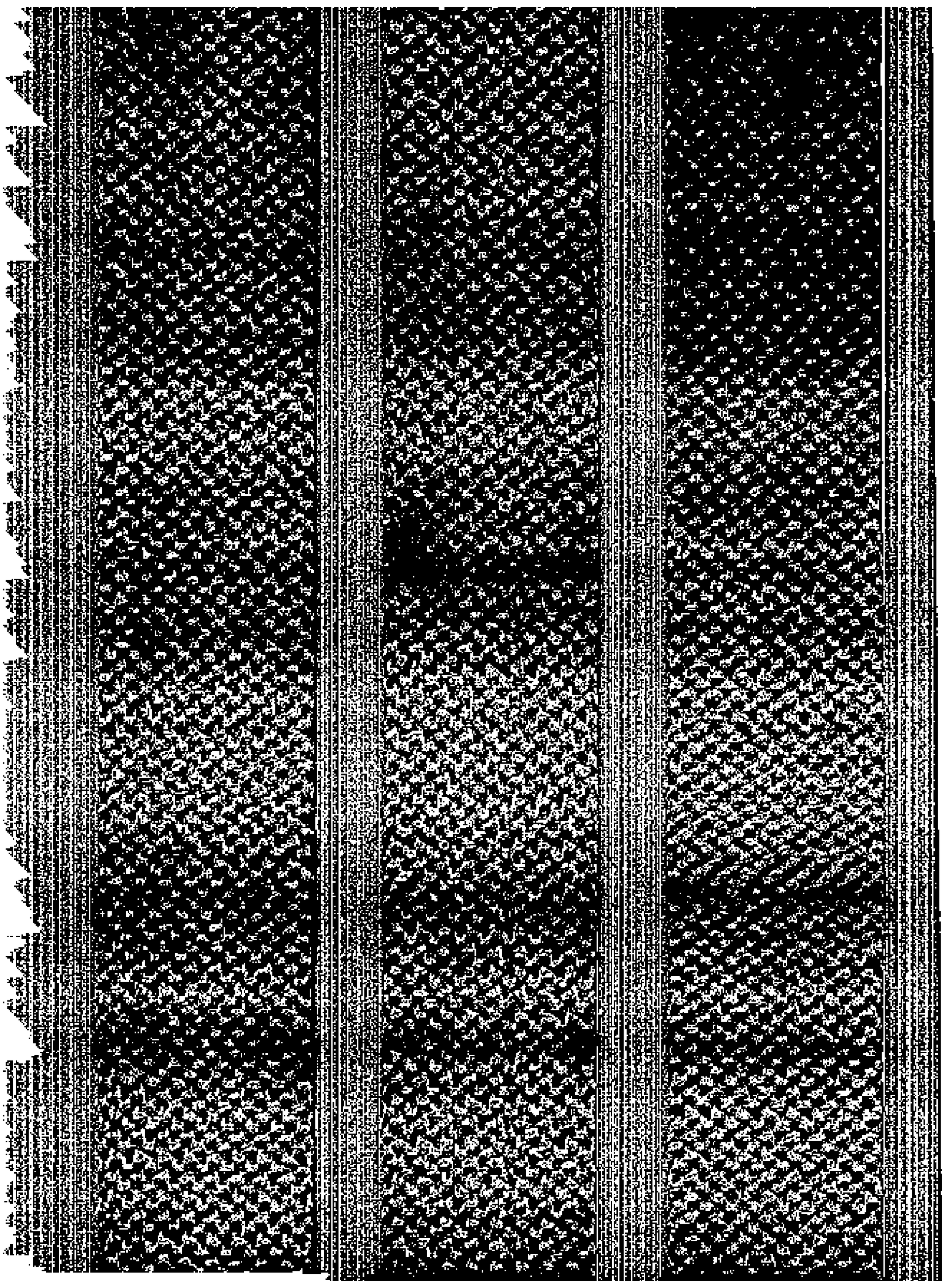
America, to which most of the world looks for new technology, is in the soup over the fast breeder. The cost of their demonstration model has already esca- lated to over R1,1 billion, while the step towards full commercial realisa- tion will cost 10 times this.

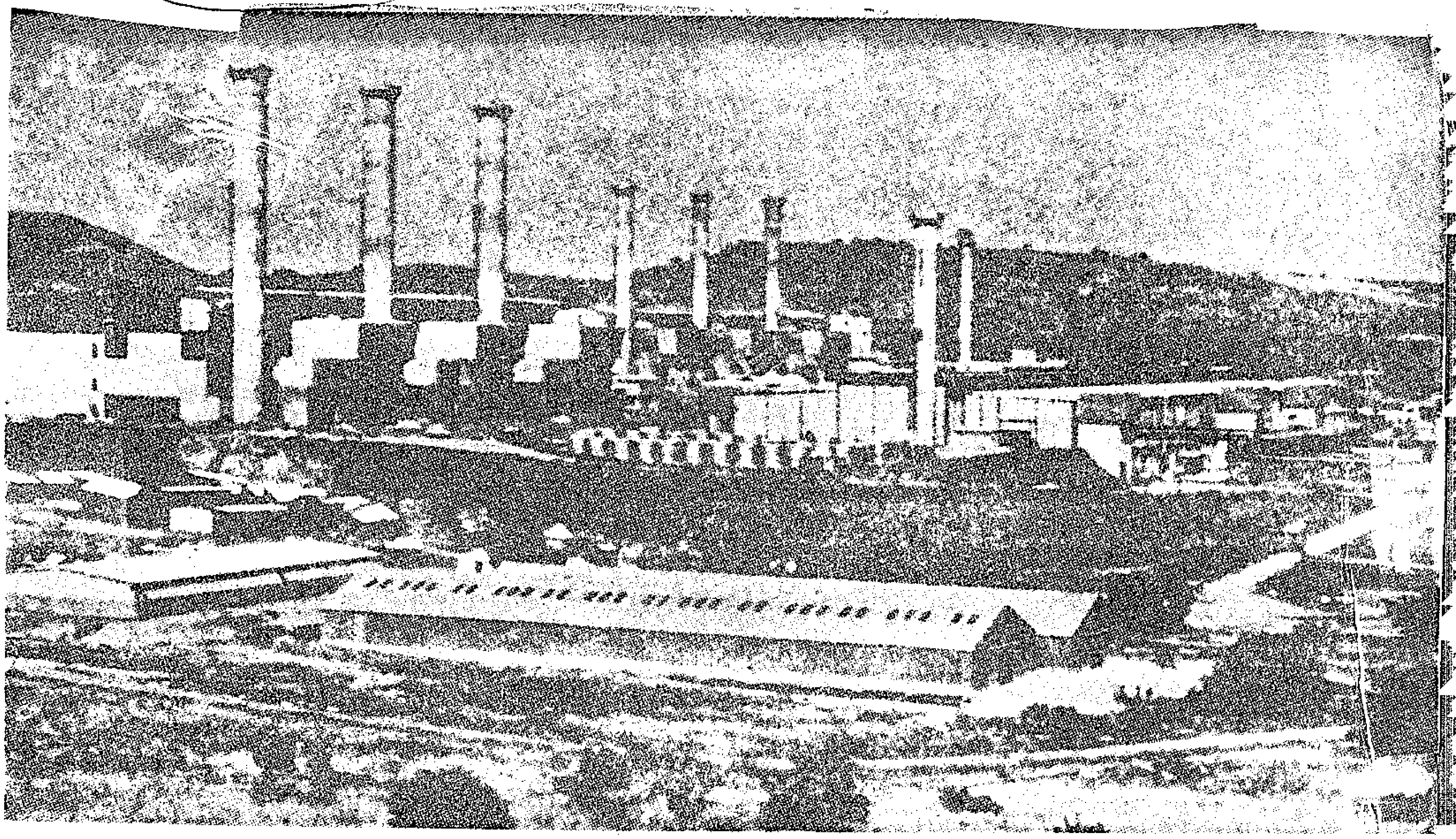
It looks as though, whether by accident or design, we've timed things very well in this country. We've opted for the simplest proved tech- nology, powered by enriched uranium, the raw material for which we have perhaps a quarter of the world's supply.

At the same time, we've developed an enrichment process, claimed to be substan- tially cheaper than those operated elsewhere. Although we are not planning to do our own enriching yet, this gives us future independence and points to a lucrative export market.

Local industry will also benefit to the tune of nearly R300-million in supplying equipment, materials and services for Koenberg A, at the same time learning to use novel techniques and meet stringent quality standards.

ENERGY





A VIEW of the Valindaba uranium-enrichment plant in the Transvaal.

20 The Natal Mercury, Thursday, October 16, 1975.

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.

ENERGY

Dutch row on atom tender

Star 17/10/75

(1) ENERGY
(2) ~~70~~

Tim Patten

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 cocialist coalition — the Revolutionary progressive party — threatened yesterday to withdraw from the Government if the tender is made.

The Dutch firm Rijn-Schelde-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 Labout Party have been applying pressure on the Prime Minister, Mr Joop den Vyl, 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 Duisenberg, the Economics Minister Mr R Lubbers, and the Social Affairs Minister Mr Jan Boersma.

Two of these 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 moralising continues, it has been pointed out that the contract would be worth R300-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 wil lbe very carefully weighed by the shakily placed Den Uyl Government.

ENERGY

S.A. atomic deal with Iran denied

Mercury 17/10/75

(1) ENERGY
(2) ~~IRAN Geog~~

PRETORIA — The chairman of the Atomic Energy Board, Dr. A. J. A. Roux, yesterday described 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 Teheran — 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. — (Sapa.)

ENERGY

R23m profit in Sasol's best year

RDM 21/10/75

~~(1) 260 B~~
(2) ENERGY

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 113 000 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 R389-million from R293-million in the previous year.

Dr Rousseau said that gas consumption rose by on "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 to come into force early next 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 project to be erected near Evander and Trichardt.

Sites for mine shafts had been prepared since last month, he said, and it was intended to start shaft sinking early next year.

Good progress had been made with factory planning, with site preparation to start in the middle of 1976. Work on the foundations and other civil work should start by April 1977.

The rail link between Trichardt and the factory route had been already approved in principle by South African Railways.

Dr Rousseau said that the cost of the mine and factory complex had been estimated at R1 021-million on February 1974 price levels and the estimated completion date was 1981.

"It is still too early to judge the effect of world and South African inflation during a period of eight years on the cost of the projects," he said.

"It is certain, however, that last month's devaluation of the rand will lead inevitably to a considerable increase in the cost" he said. — Sapa.

ENERGY

(1) Energy
(2) 246
(3) ~~262~~
(4) ~~84~~
(5) ~~317~~
(6) ~~313~~

Fares up...or service down, warns prof

RDM 25/10/75

Staff Reporter

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

Prof Welgemoed, 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 per cent mark-up on delivered cost of petrol. A similar claim in April was rejected.

Motorists now pay 21,1 cents a litre. If the MIF demand is agreed to by the Government the price would reach 22 cents.

BUS 5 6 7 8 — wouldmk 11

Prof Welgemoed 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."

Prof Welgemoed 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. Mdlangani, 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 per cent and 7,5 per cent next year.

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

And Mrs Dolly Shiller of Lilliputs 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. 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.

Weekend Argus Correspondent and Sapa 1/11/75

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.

Energy

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

Two rigs will be used. One, a North Sea oil rig Sedco K is 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 Plettenberg 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 Plettenberg Bay find was an indication that there was a vast oilfield within 500 km of the gas find.

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 Soekoer, 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 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.

The new probe is expected to cost at least as much as all the off-shore oil drilling done in South African waters since 1967.

(1) Energy
~~(2) 246~~
~~(3) 28~~

Garagemen criticise MIF over petrol price

1/11/75

The Weekend Argus Correspondent

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 R. 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 Loubser, 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 Loubser said it was time the MIF did more for garage owners.

Relief call

He believed the oil companies should grant temporary relief to petrol resellers 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

Star 1/11/75

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 500 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.

SUPPLEMENT

~~(1) 70~~
(2) Energy
(3) ~~Multinational~~ Company

Gi[illegible] world of [illegible]ness

HOW DOES [illegible] Dutch/Shell [illegible] the world of [illegible] Fortune [illegible] at the top [illegible] companies [illegible]

As a [illegible] however, it [illegible] quite as hi[illegible]

A look at its [illegible] report for [illegible] December [illegible] pretty good [illegible] muscle.

Last year [illegible] corded a [illegible] R24 938-mi[illegible] double the [illegible] in the pr[illegible]

Against [illegible] come [illegible] was [illegible] (R1 32[illegible]

On the [illegible]

[illegible] unit of sales amounted [illegible] 497 000.

[illegible] the end of last [illegible] owned as- [illegible] million.

[illegible] production side, [illegible] Dutch/Shell [illegible] oil operations pro- [illegible] 5 941 000 barrels of crude oil a day, of which it [illegible] 4 8[illegible] barrels [illegible] in its [illegible]

[illegible] crude [illegible] oil [illegible] ducts [illegible] 000 bar- [illegible]y.

[illegible] as the [illegible] in the [illegible] either [illegible] has on [illegible] com- [illegible]

capacity of 475 000 cubic metres.

Excluding its activities as a supplier of oil the Shell group stands up as one of the biggest chemical manufacturers in the world. Proceeds from its chemical sales alone amounted to R2 698-million last year, which represented a 79 per cent value increase on earnings in 1973.

Considering its size the group naturally has a large number of employees. Last count at the end of the 1974 financial year revealed the group had 1[illegible]000 on its payroll which cost R1 [illegible]-million. [illegible] covered both [illegible] salaries, social [illegible] and [illegible]

[illegible] company on the cards

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 R500-million in the next 10 years.

This investment will considerably strengthen the group's commitment towards exerting a more positive and meaningful presence in the southern areas of the African continent. By 1985 it is expected that Shell's asset base here will amount to R750-million, against current investments of R250-million.

Shell's aspiration in Southern Africa over the next decade is to become "transformed from being just a petroleum supplier into a great energy company with expanding interest in chemicals and metals."

Where its chemical activities are concerned, it intends to grow into a fully-integrated marketing and manufacturing operation, with a rating as one of the top three companies within the framework of the South African chemical industry, says Mr K. L. G. Ken Geeling, Shell South Africa's chairman and chief executive.

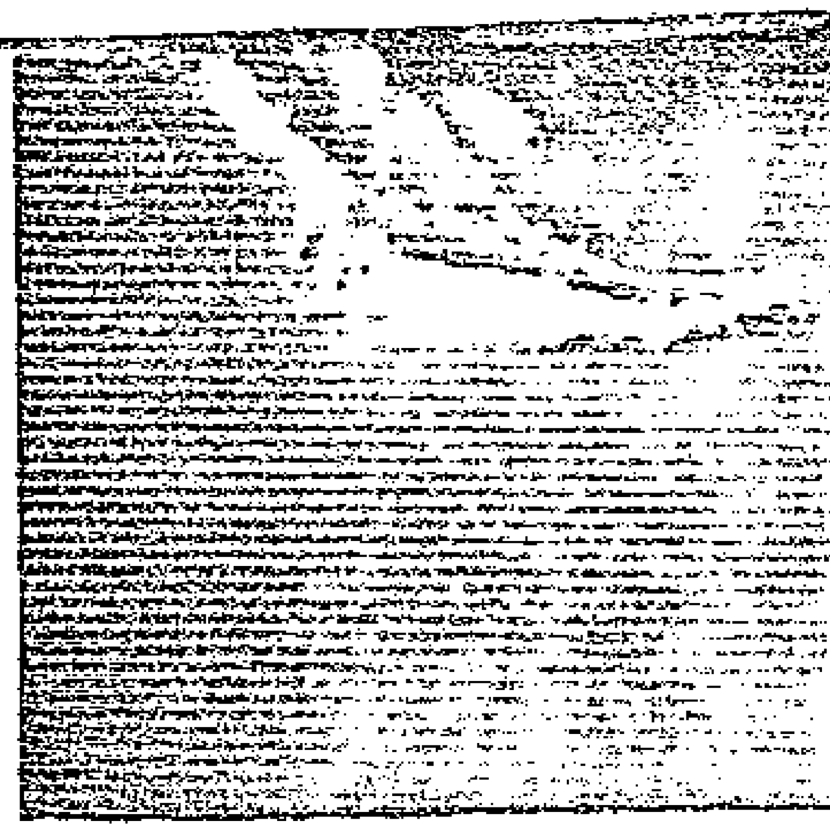
With this target in view, it must inevitably lead Shell into becoming more South African by opening its doors to local participation.

It is a point which was conceded by Mr Geeling during an interview in Shell House — which borders Greenmarket Square, Cape Town, and has been the group's headquarters since 1929 — when he outlined the philosophy behind his company's ambitious and diverse expansion plans.

He noted that with oil and oil products continuing to play the dominant role in meeting world energy demand and likely to hold this position for some years [illegible] activity in this [illegible] continue to be the [illegible] of Shell South Africa's business.

But the [illegible] oil prices [illegible] October 1973 has [illegible] company to switch [illegible] to

SHELL - 75 YEARS IN SOUTHERN AFRICA.
Natal Mercury 3/11/75



the extent that the years immediately ahead will see greater emphasis on equipping and improving manufacturing facilities to meet the changed pattern of product demand.

To this end, Shell's refinery operations in Durban — which it shares with British Petroleum — are to go through an extensive modernisation programme designed to enable more petrol and gas oil to be produced from available crude.

"This will enable the country's needs to be met with less imported crude oil and improve flexibility," says Mr Geeling.

Heavy investments are also envisaged to improve both the quality and yield of marketable products from crude oil, while plans are being studied to produce aviation gasoline and special products for industrial purposes.

The group is also widening its base in chemical manufacture in Southern Africa, says Mr Geeling. The first independent venture in this area is an Epikote resin plant which was opened in May last year by Shell subsidiary Shell Chemical South Africa (Pty).

This R2-million-plus investment has an initial capacity of 4 000 tons a year.

Of course, Shell Chemicals — established in 1949 — has been involved in chemicals manufacture in South Africa for some time, but essentially in joint ventures. It represents more than 10 per cent of the Shell company's net capital employed in the country.

The company operates formulation plants for agricultural chemicals, paint and lacquer solvents, polyurethane chemicals and consumer products.

According to Mr Geeling, Shell Chemicals is considering plans for an additional polystyrene plant and a R50-million polypropylene plant is on the drawing boards and expected to go into production in the second half of 1978. This is to be built in Durban and have a capacity of 50 000 tons a year.

Of particular relevance to South Africa is Shell's intentions in other energy fields. The group has decided to halt its search for oil and, instead, is expanding its activities in the area of coal exploration.

Spearheading the group's efforts in this regard is Shell Coal South Africa. The decision to form this company, says Mr Geeling, was based on "our ability to provide both capital and know-how in the development of South Africa's large coal reserves".

Mr Geeling, and Shell, firmly believe these coal resources are a bull point for South Africa and a means of improving the country's relationships with the rest of the Western world.

At the same time, they are convinced that these energy resources are currently not being properly utilised.

As Mr Geeling observed in a recent review of Shell's developments in coal, the current world energy situation provides a unique opportunity for South Africa to revitalise its coal industry which has been somewhat dormant and low key for many years with little productive investment and many wasteful practices.

"There is a need to move with appreciable speed if South Africa is to consolidate its international market position in advance of other countries who are now intensifying their efforts to export huge coal reserves previously lying dormant," he says.

This the country should be well able to do, in Mr Geeling's view. He bases this on the likelihood of South Africa being able to reduce its future dependence on imported oil to 20 per cent of its total energy needs through the application of conservation measures.

This would leave a balance of 80 per cent to be satisfied from indigenous sources. Mr Geeling estimates that this balance would represent 1,1 per cent of the world's energy consumption, leaving 0,9 per cent of available resources here in surplus.

In a world facing energy shortages, Mr Geeling says: "I believe South Africa therefore has an unrivalled opportunity to help herself by helping others."

He suggests two ways in which this energy surplus can be exported.

"We should use the surplus to stimulate new spheres of energy-intensive activity to turn our [illegible] natural resources into [illegible] portable products."

Second, the opport[illegible] exists to show South Africa's good faith with the world by exporting some of our available coal and uranium.

Mr Geeling said: "I fully appreciate that this is a vexed question and open to argument, but should we deny this basic need, we could be considered guilty of the same conduct that is attracting criticism of the oil producing countries."

Significant advantages would accrue to South Africa through her coal exports, Mr Geeling maintains. One is the enhancement of the economic well-being of the country.

Another "is that it would be a valuable aid in the endeavour to improve our international relationships."

Shell is [illegible] these views in practice. The company has embarked on a joint venture with Transvaal Consolidated Lands for the long-term exploitation of coal reserves in the Witbank and Bethal areas of the Transvaal highveld.

[illegible] cording to [illegible] will go to [illegible] company has been [illegible] provisional approval [illegible] the Government [illegible] 150-million tons of [illegible] over a period of 20 years.

An order worth more than [illegible]-million has already been placed for dragline [illegible]

Shell [illegible] ing [illegible] the [illegible] harbour.

According to Mr Geeling, [illegible] on [illegible] could be as much as [illegible] million.

Shell is [illegible]

This [illegible] would [illegible] be very exclusive to the product for which it has been designed

Setting sights on the chemical industry

Natal Mercury 3/11/75

(1) 70

(2) Energy

THE chemical industry is one of the fastest-growing sectors of the economy and Shell Chemical South Africa (Pty), which started operations in this country about 26 years ago, plans to be in the forefront of this development—rated as number three behind AE & CI and Sentrachem in the big league stakes.

Shell Chemical currently operates in four main business areas in South Africa — agricultural, industrial, plastics and resins, and consumer products.

It has plants operating in Wadeville near Johannesburg, Durban, Cape Town and Port Elizabeth.

The company operates branches in Mozambique and Malawi and has blending and storage facilities in these countries to support its sales effort.

Its first and most recent independent venture into chemicals manufacture in South Africa was taken last year when a R2-million-plus epikote resin plant, with an initial capacity of 4 000 tons a year, was officially set on stream.

Shell Chemicals is currently spending more than R500 000 on a de-bottling operation at the resin plant and is also getting set to manufacture powder-coating resins. When this happens South Africa will be self-sufficient in all types of epoxy resins for some time to come.

The company is moving ahead with a 10-year expansion programme which should absorb anything up to R100-million in investment capital.

Mr Stuart Squires, managing director of Shell Chemicals, says that one of the first projects to be activated is a 50 000 ton a year polypropylene plant, which is currently planned to be built at Durban.

When this project was first announced the capital requirement was [illegible] at about R50 million [illegible] escalations plus [illegible] tion of extra facilities [illegible] since pushed the [illegible] about R64-million and it is highly probable that this figure will be pushed up even further before the project is completed and in operation especially in view of the recent announcements.

Mr Squires says his company is considering the desirability of a South African partner to participate in the venture — probably at the behest of the Government, which would obviously like to see more local participation in such strategically important developments.

Shell has already been considering possible partners for the joint venture, according to Mr Squires. Such a partnership will be of considerable benefit to Shell in manifesting its local image and it will also strengthen its abilities to borrow money on the local capital market to partly finance the plant.

Shell started work on the polypropylene plant 2½ years ago and has now reached the design and engineering stage.

According to Mr Squires, it is expected that the first sod will be turned towards the middle of 1976. Construction will take two to three years and, from 1979, it would probably take about four years before the plant was in full production for the domestic market.

Feedstock is planned to come from the two Durban refineries and the supply is reckoned to be more than sufficient to satisfy the plant's requirements.

The scenario painted by Mr Squires for polypropylene in this country is that we are going to experience a shortfall in this thermoplastic by 1977 and this is when Shell's plant comes on stream.

Increased market demand during this period will more than absorb the 40 000 ton a year output by Safripol, the country's other manufacturer of polypropylene, and South Africa will, for a couple of years, have to be a net importer of this material.

Mr Squires estimates that the domestic market will probably reach 70 [illegible] tons a year by 1980, wh[illegible] will then easily be met [illegible] manufacturing output [illegible] here. This means the[illegible] will be excess capacity [illegible] export.

This will last until ab[illegible] 1982 when it is expect[illegible] that production capac[illegible] will be totally absorbed [illegible] the South African mark[illegible]

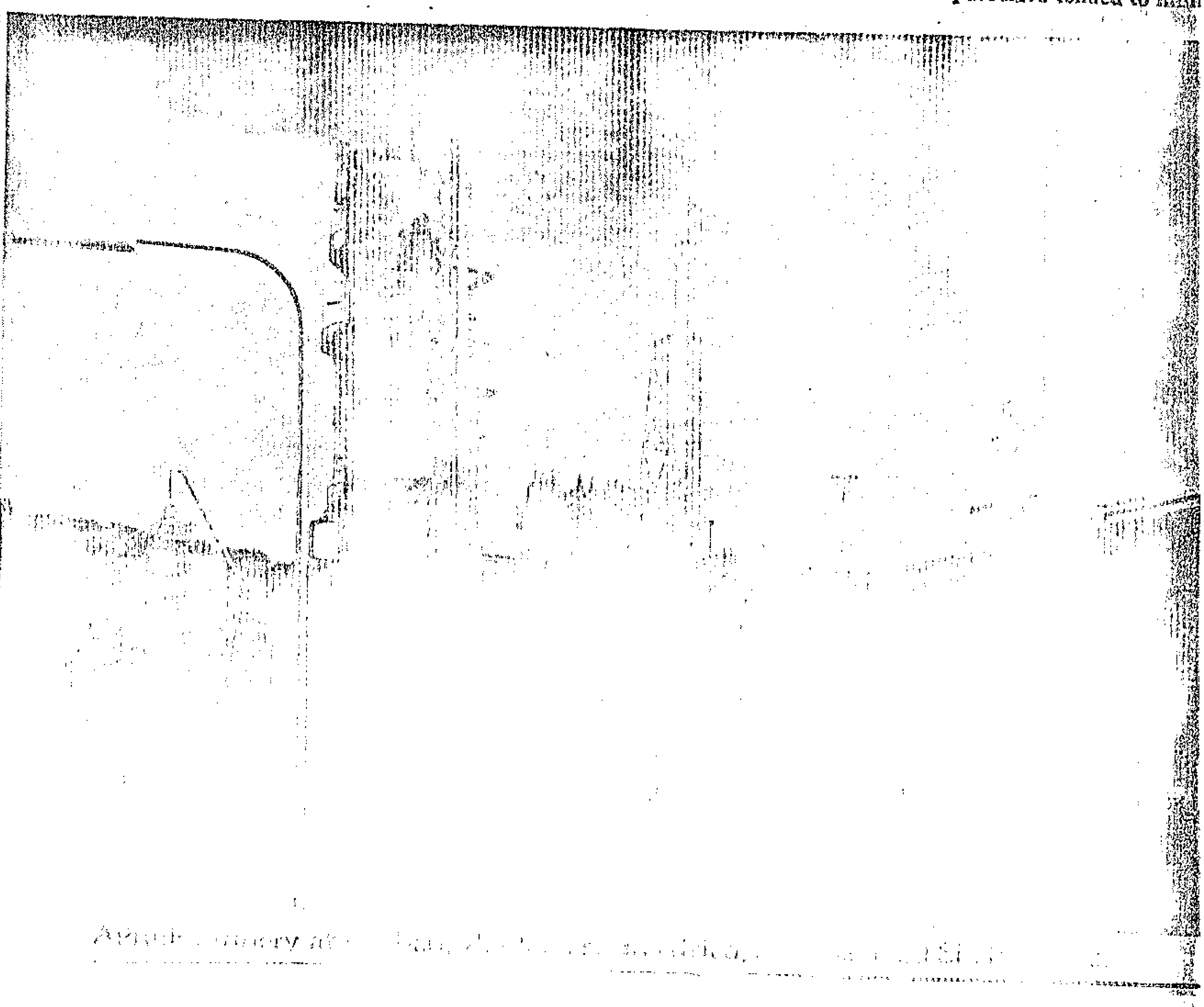
South Africa's econo[illegible] development program[illegible] has indicated that up [illegible] 1979 the chemical ind[illegible] try's growth should [illegible] around 7,9 per cent a ye[illegible] with the gross domes[illegible] product maintaining an [illegible] nual growth of around [illegible] per cent a year.

However, the chemi[illegible] industry, has grown at [illegible] per cent a year during [illegible] past 10 years when [illegible] average growth in GDP [illegible] been 4,7 per cent.

It is well known tha[illegible] the past two years at le[illegible] the GDP has not co[illegible] anywhere near the [illegible] quired growth targets. [illegible] same story applies to [illegible] next couple of years.

It still has some way [illegible] go before its contributi[illegible] to the GDP achieves the [illegible] per cent level that is [illegible] case with most develop[illegible] industrialised economies.

Factors which in [illegible] past have tended to inhib[illegible]



Star Nov 4 '75

Energy

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 a 12 percent tax on imported Italian wine or face charges before the European Court of Justice.

This 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.

* * *

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 Ulster's bloody and long-running crisis.

* * *

EMBARGO 12.00 NM.

PRESS RELEASE ON A COMMERCIAL URANIUM ENRICHMENT PLANT IN SOUTH AFRICA, BY DR. THE HONOURABLE P.G.J. KOORNHOF, MINISTER OF MINES

~~Note time and~~ date of
STRICT EMBARGO

RELEASE : 24h00 on 12 Nov. 1975

ENERGY

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

3/ ......

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.

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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 1978 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 viz a viz the world community and which it will under no circumstances ignore.

5/ ...

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.

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(1) Energy
(2) ~~2~~ 28

New company to handle coal in Cape

ARGUS 12/11/75

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. Kets, 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 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 OFS (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.

ENERGY

'Go' for huge uranium plant

R.D.M. 13/11/75.

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 o fthe plant would not be decided until 1978.

Dr Koornhof declined to give any official estimate f the cost. But overseas sources say that a 5 000 tonne-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 abut 30 or 40 per cent cheaper than any other rival process.

Boost

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 [illegible]

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.

Cheapest

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

R.D.M. 13/11/75

~~(1) 78 A.~~
(2) Energy

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 Cooperation 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 rector needs 450 t of uranium oxide initially and around 165 t annually for reloads over a life of 25 years.

Recent estimates forecast demand increasing from 22 700 t of uranium oxide in 1975 to 140 000 t in 1985 and 245 000 t by 2000. Cumulative demand between 1975 and 1985 is expected to be 780 000 t, which will rise to 3 400 000 t by 2000.

The figures are mind boggling and make one ask if that sort of 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 $150 000-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 3 260 t out of total world output of 22 045 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 West's 1 100 000 t of $10 a lb reserves. The United States has another 28 per cent at this price while Canada and Australia have 20 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 5 000 t a year plant has been costed out on a selling price of $74 a kilogram (around $3-3,64 a lb). This compares with long-term enrichment contract prices of around $100 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 R910-million.

This figure excluded the cost of electricity but included R130-million for further research and development and testing plus 15 per cent for contingencies and 5 per cent for in-house project engineering.

[illegible]

Uranium con[illegible], prices and costs of pro[illegible] are shrouded in secrecy so it is impossible to calculate the

(1) ~~210~~
(2) Energy
(3) ~~65~~

R.D.M. 13/11/75

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 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 was provided 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."

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 1978.

Feasibility studies by

1. 220

2. Energy

Anglo supermill could earn R30m profit annually

Star 24/11/75

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 1976 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 Rioden 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, the bullion proceeds would be R45,9m a year. Uranium at 66 dollars a kilogram would produce R56,3m 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 possible 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 Roiden 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 R80m, with further spending if similar undertakings are established elsewhere.

Labour union backs petrol price cuts

Star 25/11/75

1 246
2 15C
3 Energy
4 ICC A

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 Attie Nieuwoudt, president of the confederation.

"We welcome this breakthrough in a field which is notorius 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.

Strong German bid for SA nuclear tender

Energy

STAR 27/11/75

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 Verolme.

The Dutch Parliament this week voted against allowing Verolme 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 reported stolen, 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 came to the crunch between Black Africa and South Africa.

Mr Geissler said: "It's the same nasty business as with Cabora Bassa — the Swedes stopped their Asea company taking part for political reasons. But our industry doesn't apply those 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 furore the earlier publication of documents caused.

1. ~~162~~ Trl

2. Energy

3. ~~260 B~~

Council to take over from Escom

STAR 1/8/75

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 R500 000.

Townships involved in the planned takeover are Kibler Park, Mayfield and its proposed extensions, the proposed council townships at Liefde en Vrede and Rietvlei, Rispark Agricultural Holdings, Patlynn Agricultural Holdings and the proposed Klipriviiersoog 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.

1. (Energy)

2. ~~260B~~

Dual rates jolt from Escom

Mercury 10/12/75

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 35 percent in 1975, represented the highest cost increase, the statement said.

Total coal expenditure would increase from R112 - million, originally budgeted for 1975, to an estimated R167 - million in 1976, Escom said. Other working costs would increase from R119 - million, budgeted for 1975, to R163 - million in 1976.

Escom estimated that financing costs would increase from an estimated R157 - million for 1975 to R219 - 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 cut

Mercury 13/12/75

■ FROM PAGE 1

M.I.F., which represents filling station owners, was: "Our petrol sales at the hypermarket brought us a very solid profit. If we can do it, why can't they?"

But Mr. Ray Taverner, the M.I.F. president, said he would do his utmost to keep the many thousands of small operators in business. "We will not allow their living to be undermined and we will take every step open to us to insure they stay in business."

Mr. Steyn of Trek said he had been most upset by the judgment but had ordered the immediate resumption of petrol supplies to the Boksburg hypermarket.

He said his company still had more than nine years to run on their supply agreement with the hypermarket and they would honour that.

"But I believe that if discount petrol sales become widespread the country will suffer. Petrol is a strategic commodity and if the price goes down, then of course, the demand goes up," Mr. Steyn said.

The Automobile Association said yesterday the judgment could only benefit the motorist.

A spokesman said the hypermarket had proved that it was possible to achieve profitability on a product with a large turnover even if the product was being sold at a reduced price.

Petrol pri[ce] cuts in re[st] of S.A. like[ly]

Mercury 13/12/75

Energy

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 Bazaars, 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

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feel these goals were ... uring the year :

World wide furore looms

French win atom deal

STAR

29/5/76.

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-Netherland-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, Alshtom and Spie Batignolles.

Framatome would handle the nuclear reactors, Alshtom the turbo-generators and Spie Batignolles —who took part in the Sishen-Saldanha and Orange Fish tunnel projects—would be responsible for the civil engineering works.

German bid

The third consortium bidding for the contract was Kraftwerk Union of West Germany in collaboration with Murray & Roberts.

The US, Swiss-Netherlands consortium involved General Electric of the United States, Brown Boveri of Switzerland and Rijn-Schelde-Verolme of Holland.

It was the front runner until the political row upset the applecart.

Neither the French nor the West Germans apparently had any difficulties in obtaining the necessary guarantees from their Governments on linking up with South Africa on a nuclear power basis.

An indication of the likely reaction in the Netherlands, for instance, is the fact that if the Rotterdam-based Rijn-Schelde-Verolme group had taken part, it would have provided jobs for 1 000 people for five years.

Dutch trade unions have remained largely silent on the issue.

Opponents of the project have said the Koeberg reactors could produce about 450 kg of plutonium a year—enough for about 100 Nagasaki-sized atomic bombs.

South Africa has not signed the nuclear non-proliferation treaty, they say.

They have argued that an official of the South African Atomic Energy Board said publicly in 1974 that South Africa possessed the technical capability to make atomic bombs, and that its nuclear programme was more advanced than that of India, which exploded its first nuclear device earlier that year.

The two-unit power station will consist of two pressurised water reactors, each with an electrical output of 922 Mw—each almost enough to feed Johannesburg.

The first unit is scheduled for commissioning in November 1982 with the second unit to follow one year later.

The contract also provides for the supply of fuel elements for the initial charge of five reloads for each unit, to be manufactured by the Franco-Belgian Fuel Company from enriched uranium hexafluoride provided by Escom.

Last year Escom signed a contract with the US Enrichment Authority for the enrichment of uranium hexafluoride it is to supply. — Sapa

(1) 103
(2) Energy

Power from the Transkei

1/5/76 NM.

THE PROPOSED R50 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 Cementation group, the final shape of the project is by no means settled.

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

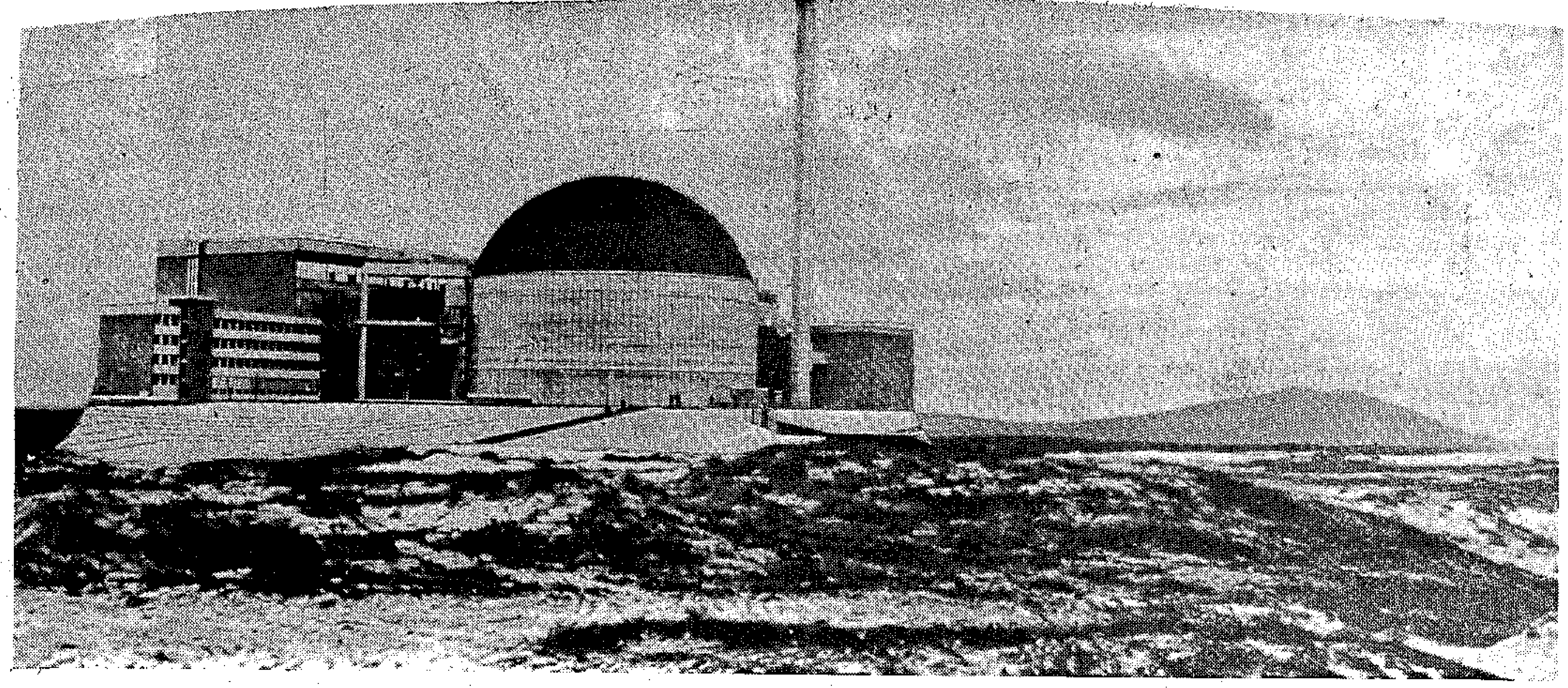
The ultimate installed capacity power output is estimated at 3 000 megawatts, or about twice the capacity of Kariba.

The project is expected to revolutionise the economy of the Transkei, bringing in an annual income of around R50 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. Bringing in and shutting off turbines will be a push-button affair, remote controlled in South Africa, because power from the Transkei will only be used to meet peak load demands and will not form part of the base load supply.

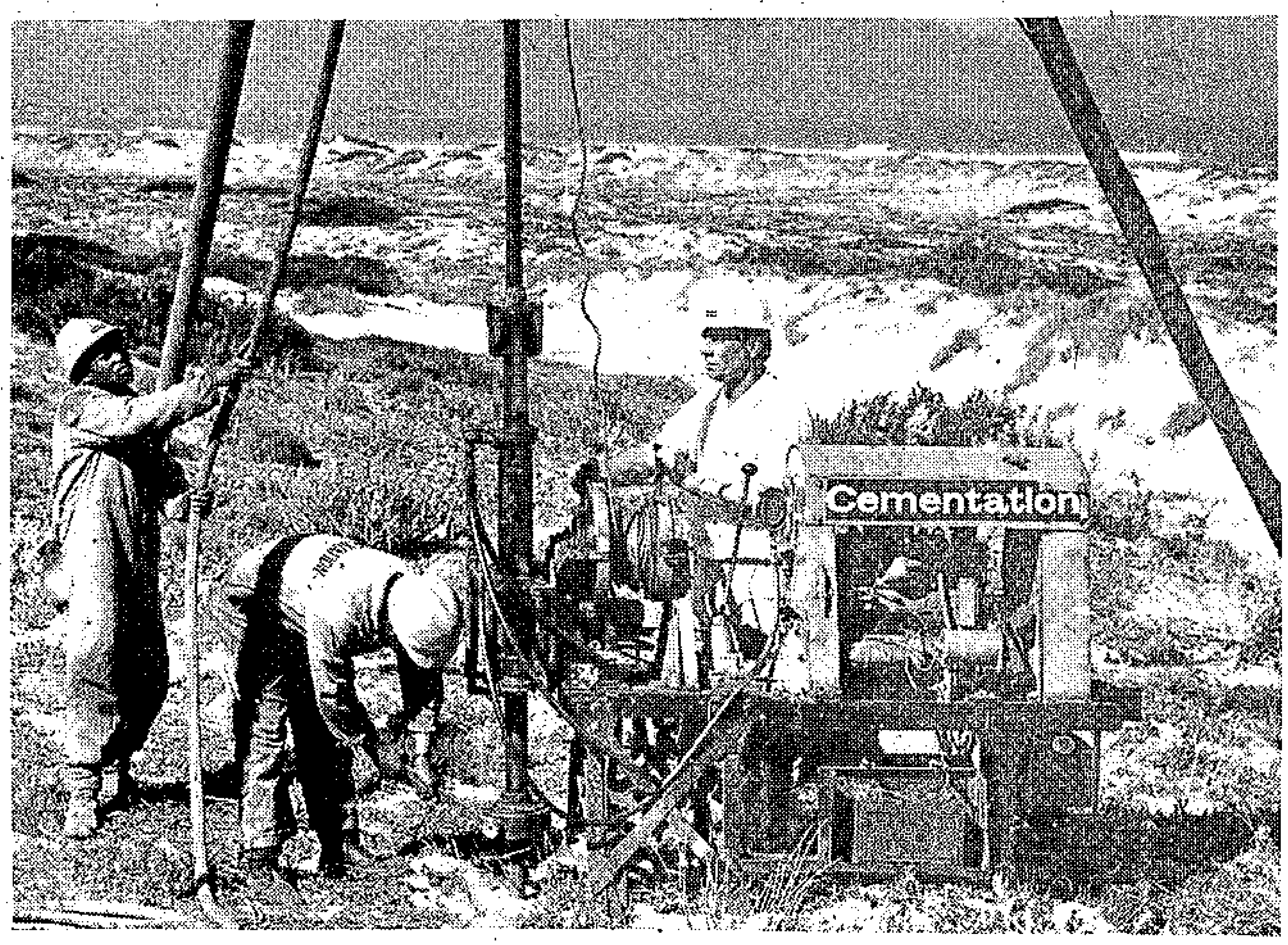
It will take about 15 years to complete the complex, interlinked system which will involve in its final form at least six major dams.



ABOVE: A photo-montage of the site and how South Africa's first nuclear power station at Duynefontein, 28 km from Cape Town, will look when completed. It will be known as Koeberg and will cost about R875-million according to today's costs. After the nuclear power station is commissioned in 1982, it will pour 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 tenderers 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.



Details of Koeberg contract

JOHANNESBURG. — Escom announced on Saturday that the R875m contract for the construction of South Africa's first nuclear power station was awarded on Saturday night 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 turn on the pressure-groups which blocked their efforts.

PLEADING

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

The announcement said the contract for the construction of the power station at Koeberg, 28 km north of Cape Town, had

Netherlands consortium involved General Electric of the United States, Brown Boveri of Switzerland and Rijn-Schelde-Verolme of Holland. It was the front-runner until the political row upset the applecart.

Neither the French nor the West Germans apparently had any difficulties in obtaining the necessary guarantees from their governments on linking up with South Africa on a nuclear power basis.

JOBS FOR 1 000

An indication of the likely reaction in the Netherlands, for instance is the fact that if the Rotterdam-based Rijn-Schelde-Verolme group had taken part, it would have provided jobs for 1 000 people for five years.

Dutch trade unions have remained largely silent on the issue.

Opponents of the project have said that the Koeberg reactors could produce some 1000 pounds of plutonium a year — enough for about 100 Nagasaki-sized atomic bombs. They stress that South Africa has not signed the Nuclear Non-proliferation Treaty.

They have argued that an official of the South African Atomic Energy Board said publicly in

fuel elements for the initial charge and five reloads for each unit, to be manufactured by the Franco-Belgian fuel company from enriched uranium hexafluoride provided by Escom.

Last year Escom signed a contract with the US Enrichment Authority for the enrichment of uranium hexafluoride it is to supply.

The contract has been awarded on a turnkey basis, and the capital works include the design, manufacture, delivery, construction and setting to work of the entire station and all auxiliary and ancillary works.

"Thus", said the announcement, "the tenderers must provide the entire nuclear power station capable of safe, reliable and efficient operation".

The contract amount, at present day prices, is approximately R875-million. Financing will be provided by a consortium of French banks in the form of a buyer credit for 85 percent of the overseas portion of the contract.

Equipment, material and services representing over a third of the cost of the station will be ordered in South Africa.

"It therefore stands to reason", said the announcement, "that local in-

It had therefore been left with two alternatives: Either additional PT head power stations could be constructed in the Transvaal and linked to the Cape by further high-voltage transmission lines, or a nuclear power station capable of satisfying the Cape's immediate as well as future power needs could be built in the Western Cape.

VITAL RESOURCES

A conventional coal-fired station of Koeberg's capacity consumed between four and five million tonnes of coal a year, and Koeberg would therefore contribute considerably towards conserving South Africa's vital coal resources.

Inland generation of electricity made heavy demands on precious fresh water supplies, Escom added.

Running at full throttle, Kriel was expected to consume 180 000 cubic metres of water a day. Most of the water was irretrievably lost by evaporation from the cooling-towers. Dry-cooled stations operated on a slightly better ratio but still consumed about 0,7 litres of water a kilowatt hour.

Nuclear stations, while also requiring enormous quantities of cooling-water, were not tied down

False Bay than to the colder Atlantic at Duynefontein.

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 oiling-water type, are safely operating in 22 countries. Technical organizations 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 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 won the contract ahead of bids by an American-Dutch-Swiss consortium and a German consortium in collaboration with South Africa's Murray and Roberts because it was the only one which could provide the necessary credit guarantees and assurances of supply.

OPPOSITION

It appears that strong political opposition in the United States and Holland to participation in the nuclear-power project led directly to the inability of the American-Dutch consortiums to meet the fuel assurance required by Escom.

Informed sources point out, however, that the political debate in these countries has been largely irrelevant since South Africa — through its uranium-enrichment process — is able to make atomic bombs anyway irrespective of the nuclear power station.

Neither France nor South Africa has yet signed the nuclear non-proliferation treaty, but it seems likely that the two governments may agree to the non-proliferation of fuel products through a bilateral agreement.

MATTER OF TIME

The Koeberg power reactors 28 km north of Cape Town are expected to be operational from 1982 and South Africa will clearly rely heavily on enriched fuel from France till enriched uranium is 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 emphasized that the deal was negotiated independently by Escom.

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

"WELL JUDGED"

The United Party's experts on nuclear power, Mr Derick de Villiers, MP, said the decision by Escom to proceed with the nuclear power station in the Cape at this time and in relation to the present energy situation, was "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."

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.

The interview, in the news magazine Le Point, came as South Africa announced that its first nuclear power station would be built by a French consortium.

Mr Sauvagnarues, 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.

Mr Sauvagnargues

The R775-million deal was expected to arouse protests in France and abroad 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 land and air arms sales to South Africa. His opponents said that this would not affect any arms contracts already concluded.

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 contracts 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 nothing. We will not relax our controls (on nuclear sales) to obtain commercial advantages — as long, of course, as our commercial rivals do the same," he said.

Opponents of France's policies claim that controls on military sales have repeatedly been violated. The main example cited was a deal with Libya which theoretically prohibited Mirage jets being put at the disposal of a third country.

French officials were embarrassed when Libya confirmed Israeli charges that the jets had been put at Egypt's disposal during the 1973 Middle East war.

French authorities are expected to reply to criticism of their nuclear sales to South Africa by stating that other Western countries were prepared to clinch the deal.

The United States Under-Secretary of State for scientific affairs, Mr Myron Kratzer, told a Senate commission in Washington last week that the United States intended to sell South Africa two nuclear reactors.

France has also agreed to sell nuclear technology to Iran, Iraq, Pakistan and Libya. — Sapa-Reuter

There will be trouble, warns press

Own Correspondent

PARIS. — Warnings have already been sounded that "there will be trouble" in France over the nuclear plant it will sell to South Africa.

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

France's only national Sunday newspaper, "Journal de Dimanche" had a headline over five columns, "There will be trouble". It said that it was a "fabulous contract" but "it risks also causing some polemics" for "anything concerning South Africa is charged with passion".

It said that the French-speaking African leaders who attended a conference here earlier this month with President Valery Giscard d'Estaing would "not be very favourable". It added that "the Americans will also not be very warm about the contract" because they told the French President when he was visiting the United States only a week ago that France should not adopt such a free policy in selling 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 United States and the Netherlands were putting up political obstacles — could start polemics".

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

(1) Energy
(2) 69

N-contract causes storm in France

Cape Times 1/6/76

Own Correspondent

PARIS. — A major political and diplomatic storm yesterday broke over President Valery 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.

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".

Critic

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."

France's official line is that "the contract must be seen purely on the 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 can".

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.

~~(1) 79~~

(2) Energy

'Political' deal [illegible] by Bl[illegible]

By BOB HITCHCOCK

FRANCE'S victory over two European and American consortiums for the contract for South Africa's R[illegible] million nuclear power station is "political".

That was yesterday's reaction in foreign diplomatic circles in Johannesburg, Pretoria, and Cape Town to this international hot potato.

A United States spokesman did not believe his Government would comment on the failure of an American-Swiss-Dutch consortium to nail the contract for the erection of the plant at Duynefontein, near Cape Town.

He commented: "But I guess General Electric, among other concerns, will be pretty disappointed."

It is known that the West German Government too is playing a [illegible]

[illegible]

pleted a three-year study grees C.

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".

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But even such a strong critic of the contracts as Le Monde declared yesterday, "The South African decision was a logical one."

I PROBES
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Evan. Times 4/1/76

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 within seven years thus be producing about 20 per cent of this country's annual petrol needs.

This depends on the invention being developed to yield commercially the quantity of ethylene needed by its plastics division, which will have R230-million invested in plant and equipment by 1976 and a further R100-million earmarked for a polythene plant by 1984.

If AE & CI goes ahead with what promises also to be a major new diversification, it could fortuitously be supplying amounts of petrol equal to about half of Sasol Two's estimated annual production and nearly 30 per cent of this country's expected 1982 inland petrol consumption.

Cheaper

According to AE & CI Deputy Managing Director, Mr. Ronnie Webb, initial indications are that this petrol might be produced slightly cheaper than Sasol petrol and that it could be of a higher octane rating and, therefore, require less additives.

"Confirmation will depend on the outcome of the R5,5-million four-year development phase through which AE & CI is putting the purchased invention".

AE & CI's interest in the invention, Mr. Webb explains, stems not from the possible petrol production but from locally produced ethylene as a long-term domestic source of feedstocks for polyethylene PVC and other industrial polymers such as "Terylene."

Plastics constitutes a quarter of AE & CI's business. This year plastics' sales alone amounted to more than R70-million and it is a major growth area.

The invention, says Mr. Webb, involves the production of synthetic gas from coal, from which, in turn, methanol is extracted. This

By Nigel Bruce

Mobil discovered, if put over a zeolite catalyist produces a limited range of hydro carbons, principaly aromatic hydro carbons, which is in effect a good petrol.

"What AE & CI is mainly interested in is that interrupting 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 3 to 1 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.

Other objectives of the development phase are to estimate the scale of operation necessary, assess 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 Naptha 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.

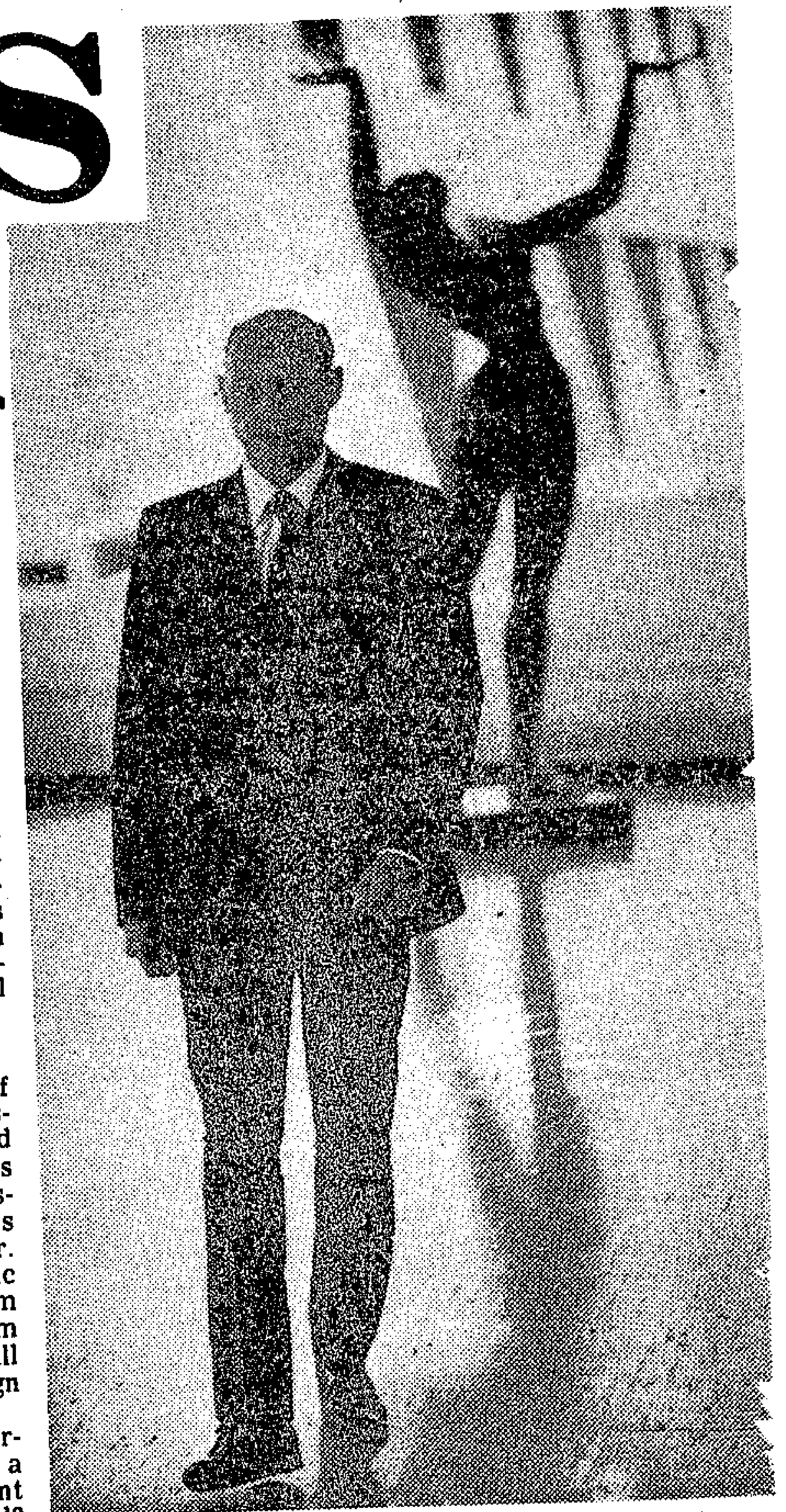
If this ethylene output is reached from the new process he says that at its present stage of development the process will require about five million tons of coal annually — which would make AE & CI the second largest industrial coal consumer in the country.

Feedstocks

Even if 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 has the exclusive right in South Africa to 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 fortuitou. 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 De Beers, are associated with AE & CI.

(1) Energy

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(1) 42
(2) 260 B
(3) Energy

Sasol 2 in drive for staff

RDM 13/1/76.

Staff Reporter

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

The Springs-based company will start soon on the R1 000-million project near Trichardt and has vacancies for 300 employees. Sasol 2 will be one the world's biggest gasification project.

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 Ibadan on the Persian Gulf.

Energy

US interest grows in Sasol's oil-from-coal

STAR 30/1/76

Business Reporters

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 from 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 petrol-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 gasolene 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

NMerc 28/1/76

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.

1 222

2 Energy

3

(1) 28 (3) 216

(2) 4.69

Why the days of cheap coal are coming to an end

FM 27/2/76

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 unashamedly 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 have come directly under the ownership and control of the large mining houses". And "the emphasis of 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 supports instead of leaving pillars, or more emphasis on opencasting, with its big 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.

(i) Energy
(I) 260 B

SASOL II COST HITS R1 900m

NM 13/2/76

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.

Energy

Escom tariffs to raise price of electricity

ARGUS 29/3/76

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 offset 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 22,5 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 R2,5-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 Palser, 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 railing 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

RDM
8/4/76.

(1) Energy
(2) ~~216~~

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 Cabora Bassa 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 he fact that the developing shortage is not likely to be

prevented the switching on of Cabora Bassa power. In addition, the body controlling the hydro-electric scheme is bargaining with South Africa for higher charges than were negotiated in 1967.

The Minister of Economic Affairs, Mr Heunis, has warned in Parlisment that if Cabora Bassa does not provide power this winter and there is severely cold weather, power cuts will be unavoidable.

N-station: Name of builder soon

Cape Times 6/4/76

Chief Reporter

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) said 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;
- Framatone and Spie Batignolles of France; and
- Kraftwerk Union and Murray and Roberts of South Africa.

These consortiums were selected by Escom after an "outline inquiry" about the Koeberg project was issued 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 Alsse Mensha, 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 fall-out on our continent," he told the West German Deputy Foreign Minister, Mr Hans-Juergen Wischnewski.

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.

(1 ~~65~~

(2 Energy

(3 ~~260 B~~

Koreans get own village

CAPE TIMES 15/4/76

Chief Reporter

A SELF-CONTAINED village, with its own playing fields, is being built at Milnerton for a work-force of highly-skilled South Korean artisans who will be arriving in Cape Town soon to help in a R117 million Caltex oil refinery expansion project.

Although the South Koreans are to be paid in accordance with South African wage-scales, it has been estimated that there will be a saving of at least R4m by using them instead of local labour. Not only are their specialized skills hard to find in South Africa but also the Koreans have a world-wide reputation for absolute dedication to their work.

Special permission was obtained last year from the Department of the Interior to import a limited number of refinery construction artisans from South Korea for what will amount to the doubling in size of the Milnerton refinery.

PIPING CRAFTS

At the refinery yesterday Mr Bert Hyne, the American manager of the expansion project, said about 30 of the Korean artisans would arrive in Cape Town by air next month, and in a year's time there would be about 350 living in the "Korean village". This would be at the peak of construction.

The South Koreans, he said, were highly skilled in the piping crafts and were used in many parts of the world in the construction of refineries. They would work a 60-hour week at Milnerton and would have their own recreational and other facilities in the village which adjoins the construction site.

All the artisans had bachelor status; only the managing director of the South Korean contracting company for which they worked, Mr H S Lee, would be bringing his family with him. The Lees were renting a house in Constantia.

Mr D H Kim of Seoul, who is to be camp manager at the construction site, is in Cape Town to prepare for the arrival of the Korean artisans. He said yesterday that the artisans, who will return to their homes after the expansion task has been completed, will have their own chefs to supervise the cooking of dishes to which they are accustomed.

"The only real problems we are having at the moment are finding Chinese cabbage, and the means to prepare rice the way we like it."

The expanded Caltex refinery is expected to be completed in two years' time.

With the special "Korean Village" taking shape around them, Mr D H Kim of Seoul, camp manager, centre, Mr Bert Hyne, Caltex refinery expansion project manager, left, and Mr Fred Stanmeyer, project engineer, discuss progress so far. The village will house up to 350 South Korean artisans.

Scra[...] Prell[...]

PRETORIA. — Art [...] to outbid each othe[r] [...] African artist, Alexis [...] experts say, are wor[...]

And in the process they are threatening plans to preserve the Preller art collection for posterity in a museum and to flood the market with his works.

According to Mr Justice Kowie Marais, chairman of the SA Association of Arts, what is happening in the Preller case could result in a statute to ensure than the nation is not deprived of irreplaceable art and other treasures — "things to which we, and posterity, could fairly be said to have a reasonable claim".

NEGOTIATIONS

(1) 79

(2) Energy

French row over SA atom deal

STAR 31/5/76

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 expressed its "disapproval of this type of commercial transaction" and said "legitimate internal economic preoccupations cannot justify an initiative which implies a serious risk of dissemination of atomic armaments."

The communique 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 Abourdarham, sales director for the Framatome company which is selling the reactors, said in a television interview that the contract represented about 25-million man-hours for French workers.

Asked if there was any fear that the plants 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 Energy Agency in Vienna would monitor the use of the materials and installations. — Sapa-AP.

(See "N-plant bombshell 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 Derick 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 Honikman, 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 E 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 MILLIONS FOR SA

S TIMES. 28/4/76.

Mobil Refining's managing director, Bill England (inset) and part of his company's R200-million investment.

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

A Southern African "first", the new aromatic solvents plant will save R6,5-million a year in foreign exchange at current prices.

But probably more important, as the latest link in a continuing chain of investment by Mobil and other oil companies, it underlines the extraordinary loyalty which the international oil majors have shown to this country.

The usual explanation given for this is that the oil companies feel the Government is an ally of free enterprise. South Africa is a profitable little market for them.

But the oil crisis has forcibly reminded them, too, that the future of oil is a limited one, and that they must diversify into other energy sources.

South Africa, with its coal and a quarter of the world's uranium resources, is obviously an ally to cultivate.

Mobil's new plant will manufacture five high-grade aromatic products — benzene, toluene, xylene and two near-100 per cent aromatic fractions — which are currently imported.

Feedstocks

These chemicals are important as feedstocks in the petrochemical industry, and as solvents and carriers in the paint, adhesive, rubber and agricultural industries.

With a capacity of 90 000 tons a year, the plant should meet the industry's needs until 1982.

Mobil Refining's investment 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, 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 adjustments 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 product 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

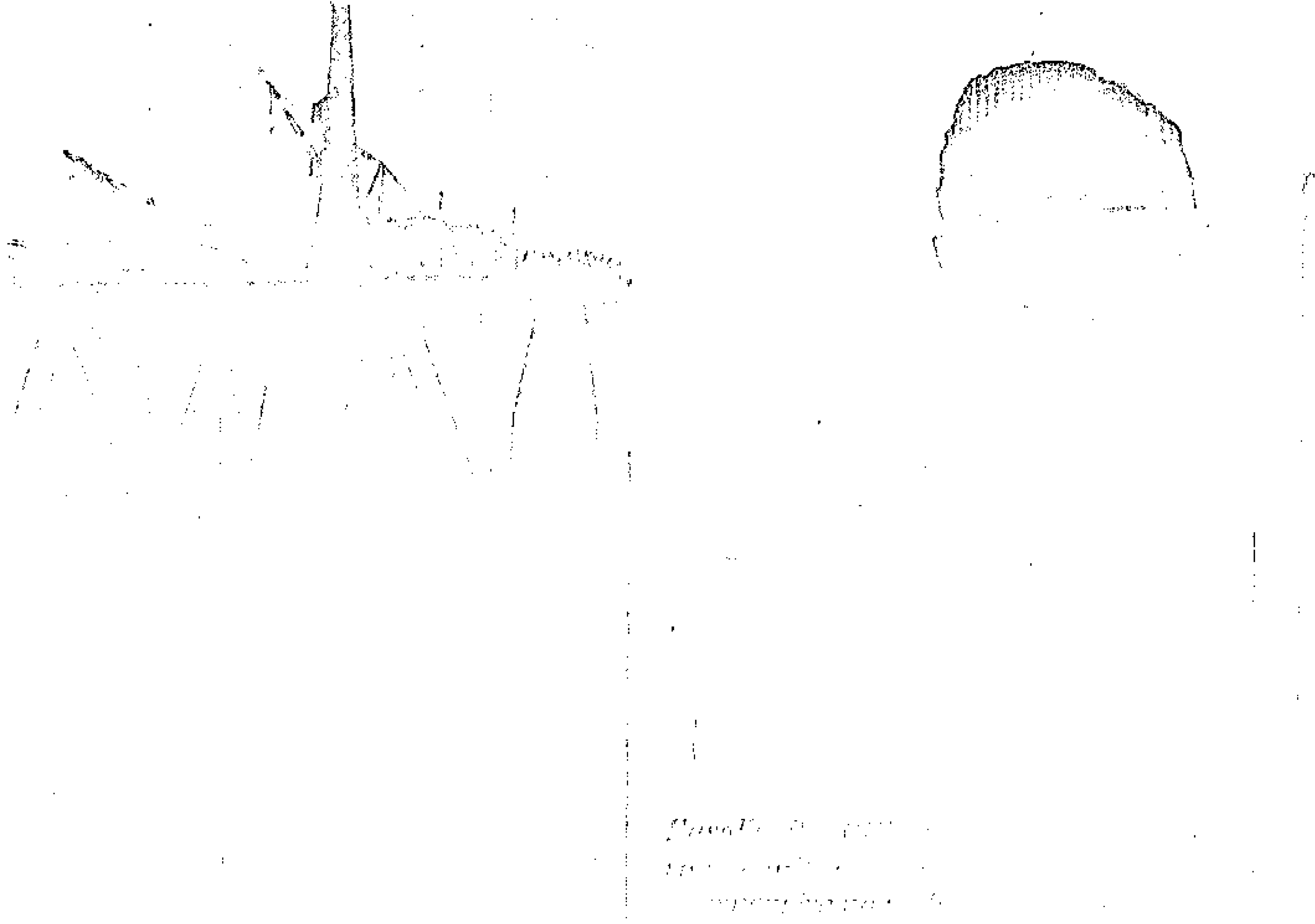
BP, which last year severed its marketing link with Shell, is talking of doubling its R140-million investment within 10 years.

And Caltex is spending R96-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 that 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.



The sky's the limit for Sasol II

But strategic necessity or not, the poor taxpayer should [illegible] told what the [illegible]

There's a hard lesson to be learnt from Sasol [illegible] [illegible] cost doubled [illegible] [illegible] [illegible] [illegible]

[illegible] allowed, indeed encouraged, in the case of Sasol. [illegible] [illegible] [illegible] [illegible] [illegible] completion.

[illegible] figure was based on February 1974 [illegible] price levels and, to quote [illegible] on a broad concept [illegible] [illegible] [illegible] [illegible]

Latest estimates, now based on October 197[illegible] [illegible] the cost at [illegible] At the [illegible] [illegible] [illegible] [illegible]

[illegible] disturbing thing is [illegible] [illegible] [illegible] [illegible] in fact, [illegible] [illegible] [illegible] to

make estimates of price [illegible]

Furthermore, [illegible] estimates were [illegible] even on 1974 prices.

Secondly, world [illegible] [illegible] plant costs [illegible] February 1974 and [illegible]

Thirdly, since [illegible] calculating the [illegible] project [illegible] [illegible] another 20,20% to [illegible]

There is little doubt [illegible] on plant cost escalation [illegible] in line with the [illegible] engineering [illegible] [illegible] [illegible] and December [illegible]

Another [illegible] that, in calculating [illegible] of Sasol II, [illegible] costs would [illegible] with crude oil prices [illegible] the [illegible] [illegible] down.

[illegible] should [illegible] return on capital [illegible] the projected [illegible] 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. Just 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 guess 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 2c/litre levy on petrol which goes to the Fund. "The flexibility here," argues De Villiers, "lies in the period of time in which you can continue to feed this fund."

But all this means is that an unknown quantity of export credits aside, the taxpayer is footing the Sasol II bill. It's perhaps arguable that he should. The new Sasol complex (plus Sasol I) will eventually provide [illegible] petrol as well as much [illegible] and gas requirements [illegible] currently [illegible].

But with the poor [illegible] having [illegible]

[illegible]

Still afloat

Though James Brown & Hamer will have lost at least R5,5m on certain of its shipbuilding contracts it hasn't lost faith.

This week's interim statement that the Anglovaal subsidiary had an attributable loss of R1,997m for the half-year to December 31 follows last year's admission that JBH had already lost R3,5m on shipbuilding (*FM* October 31). The trouble, arising from contracts booked between July 1973 and March 1974, is twofold:

Firstly, JBH entered contracts to build six oil rig supply vessels for a Norwegian customer at fixed prices which have subsequently been overwhelmed by inflation.

Secondly, JBH signed up to build Safmarine's 9 600 hp 2 900 ton salvage tug *John Ross* in a role as secondary contractor to Scotland's Robb Caledon, one of the world's expert tug builders, which has the contract for the sister ship, the *Wolraad Woltemade*.

Robb Caledon, as lead yard supplying JBH with technical background, has run into troubles of its own and is running a year behind schedule on the *Woltemade*. JBH, forced to recruit expertise to build the *Ross* from overseas because nothing was available in SA, and to train local artisans, has also found itself lagging behind its scheduled delivery date [illegible] three months after the Scottish lead yard.

An Anglovaal spokesman told the *FM* this week it has also meant that JBH has been unable to plan resources the way it wished, still having seven vessels under construction and contracts worth [illegible] to complete. Indeed, JBH has contracts to take it through to January next year and intends tendering for more as it now has "the expertise, capacity and a first class team. Of course, we'll work within limitations, and it remains to [illegible] we can get further contracts."

Since starting the *John Ross*, JBH has secured building a tug for Iscor (for Saldanha Bay) at a price with an escalation [illegible]

Focus by starlight

This month should see the arrival in Johannesburg of some prohibitively [illegible] low light television. Both [illegible] and Cupido Bureau [illegible] are expecting [illegible] a form of [illegible].

These [illegible] systems can produce pictures by starlight and are often used for security [illegible] [illegible] inaccessible places like the insides of gas turbines.

Sulzer's system (manufactured by [illegible] Ireland Electronics of Bath, UK) claims to produce high quality pictures of [illegible] at light levels of [illegible].

[illegible] says Sulzer, for one camera, [illegible]

[illegible]

Energy

THE ELECTRICITY SCENE IN

How peace could come from power

NM 26/4/76.

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, Cabora Bassa and the Orange River Project.

The facts on which he bases his idea that the price of electricity can fall come from Rhodesia. Over a ten-year period the price of the average unit sold in Rhodesia has come down from 0,605 cents to 0,390 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 co-operation in this area of daggers drawn is an impossible dream.

Dr. Olivier does not agree.

"My 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 peoples.

"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 Cabora 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 Mozambique 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 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 would still provide the lion'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 Matanzima announced that hydro-electric power generation in the Transkei was being investigated by the S.A. Department of Water Affairs. A major project in several stages was involved.

The eventual output of such a scheme would be far in excess of the needs of the Transkei, said the Chief, but it would be a practical possibility if the power generated was 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 infrastructure. Once capital costs have been recovered, the Transkei should have a steady income running into many millions of rands a year from electricity sold to South Africa.

Project details are not yet final but preliminary 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 spark the whole issue. The revenues and royalties earned from exploiting the untapped 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 a public outcry", the report said the survey would provide a baseline so that possible changes brought about by the power station could be recognized and deleterious effects on marine life prevented by Escom.

Nuclear power: How safe is it?

By ALAN DUGGAN

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?

Do people living in the area of the plant risk the horrifying consequences of radioactive contamination?

No, replies Escom. Koeberg will be very safe. Light-water reactors are operating or being built in at least 22 countries. In most, if not all, expert organizations have been set up to protect the public interest.

Further, adds Escom, by the time Koeberg is commissioned, at least three years of operating experience will have been gained on an essentially identical plant.

What about radioactive effluents?

LEAKAGES

Escom explains: "In order to escape, radioactive atoms must first penetrate the dense fuel material in which they are formed, leak from the zirconium alloy fuel 'pins', escape from the pressure vessel or coolant circuit and penetrate the double-walled containment building."

Nevertheless, recognized leakage paths do exist. Radioactive forms of the gases xenon and krypton are discharged into the atmosphere and other radioactive materials are discharged into the sea. In both cases the quantities are minute and carefully controlled.

However, this leakage is negligible, argues Escom. It is considered unlikely that the minimum radiation levels specified by the Atomic Energy Board will even be approached.

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 eating sea foods taken from around the outlet receives more than 10mrem/year (thousandths of radiation units, expressed as Röntgen Equivalent Man).

Before discharge the effluent will be diluted to below permissible life-time drinking water concentrations.

A certain amount of solid radioactive waste will be stored permanently on the site, says Escom. It will be in solid form in drums possibly mixed with cement. Though leakage is thought to be unlikely, routine radiation surveys will be carried out.

However, this waste stored on the site will be only a tiny fraction of the fission product (radioactive) accumulated in the fuel pellets.

The rest will be shipped abroad to a reprocessing plant, where the radioactive substance will be separated and sent to permanent storage.

A nuclear explosion at the plant is impossible. New reactor fuel contains not more than three percent uranium, says Escom.

"Accident situations are avoided by very careful design, construction, testing and operation. Very large safety margins are allowed. External events such as earthquakes, floods, aircraft crashes and sabotage are considered."

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.

ESCOM'S R1m STUDY

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 associated with the study was the Atomic Energy Board, the Cape Provincial Administration, the CSIR, the Departments of Planning, 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.

(55)

(1) 317

(2) Energy

CAPE TIMES 30/6/76

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 embarassing 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

Energy

2/7/76

STAR.

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 i. 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 R2,26 — 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 R9,02, which gives the CMA figure of 33 percent.

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 Escom, 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 39c increase in the price of 90 kg bags of domestic coal, bringing the new selling price to R1,90 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 18½c 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, Dr H J J Reynders, said today he believed the coal price increase would have "a minimal effect on the cost of living" and that it would not be inflationary.

Energy

Lack of coal hits Rand industries

STAR 15/7/76

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...

By TONY SPENCER-SMITH 1/8/76 STRIB

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 tighter 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.

To a certain extent municipalities were responsible for this, and in 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 increasingly flouting the speed limits.

Mr Floor's shock message for the Government is: The petrol restrictions so far have done little to cut the country's total oil consumption, and tighter restrictions would only really pay off in this way unless they were so drastic that 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". Taking into account the population growth, public transport in this country is considerably worse than before the Second World War.

Antiquated

It has been allowed to deteriorate, he says, to a "regrettable state". In many ways it is technologically antiquated. Many people find themselves living nowhere near public transport. Services are more erractic 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, a Cinderella. They feel that if they can only get shot of it, they'll be far better off. This is very short-sighted."

Use of public transport costs the commuter extra time, and a severe curb on cars would mean a slowdown in the whole economy — especially considering the poor telephone service.

"Business is much better conducted face-to-face. And studies have shown that people who have to spend ages commuting just don't work properly for hours after they arrive. You can't expect a man with a high salary to catch a bus suddenly and maintain the same level of productivity. That's a hard fact the Government must accept."

But Mr Floor is sceptical of the chances of providing a really comprehensive public transport system, given the country's economic position and low population densities.

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 35 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 a considerable dent in private motoring would not make that much difference to the balance of payments.

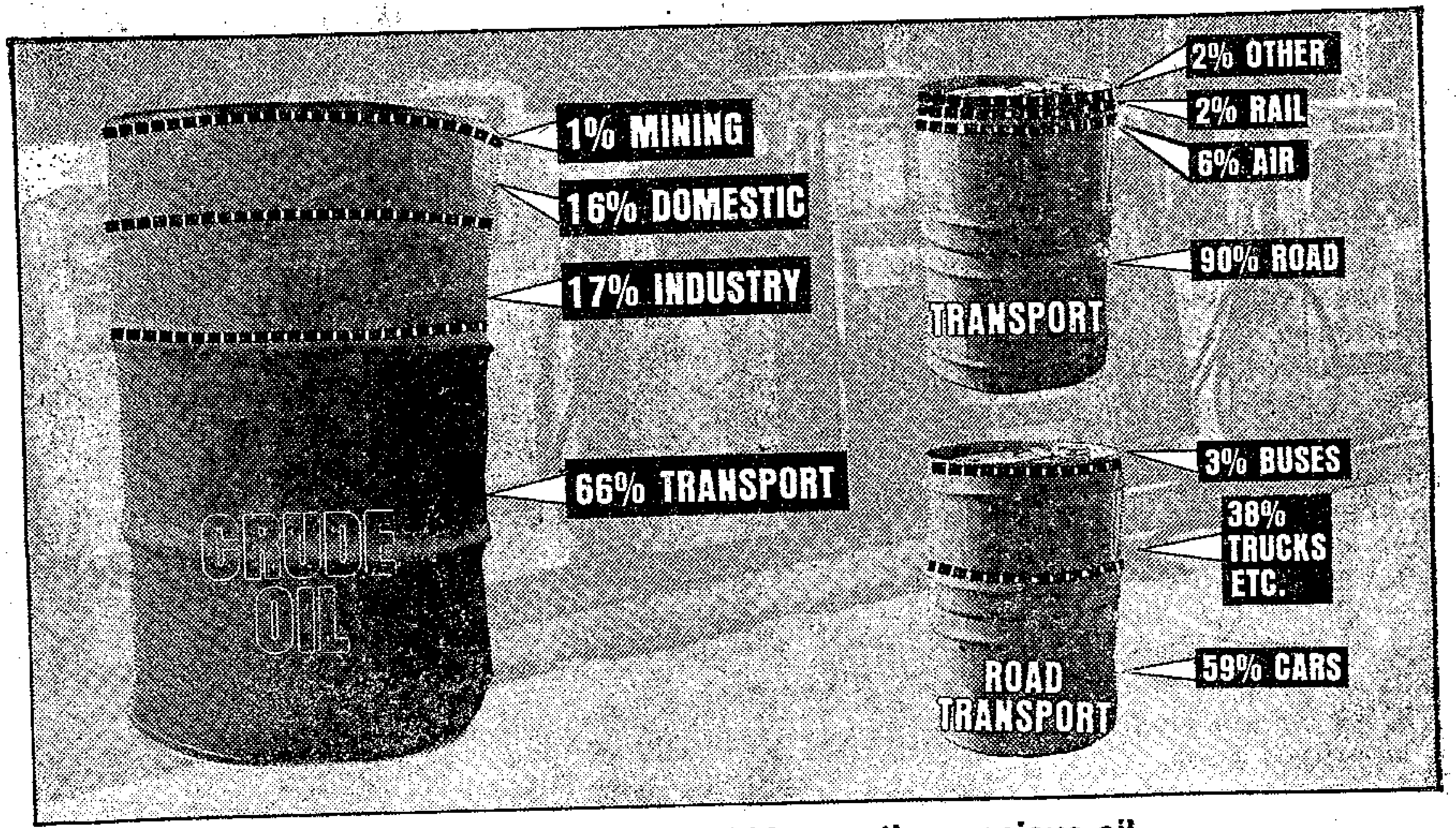
"There's not much use in fiddling around there.

"And to improve public transport to the extent that it could replace private transport would cost a fortune in overseas equipment and technical assistance. Far more in fact than the cost of the oil for fuel. The cheapest solution might be to go on importing fuel, at the same time motivating the motorist not to be wasteful and improving public transport 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 enlist the motorist's support. They should "come clean" with the public and tell them exactly why the restrictions were necessary.



How the country gobbles up the precious oil

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 Gavin Maasdorp, 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.

(1) 55
(2) 64

2 The Cape Times, Monday, August 2, 1976

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 co-operation 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 Africans must tighten belts, says expert

r M. D. Marais . . . start chopping

RATION PETROL ...AND DO IT NOW!

By DEREK TAYLOR

THE GOVERNMENT must introduce petrol rationing and rigorous import controls urgently.

This is the view of Dr M. D. Marais, doyen of South Africa's industrialist-economists and former member of the Prime Minister's Economic Advisory Council, who told the Sunday Tribune yesterday: "The time has come for drastic steps to be taken with speed.

"South Africans must get used to the fact that we are all going to have to drop our standard of living," said Dr Marais. "We just cannot afford the level of expenditure which has for so long depended upon a high price for gold."

● **PETROL RATIONING:** "We cannot afford the amount of petrol we use and current measures to reduce it are not working. We must ration it."

● **IMPORT CONTROLS:** "I do not normally favour controls of this kind but the situation now demands them. We must fit our imports to our exchange resources.

"Too much money has been leaving the country through exchange control loopholes. Urgent and effective methods must be found to block them.

"The Government has based its plans on the assumption that gold would go to two hundred dollars and stay there until doomsday," said Dr Marais.

Vast capital projects which now total R20 000 million must be reconsidered.

"We must get our priorities right and start chopping and postponing," said Dr Marais.

Sasol II, the proposed uranium enrichment plant, the atomic power station and certain railways expansions would have to be postponed.

Projects to improve the lower-income groups participation in the economy should be given a high priority.

South Africa had borrowed too much abroad — much of it in short-term loans — and it would be increasingly difficult to borrow more.

"In London and places like Frankfurt they do not like the continuing symptoms of Soweto.

"But we will have to continue to borrow large amounts to maintain stability and our exchange reserves — that is when we are going to have problems," said Dr Marais.

"Our last devaluation proved no solution and it would be fatal to devalue again. Foreign investors will not invest in a falling currency," he said.

Monetary or fiscal measures could not solve the present situation — it called for direct measures and the sooner they were applied, the sooner they would take effect. Internal liquidity must be retained.

"I must stress — and the Rhodesian experience has amply demonstrated this — that there is tremendous scope for replacing imports with our own manufactures," said Dr Marais.

"This must be given equally urgent attention and encouragement within a scheme of import control," he said.

Fuel decisions tomorrow

Vehicles to be seized?

4/10/76 STAR.

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 lifts.

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 Riekert, recently spoke out 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 Kruger.

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 services, said today that all the equipment used by his men was tested by the province and had been found accurate.

Mr F 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."

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Work starts at Koeberg

South Africa's first nuclear power plant at Koeberg 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 Kw.

● French atom policy stays — Page 25.

12/10/76

STAR

(55)

F. M. 22/10/76

SASOL SPENDS

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.

Bosjesspruit, the new Sasol mine, has also had some R45m earmarked for its development. Winning companies include Hunslett Taylor, Shaft Sinkers, E L Bateman and Siemens.

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Petrol puts off PM's meeting

S. 4\11\76

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 Soutpansberg 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

310/55

Swazis cash in on fuel cuts

Sunday Express 14/11/76

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.

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264

Oil rumour: Soekor, Govt are silent

17/11/76

Industrial Reporter

THE State-backed oil exploration group, Soekor, and the Government yesterday refused to confirm or deny rumours that the giant American off-shore oil rig, Sedco 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.

276/55.

SA fuel curbs hit Rhodesia tourism

Star 17/11/76

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.

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Energy 88 Star 11/11/86

Guilty of petrol offence

A Jeppe man found guilty of contravening the new petrol regulations two days after they were introduced told a Johannesburg 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.

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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

Nat. Merc. 19/11/76

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 Halcrow 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: Yanbu, which at present can only receive small vessels, is to have seven deepwater berths.

The target of Saudi Arabia's huge current plan is to achieve a growth rate of 10 percent while the aim is that the non-oil sector — crucial to long term diversification plans — should grow at 13 percent.

The plan expects to invest 14 000 million dollars in new hydro-carbon - based industries over the next five years; it also envisages that between 800 and 900 small and medium non-oil manufacturing units will be established in the private sector at the same time.

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 ITT 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 100 000 cubic metres of water a day). The new project will take more than three years to complete and will cost R420 million.

These are just a few of the contracts awarded under Saudi Arabia's 140 000 million dollar development plan.

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 ensuring 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 74 percent 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-for-technology deals. The most spectacular of these was that concluded in 1974 with the West German firm Krupp when Iran purchased a 25 percent 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 drawbacks include both lagging oil revenues and manpower shortages.

Early this year a number of top Western bankers, including 50 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 Snamprogetti of Italy and Sofregaz 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.

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Hansard 2, 4/2/76 col 77

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 organizations 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, Jametown, Middelburg, Somerset East, Dordrecht, Aliwal North, Molteno, Graaff-Reinet, Cradock, Lady Grey, Beaufort West, Frazerburg, Sutherland, Carnarvon, Williston, Victoria West, Colesberg, Kimberley, Vryburg, Vredefort, Ficksburg, Bethlehem, Ladybrand, Potchefstroom, Politsi 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 1975 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-aways, power failures and problems at the mines which resulted in delays in the rail transport of certain goods, including coal.

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Hansard 2 col 117 6/2/76

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) 11 100 000 metric tons.

(ii) 54 600 000 metric tons.

TABLE 11: DEVIATIONS FROM AVERAGE MONTHLY WAGE (TOTAL, CASH AND KIND) BY TYPE OF FARM EMPLOYEE, RACE AND ECONOMIC REGION - 1972/73

TYPE OF FARM EMPLOYEE - REGULAR RACE - AFRICAN YEAR - 1972/73

AVERAGE MONTHLY TOTAL WAGE FOR ALL ECONOMIC REGIONS =R 20.82

DEVIATIONS FROM AVERAGE MONTHLY TOTAL WAGE BY ECONOMIC REGION

EC REGION	1	2	3	[illegible]	5	6	7	8	9	10	11	12
DEVIATION	17.82	7.75	4.94	10.86	7.56	8.09	2.93	10.92	1.09	1.86	9.40	11.45
EC REGION	13	14	15	[illegible]	17	18	19	20	21	22	23	24
DEVIATION	3.59	6.37	6.50	-.72	-2.47	-3.88	-5.06	-4.10	-4.27	-7.04	-5.34	2.29
EC REGION	25	26	27	28	[illegible]	[illegible]	[illegible]	32	33	34	35	36
DEVIATION	-2.96	-3.04	-1.10	-3.6[illegible]	[illegible]	[illegible]	[illegible]	-6.77	-5.12	1.08	-.05	15.10
EC REGION	37	38	39	40	[illegible]	[illegible]	[illegible]	44	45	46	47	48
DEVIATION	-.17	5.21	3.49	-3.0[illegible]	[illegible]	[illegible]	[illegible]	-2.28	-6.59	-6.25	-2.33	-2.45
EC REGION	49	50	51	52	[illegible]	[illegible]	[illegible]	56	57	58	59	60
DEVIATION	-2.57	-2.58	-2.77	.2[illegible]	[illegible]	[illegible]	[illegible]	-4.19	-8.00	-5.46	-4.36	-.80

TYPE OF FARM EMPLOYEE - REGULAR YEAR - 1972/73

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AVERAGE MONTHLY CASH WAGE FOR ALL ECONO[illegible]

DEVIATIONS FROM AVERAGE MONTHLY CASH WA[illegible]

EC REGION	1	2	3	[illegible]	[illegible]	[illegible]	[illegible]	8	9	10	11	12
DEVIATION	17.19	7.06	7.32	8.97	10.08	10.81	5.29	13.29	4.09	5.12	5.58	6.37
EC REGION	13	14	15	16	17	18	19	20	21	22	23	24
DEVIATION	-.93	2.60	4.96	.03	-2.73	-3.66	-5.54	-3.97	-6.82	-6.72	-6.48	3.15
EC REGION	25	26	27	28	29	30	31	32	33	34	35	36
DEVIATION	-1.43	-1.25	-1.52	-1.43	.23	-.31	-1.61	-5.28	-3.52	3.26	.36	17.27
EC REGION	37	38	39	40	41	42	43	44	45	46	47	48
DEVIATION	.63	6.15	4.78	-1.99	-2.01	-4.20	-1.49	-.62	-4.03	-4.44	-2.99	-3.33
EC REGION	49	50	51	52	53	54	55	56	57	58	59	60
DEVIATION	-2.37	-5.18	-3.72	-4.13	-6.27	-6.64	-6.46	-7.19	-8.28	-5.99	-5.82	-4.21

Hansard 4 col 298
20/2/76

Nuclear power station at Duynefontein

*13. Mr. T. ARONSON asked the Minister of Economic Affairs:

Whether there has been a re-assessment of the cost 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 INDIAN AFFAIRS (for the Minister of Economic Affairs):

Yes, R600 million and R550 million, respectively, plus approximately R350 million on interest during the construction period.

Hansard 8 col 619
19/3/76

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Total domestic consumption of coal

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.

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Hansard 9 col 679
26/3/76

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 Cabora 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 Cabora 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%.

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Hansard II col 770
6/4/76

For written reply:

ESCOM: Charges for electrical power

533. 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)
July 1971	0,0227
July 1972	0,0336
April 1973	0,0376
April 1974	0,0338
April 1975	0,1128

(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:

Undertaking	Present surcharge %	1 April 1976 Increased %	1 September 1976 surcharge %
Western Cape Undertaking	22,5	40	60
Northern Cape Undertaking	−7,5	5	20
Eastern Cape Undertaking	40	60	80
Border Undertaking	30	50	70
Natal Undertaking	25	42,5	62,5
Orange River Undertaking	40	60	80
Eastern Transvaal Undertaking	−7,5	5	20
Rand and Orange Free State Undertaking	2	17,5	32,5

Hansard 11

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Stocks of coal at power stations in Port Elizabeth/Cradock/Graaff-Reinet

676. Mr. W. H. D. DEACON asked the Minister of Economic Affairs:

(1) What are the stocks of coal on hand at power stations in (a) Port Elizabeth, (b) Cradock and (c) Graaff-Reinet, (i) at present and (ii) normally at this time of the year;

(2) whether any steps have been taken to ensure that adequate coal supplies will be provided at these centres during the coming winter; if not, why not.

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	1 766 metric tons
Graaff-Reinet	425 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.

Senate Hansard 9
@ col 70
11/5/77

56

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.

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HANSARD NO. 15
14/5/76

Audio/visuals

Is it ess[...] [...]e for your
show any a[...] [...] been decided?
such as a [...]
videotape?

Coking coal 1016

891. 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 R19·95 per ton f.o.b. for straight coking coal.

[...] playing at home or
[...] the meeting room
[...] you?

[...]ble as a meeting
[...]our audience and as
[...]d for your subject?

[...]ght size for the
[...]pected?

(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?

Kangaroos jump & have children in a pouch

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:

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Price rises on Monday

4 cent petrol jolt

7/1/77 Star

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 R1,26 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 [illegible].

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 0,8c a litre in terms of a negotiated formula that will guarantee their mark-up.

The retailers' higher profit margin follows years of negotiation by the Motor

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 oil companies for the 0,4c a litre they absorbed when oil-producing countries increased the price of crude in 1975.

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 R5-million a day because of her decision to opt for the higher 10 percent hike.

South Africa's fuel bill increased almost sixfold, from R190-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."

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8/1/77 Star

Drivers foot Sasol bill

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 Heunis.

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 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 0,69c 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 the association regretted the Government had imposed a fuel tax to help finance Sasol 11.

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 Assocom, 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.

Rondalia says petrol prices have risen by nearly one-third during the past year and by 157 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."

recent union protests over ... to disrupt telecommunication links with South Africa. But many Continental countries have tough legislation against disrupting postal services and it is questionable whether an effective boycott can be mounted.

THE Minister of Economic Affairs, Mr Chris Heunis (right), says the crude oil price rise forced the immediate petrol price hike, but he must have known for some time that it was coming . . . or is this just another election ploy?

FUEL: IT'S A CASH CHOICE

9/1/77 S.T.

By NEIL HOOPER

TRAVEL less — or cut your spending on other things.

That was yesterday's naught-for-your-comfort message on the higher petrol price from the Government anti-inflation chief, Dr Lawrence McCrystal.

He admitted that the increased price of petrol was a "setback"

The ordinary man's income was not keeping pace with rising costs. Either he would have to travel less, or economise elsewhere.

"The man in the street is not going to get extra money easily — certainly not by demanding higher pay. If we are to fight inflation he will have to produce more to get more money."

WHERE SA STANDS

THIS is where South Africa stands in the log of world petrol prices:

Italy	49
Netherlands	39,5
France	38
Japan	35,5
SOUTH AFRICA	28,1
Britain	27
Australia	16,5
America	14

Dr McCrystal said the inflation rate for the last quarter of 1976 had been well down — only seven or eight per cent in relation to the previous quarter. He did not think the higher petrol price would push up inflation by more than one per cent.

Opposition spokesmen accused the Minister of Economic Affairs, Mr Chris Heunis, of bungling the increase and helping to create a state of pessimism in a year that started with the Prime Minister's New Year "message of disaster".

The United Party's information chief, Dr Gideon Jacobs, MP for Hillbrow, predicted that the Government was preparing for an election late this year "when the public have forgotten about the higher petrol price and when public servants have been given a wage increase."

The Prog-Ref spokesman on finance, Mr Harry Schwarz, said Mr Heunis could not say that the increase in the crude oil price had forced him to increase the petrol price by four cents immediately when he must have been aware for some time that such an increase in the oil price was likely.

The deputy director of the Bureau for Economic Research at the University of Stellenbosch, Mr A. J. M. de Vries, said: "The relatively small increase as a result of the increased crude oil price, is justified, and I would say that the allocation of two of the four cents increase to fund Sasol II is probably essential.

"But the Government cannot justify increasing filling stations' and oil companies' profits at the public's expense."

Mr De Vries estimated private motorists would pay R70-million this year to meet the increased price.

The total bill for petrol, oil and grease for private motorists would be about R650-million.

The public relations officer of the Automobile Association, Mr H. J. Kleynhans, also attacked the Government for giving the filling stations and oil companies increased profits.

DR McCRYSTAL
"A setback"

He said there were too many filling stations and that the oil companies had been allowed to build them.

Mr S. O. Goodwin, president of the Association of Chambers of Commerce (Assocom) said that while not unexpected, the increase had come at a difficult time.

He said the increase for petrol retailers had been outstanding for some time.

MR HARRY SCHWARZ
Must have been aware

"But should this have been granted to them? Is it essential, or should more meaningful steps have been taken to reduce costs, such as for instance, self-service pumps or a reduction in the number of outlets?"

The Afrikaanse Handelsinstituut came out in strong support of the petrol price increase.

Mr H. W. du Plessis, chairman of the Motor Chamber of the AHI, said the Government decision to freeze the number of filling stations until 1980 should increase the turnover of existing outlets while keeping unit costs in check.

MR H. J. KLEYNHANS
Profits attack

The South African Consumer Council might make representations to the Department of Commerce over the increase.

The council's director, Mr Johann Verheem, said the executive committee would debate the increase to determine whether the Government should be approached.

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RDM 11/1/77

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 Minister 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 500 ml 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 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.

Power 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.

~~248~~
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Petrol profit defended

11/1/77 Star

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 mark-up 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 increases 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 720 he would make through selling his stock of 68 000 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 and less business had caused us huge losses," he said.

Another garage owner said he would be selling 100 000 litres, which he bought at the old price, at 27,6 cents a litre.

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Audio/visuals

Is it essential to show any audio/visuals, such as a film or a videotape?

Venue

Has the venue for your presentation been decided? If so:

ying at home or
e meeting room
?

as a meeting
audience and as
your subject?

size for the
ed?

able to see?
or platform?
room for the
ng of one or
screens?

able to hear?
use a microphone?
address system
? Will there be
oises and can
during your

arkened easily?
ent power supplies
visuals or

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 J 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 so deplete available energy resources that some alternative source 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 solary 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:

55

'Review petrol hours if...

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.

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RAM 14/1/77

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. — UPI.

(253) (55)

Petrol profits inquiry 2/1/77

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 yesterday 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 15,1c a litre to 27,6c.

Mr Joep Steyn, Secretary for Commerce and the Price Controller, said he could not comment yesterday on the reports which quoted his deputy, Mr D. de Beer, as saying they had not considered it necessary to examine the petrol companies' books since 1974.

Mr Steyn said he wished to discuss the matter first with Mr De Beer today.

Mrs Joy Hurwitz, national president of the Housewives League, said the Price Controller first should have considered the books of the petrol companies in order to determine whether their profits were sufficient to enable them to absorb a pro rata proportion of the increase.

"Before agreeing to an increase of the magnitude of 4c a litre last week, the Price Controller had a duty to the public to satisfy himself that an increase should be borne by the consumer alone.

"If companies are being permitted to make vast profits at the expense of the consumer then the Price Controller is failing in his duty to the country," Mrs Hurwitz said.

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 dishing out relatively unimportant information to the public but become as blushing, quiet and skittish as a debutante at her first ball when it comes to giving out information which is critical to the consumer's pocket." — DDC.

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Gold rise will not offset jump in oil cost—Heunis

24/1/79

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 adaptations in fuel consumption could be effected if everybody co-operated.

"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. — Sapa.

Hansard 1 28/1/77 col 46

Escom: Increased charges X

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—25 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.

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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.

Hansard 1 col 47 28/1/77

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Total domestic consumption of coal

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

(a) What was the total domestic consumption of coal in the Republic in 1976 and (b) how much of this amount was used by (i) private consumers and (ii) public bodies.

The MINISTER OF ECONOMIC AFFAIRS:

(a) 68 900 000 metric tons.

(b) (i) 12 300 000 metric tons.

(ii) 56 600 000 metric tons.

Art. 13 -

In case of ... cipals of Chapters shall apply for ... cial Grand Scribe E to the Grand ... l complaints or appeals shall be ...

Such comp... riting, specifying the particula... e transmitted with all documenta... and Scribe E within two calendar ... hown for delay) from date of t... appealed against.

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 aborigation 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.

/..........7.

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TAKEN FOR A RIDE

By TONY SPENCER-SMITH

30/11/77

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 stations 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 intensive Government investigation.
- No more petrol advertising. "We are all being urged to use as 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.

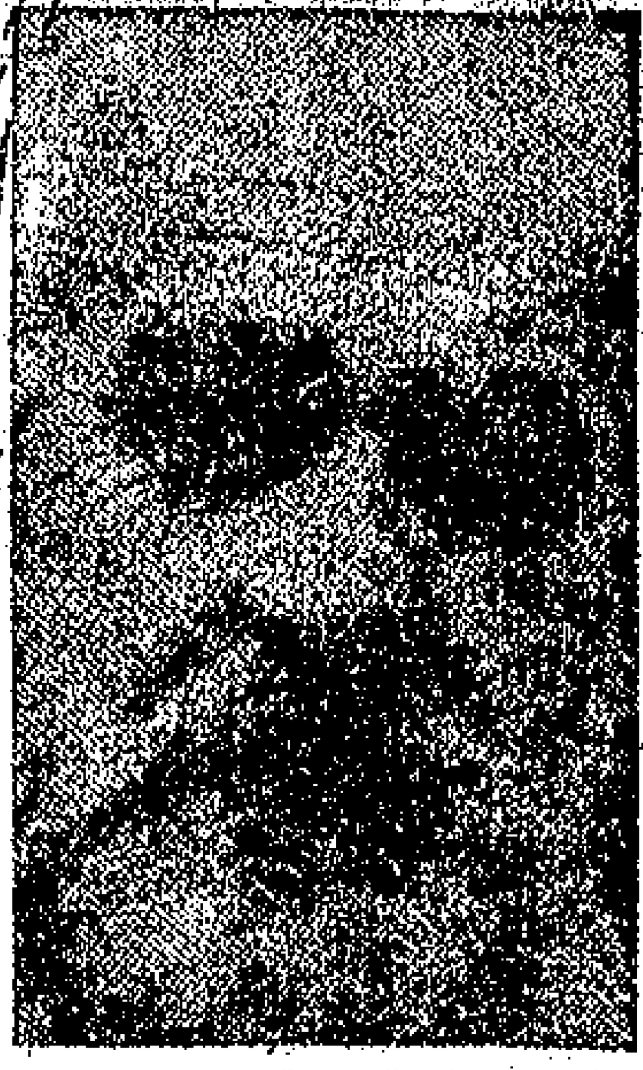
"We are dealing with a product of vital strategic importance. There is no room for wasteful private competition. It is an emergency commodity.

"Yet I have worked out conservatively that oil companies spend a minimum R137 000 a year just on entertainment allowances.

"This type of expense is legitimate in 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 R11 000 a month.

"Whose influence or friendship are they buying? And then they are paying out a minimum R27 000 a year on membership of golf clubs. Should they be able to use this sort of expense to justify price increases?"



Eugene Roelofse . . . no advertising

How free golf for the boys pushes up the price of drivin

Hansard 2 col 57 1/2/77

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Cabora Bassa scheme

*17. 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

SUN TRIB (F-14) 6/2/77

OIL COMPANIES operating in South Africa have the Government over a barrel, and can dictate the terms and prices at which petrol is sold in this country, a spokesman for the Price Controller's Office said this week.

And, he said, the oil companies agree among themselves on the retail 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 was 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 consulted by the oil companies before they change the price, and tries to persuade them not to make the price increase too harsh."

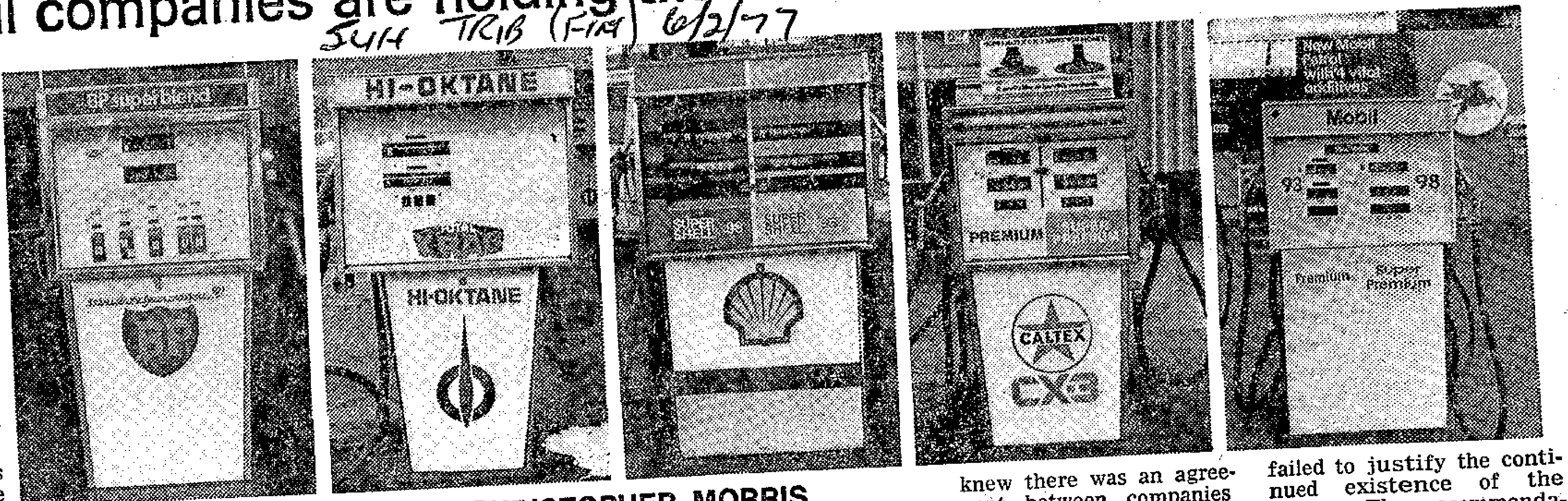
The turnover of some of the large oil companies internationally was bigger than South Africa's GDP.

"No government of a country of the size of South Africa could apply price controls stringently — supplies might well be cut off altogether.

"South Africa cannot afford to dictate to oil companies. The Government cannot rely on any regulation or legislation to control the price."

This was the reason why the Price Controller has not examined the balance sheets of oil companies since 1974. There is little point.

And, said the spokesman, even if the price controller had examined the books of oil companies, they would not find a true reflection of profits.



By Finance Editor CHRISTOPHER MORRIS

Crude oil is invoiced out to South African subsidiaries by the parent company and invoices are loaded to allow for a profit which might not otherwise be allowed in the country of use. So local companies are buying crude at an already inflated value.

"You will find that the profits reflected by local companies are negligible — profits are taken at the other end 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 oil companies would just stop supplying."

The reaction from consumer bodies was that the stranglehold must be broken. Eugene Roelofse, ombudsman of the S.A. Council of Churches and consumer expert, said this week that there were several countries in Africa, and "in the Caribbean, I think," which had successfully brought oil companies to heel.

"Maybe we should take a leaf out of their books," he said.

"We are dealing with a strategic commodity — not with canned peas or asparagus"

Roelofse said the fact oil companies were holding a gun to the Government's head came as no surprise.

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, too.

The spokesman for the price controller said he knew there was an agreement between companies called an "egalitarian pricing policy".

Interestingly, the Board of Trade completed a report in June, 1970, 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 Phipson, United Party MPC for Berea, added his voice for an invesigation into the whole question. He said he was aware that there existed strong intercompany arrangements with regard to shipping, refining and deliveries.

"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 corporations who can make book adjustments from one country to another; because of the strategic value of petrol and its massive effect on the economy, the cost to the consumer should be scrutinised by government from port of loading onwards."

• The price of petrol has risen from 8,9 cents a litre for regular in Durban in October 1973 to 25,4 cents today — an increase of 285 percent. The price of petrol in Durban now is more expensive than in London where it costs 78p a gallon (25,3 cents a litre).

Service-station curb warmly welcomed

THE EXTENSION of the curb on service-station building has been warmly welcomed by the Motor Industries Federation and the Motor Traders Association

The five-year rationalisation agreement made by the oil companies, the Government and the MIF, was due to expire in December this year, but has been extended until December, 1980.

Says Jannie van Huyssteen, director of the 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, Jessel Celine, the SAMTA divisional chairman, said: "We strongly advocate the policy, particularly when we had the fuel shortage when we went so far as to advocate a complete moratorium on the building of service stations."

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 Huyssteen, "we have noticed an increased throughput in existing stations during the operation of the plan, and as one of the signatories to the scheme I think we would be able to call for a review when we want."

Garages heading for a crash

By ESMOND FRANK

WHILE consumer organisations continue to press for a Government probe of oil company profits, many of South Africa's 4 700 garages are likely to close in the next few months despite the recent massive 17 percent rise in the retail price of petrol.

Garage operators in the Johannesburg area allege gross over-trading by the major oil companies has forced many petrol retailers into critically tight financial corners from which they are unlikely to emerge.

"There are now far too many garages chasing far too few motorists," said one city centre petrol retailer.

He added that most garages are still losing heavily despite the 0,69 cents a litre increase in profit margins.

Most of the profits, he claimed, are paid out in wages to pump attendants. This means garages attempt to offset petrol sale losses by increasing the price of workshop repairs.

But, he said: repair work has decreased as people use their cars less in the face of higher petrol prices and restricted trading hours.

Garages financial problems are compounded because oil companies are now demanding cash-on-delivery for petrol supplies while banks, which consider garages to be bad risks, are refusing to grant overdraft facilities.

I understand about 80 percent of the country's garages are owned by the oil companies which lease the sites, buildings and pumps to operators.

The operators are, however, expected to fork out anything up to R55 000 to provide adjoining workshops.

Petrol retailers complain they are frequently forced to participate and partly finance special promotions introduced by oil companies with "monotonous regularity and little apparent effect."

Consumer organisations are, meanwhile, agitating for a Government investigation into oil company profits.

While most major local petroleum suppliers are subsidiaries of giant foreign-based public organisations, they are registered in South Africa as private companies and are not legally compelled to publicly reveal the state of their finances.

However, profits declared by the major foreign-based oil companies in 1975 (the latest available figures) reached almost astronomical proportions. They are Exxon, R2 200 million; Royal Dutch Shell, R1 420 million; Mobil, R780 million; Standard Oil, R750 million; Gulf Oil, R620 million and British Petroleum, R210 million.

On the local scene, Trek Petroleum Ltd, a public company listed on the Johannesburg Stock Exchange, reported a pre-tax profit of almost R3 million on a turnover of R57-million during the first six months of 1976.

The market leader in South Africa, according to a reliable source, is Mobil with a 20 percent slice of the petroleum cake. In second place are British Petroleum and Shell (about 18 percent each) followed by Caltex (17 percent), Total (12 percent), Sasol (7 percent), Trek (4 percent), Esso (3 percent) and Sonap (one percent).

The latest four cents a litre increase, claim consumer bodies will add between one and 1,5 percent to the steadily spiralling cost of living.

They feel the oil companies could have absorbed at least some of the increase in view of the hefty profits declared by their foreign parents.

While 50 percent of the four cents a litre increase has been siphoned off by the Government for mainly strategic purposes, a healthy 1,31 cents a litre goes to the oil companies, which are extraordinarily reticent about disclosing either their profits or their (unlikely) losses.

Hansard 4 col 405
18/2/77

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Koeberg nuclear power station

306. Mr. H. E. 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.

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21/2/77

Arabs block move for oil embargo on SA

Henry Reuter
The Star's Africa
News Service

CAIRO — Saudi Arabia and the United Arab Emirates have blocked African demands, at the Afro-Arab summit here, for an oil embargo against South Africa and Rhodesia and also Israel, it is reported.

They did this at a pre-summit meeting, at which it was declared that all participating countries would agree to tighten economic blockades around these three countries.

Arab nations also agreed to pledge almost R5-million to African guerilla movements operating in Rhodesia, South West Africa and South Africa. The money was pledged by the Arabs during the weekend Foreign Ministers' Conference to prepare for the summit, which will be opened today by President Sadat of Egypt.

With the commitment went a promise that the guerillas would receive the cash immediately and not through normal lengthy procedures.

The Arab states have skirted the major issue — the demand by Tanzania for 2 000-million dollars (R1 740-m) for African countries.

The demand caused rifts in the preliminary talks last week, not only between Africans and Arabs but also between leaders of the 40 participating African delegations.

At African caucus meetings many foreign ministers challenged the Tanzanian demand for 2 000-million dollars.

After suggestions that the Tanzanian document should be withdrawn, African states agreed in the interests of African unity to put it to the summit without emphasising the Tanzanian cash demand.

Arab delegates produced draft schemes for future political and economic cooperation between the two groups, which were accepted yesterday by the Africans, and will be placed before the summit.

2c a litre jump is predicted

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8/2/71

Mr S L Muller.

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 Horwood presents the main Budget on March 30 he is likely to announce another tax increase on petrol which will boost the price by 1½c.

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 price.

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 most 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

Mercury Correspondent

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.

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Petrol tax may rise

RDM 22/3/77

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 5c 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.

335, 55

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 Bantu 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 co-operation 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 R67-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.

Hansard 6 Q cols 520 - 521 1/3/77

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.

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Hansard 6 Q col 521 1/3/77

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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.

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DN 4/8/55

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:

Its 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 Escom with that of the municipalities and,

The adequacy of existing legal provisions effecting the tariff policy and tariff structure regarding the supply of electricity. — SAPA.

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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 gases 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.

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Uniform fuel prices move

18/3/77

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 marginally 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 gases 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 variuos 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 according to the rail and other transport charges paid by the distributors on the supplies moved from the coast to inland areas.

The persons and organisations who had made the representations had submitted various arguments in favour of a uniform price system but the Minister did not say what the arguments were.

The majority of petroleum products are consumed in the inland centres where the price is about 2c a litre higher than in Cape Town and set to rise further from April 1 because of higher tariffs. — PC-DDC.

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Fuel price warning

19/3/78

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 the size of South Africa, this could lead to economic distortion if the system of price equalisation did not apply to other essential commodities and services.—Sapa.

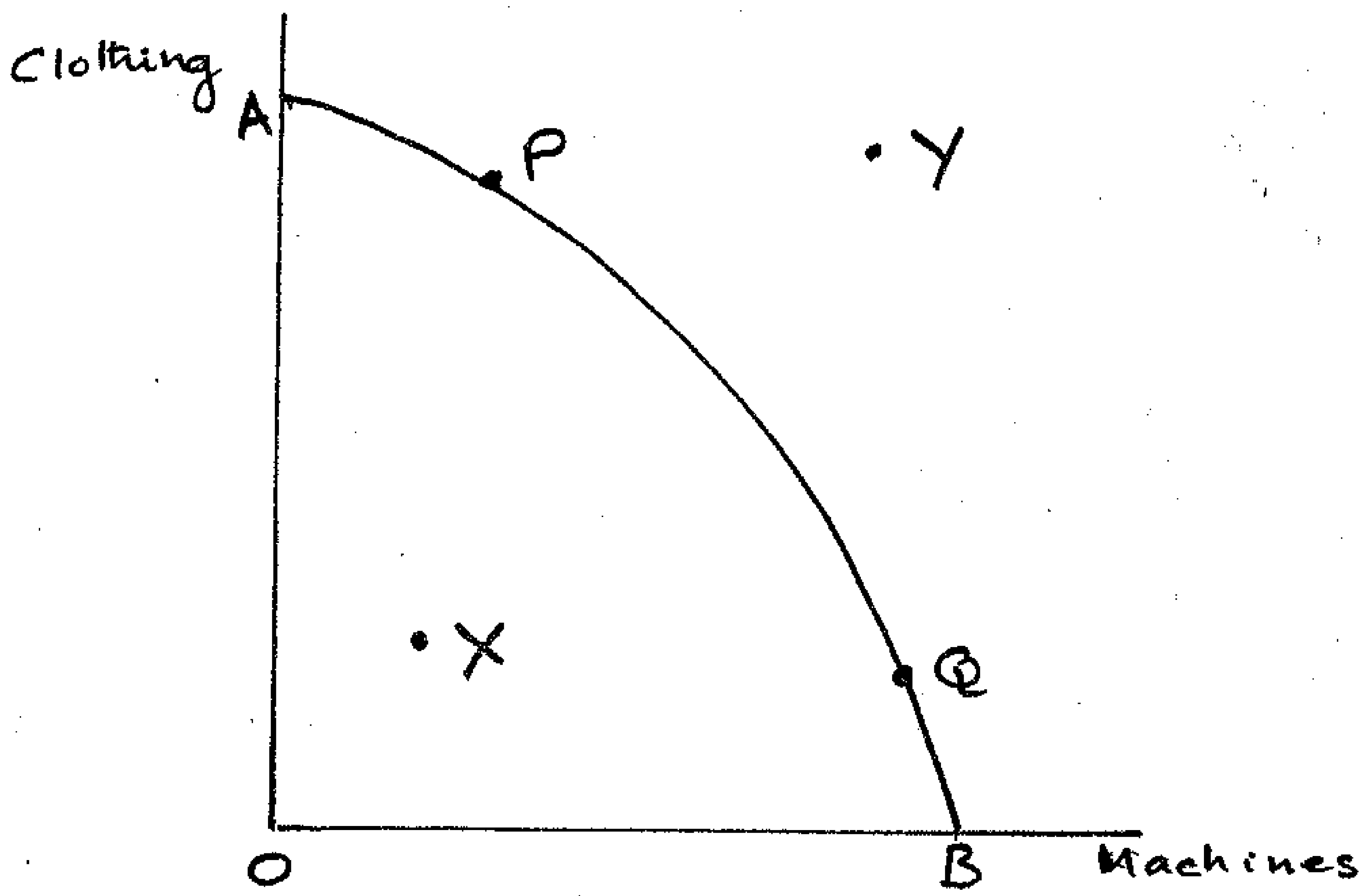
ditions and services." — Sapa.

● **Extra R111-m bill for the Reef. — Page 2.**

ECONOMICS 1A TEST (Continued .....)

SECTION B (20 marks)

1. COMMUNITY'S PRODUCTION POSSIBILITY FRONTIER



(a) Explain fully the slope and shape of the production possibility frontier. (8 marks)

(b) Under what conditions would this frontier be a straight line ? ...rks)

(c) What is the signific... the above diagram ? ...s)

(d) Would it be true to ... preferred to operate at P, rather ... cally more efficient than Q ? ...s)

(e) Could you suggest wh... production possibility curve wo...).

2. Define and briefly explai... marks)

(a) ceteris paribus
(b) inferior goods
(c) equilibrium price lev...
(d) maximum price legisla...
(e) factors of production
(f) cross elasticity of demand (i.e. 4 marks ea.)

Second nuclear reactor at Koeberg

17 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.

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Hansard 9 Q cols 694-695 22/3/77

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26/3/77

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 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, pricewise, 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.

Window". Here it is:

THE JOHARI WINDOW

No.1	The things you know about yourself which are known to others	What you do not know about yourself which is known to others	No.3
No.2	What you know about yourself which is unknown to others	The things you do not know about yourself which are unknown to others	No.4

All you know about yourself is on the left side of the Johari Window. You don't know what is on the right hand side, but you can find out more about yourself by asking others and you can gain insight by analysis of the loose bits of information you have and by thinking hard about yourself.

Johari Window look like? Look at the left side

No's 1 and 2). What do you know about yourself?

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prefects.

One-price fuel is opposed

25/3/?

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, 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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Foundation for Social Development

Telephone: Cape Town 67-5477

P.O. Box 67,

RONDEBOSCH 7700.

12th April, 1977.

Dear Sir,

The Foundation for Social Development is working in the fields of community development and education in the Western Cape. One of our current projects is the immediate establishment of a Careers Information Centre. At present we are focusing our attention primarily on the Asian, African and Coloured communities, but it is hoped eventually to enlarge this service to encompass all sectors of the population.

We would appreciate it if you would kindly let us have a copy of your current prospectus and any other information you think may be helpful to prospective students. We would also be grateful if you would put us [illegible] mation.

Petrol price protest

25/3/77 BT

Own Correspondent

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"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.

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Petrol shock due next week

26/3/79
pm

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Mercury Correspondent

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. Louwrens 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 4c rise.

Our Political 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. Kleu, chairman of the Board of Trade and Industries, Mr. H. S. Mabin, deputy chairman of the board, Dr. D. J. Mouton, Mr. H. de Wet, Mr. H. J. P. L. Kruger

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Fuel price to rise?

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 pr[ices] 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 t[o] more than 30c a litre.

It was pointed out tha[t] the exchequer gaine[d] nothing from the Januar[y] 4c rise, and that the Government needs higher revenue. — DDC.

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PARLIAMENT

20/3/77 RD

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.

TRAINEES

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.

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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 R2 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 Heunis, 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.

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in the estimates, it now ... — PC.

31/1/77 M

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 related 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. — SAPA.

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Star 31/3/77

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 Railways Budget earlier this month. Last year, the pipe-line made a profit of R111-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 0,19c for higher crude oil prices, 0,4c to the South African oil companies, 0,69c to garages and 2c in excise duty to bolster the country's Strategic Oil Fund and to finance the new Sasol 2 oil-from-coal project.

Hansard 10
Q cols 793-794

1/4/77

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Search for oil

681. 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 belt. 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.

(4) 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 2½ years ahead and a decision whether the search should thereafter be continued will depend on the results obtained during this period.

	REGIONS			
	37	38	39	40
	ODUCTION/SALES/NO.(1)			
Maize	0,8	0,1	0,2	0,9
Grain Sorghum	0,1	-	-	0,9
Wheat	-	-	0,1	2,4
Other Cereals	-	-	-	0,3
Sunflower Seeds	0,1	-	0,1	3,1
Ground Nuts(Shelled)	-	-	0,1	4,5
Ground Nuts(Unshelled)	-	-	0,5	9,9
Legumes	5,7	0,1	0,1	0,5
Tobacco	-	-	-	35,2
Chicory	-	-	-	-
Seed Cotton	-	-	0,2	0,9
Sugar Cane	-	-	-	-
Sisal	-	-	-	-
Phormium Tenax	-	-	-	-
Hay&Fodder Crops	0,2	0,3	0,5	1,1
Vegetables	1,0	0,7	3,1	1,9
Citrus Trees (B)	-	-	0,2	8,1
Citrus Trees (N-B)	-	-	0,2	4,9
Bananas,Pineapples, Granadillas	-	-	-	-
Other Sub-Trop Fruit(B)	-	-	0,1	0,6
Other Sub-Trop Fruit (N-B)	-	-	0,2	0,9
Nut Trees (B)	0,8	0,1	1,9	0,8
Nut Trees (N-B)	0,2	-	2,5	2,1
Grapes (B)	-	-	-	-
Grapes (N-B)	-	-	0,4	0,1
Other Deciduous Fruits(B	0,4	0,5	0,8	1,0
Other Deciduous Fruits (N-B)	0,1	-	0,5	0,9
Cattle	0,3	0,1	0,4	4,8
Sheep	-	-	-	0,2
Goats	-	-	0,1	1,5
Pigs	0,7	0,5	1,8	2,5
Horses,Mules,Donkeys	0,3	0,1	0,5	1,7
Ostriches	-	-	0,2	0,1
Poultry	1,0	1,2	7,2	1,1

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Petrol firm spent R4-m on 'facelifts'

The petrol price has risen 170,2 percent to consumers in the last four years. In that time BP South Africa has been spending nearly R4-million on "face-lifts" to service stations.

According to the March edition of the BP News Bulletin the "re-furbishing and re-decorating" has been to more than 800 service stations in major towns and areas.

Their efforts have focused mainly on sign-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 PRO 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."

AGREED

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 latter statement.

He said the money could have been used to subsidise stations in small towns with lower profit margins.

Mr Keith Bryer, 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.

● Seawater into fuel — Page 3.

Cape Times 19/4/77

Nuclear plant plan for Peninsula

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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 Munnik, 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 co-operation 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 rands".

Hansard 12 col 898 21/4/77

OUTPUT & PRODUCTIVITY GROWTH RATES. Page 28. FIG. VIII

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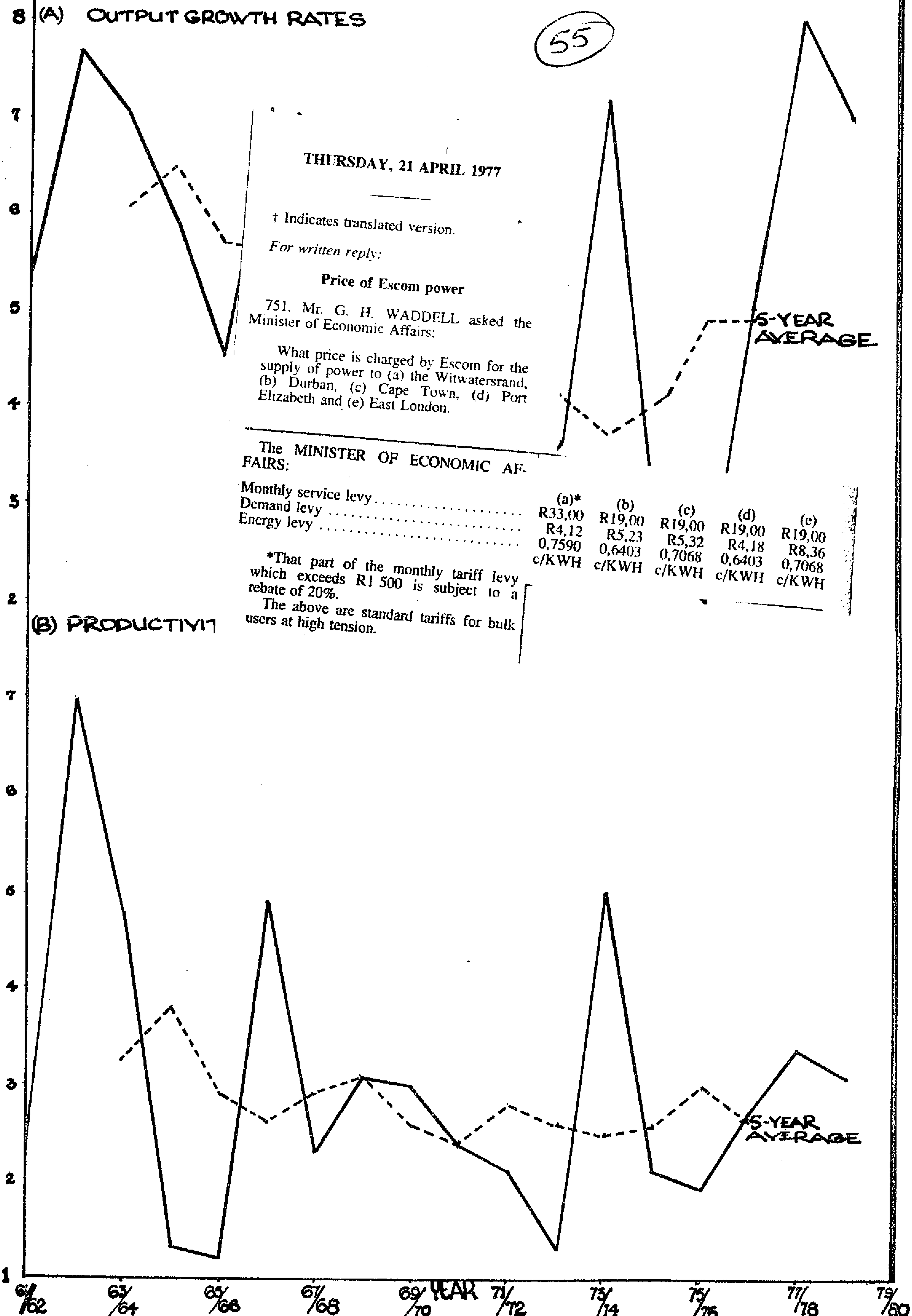

THURSDAY, 21 APRIL 1977

† 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 AFFAIRS:

	(a)*	(b)	(c)	(d)	(e)
Monthly service levy	R33,00	R19,00	R19,00	R19,00	R19,00
Demand levy	R4,12	R5,23	R5,32	R4,18	R8,36
Energy levy	0,7590 c/KWH	0,6403 c/KWH	0,7068 c/KWH	0,6403 c/KWH	0,7068 c/KWH

*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.

22/9/77

Govt probe on petrol prices

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Pretoria 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 Heunis.

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.

Power costs a 'big worry'

4/5/77 RDM

RDM 4/5/77

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THE SENATE. — The steeply-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-orientated 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 Poorter, 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.

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[?]lea for longer petrol selling

RDM 1/5/77

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 deputation would see the Minister concerned as soon as possible. — Sapa.

(55)

Hansard 15 col 1082 12/5/77

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.

FIN MAK 13/5/77

KOEBERG

Industry's spin-off 55

A local industrial spin-off from the R1 000m Koeberg Nuclear Project starts next month.

A spokesman for Industrial Machinery Supplies (IMS), which is co-ordinating technical and contractual details between Escom 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 R3m contract. It involves the construction of six condensers (three condensers per unit).

Originally, nine companies responded. That figure was later pared to five. They are Dorbyl, Barlows, Stein Mueller, James Brown & Hamer and Elgin Engineering.

Approximately R7,5m has been allocated for the construction of the two units. R3m 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 1 500 t of steel is needed per unit: 1 000 t from SA and, again, the balance from Japan, which makes specialised steel not manufactured in this country.

Further Koeberg contracts will announced towards the end of Novem for the construction of three turbine c ings. Sources say Dorbyl, Barlows a Broderick Engineering are in the runnir

When the French won Koeberg three company consortium involv Framatome, Alsthom and Spie Ba nolles) estimated construction cost wa the region of R850m. Today, because material and labour escalations, t figure is more like R1 000m (and it co be even higher than that by the end 1982 when the two reactors are sc duled for completion).

Local Industrialists reckon on a th share of that lucrative cake. "Noth has changed and industry in the C area will benefit from the project, planned," says IMS's Technical Direc Herbert Berger.

Some 1 000 black workers and aro 100 French and LTA construction e neers are on site at Duynefontein, 28 north of Cape Town. Within the r couple of years at least 300 French fa lies and several hundred bachelors wil living in the area.

Local contractors hope to b recreation centres, homes, schools (knowing French eating habits) at lea couple of quality continental-s restaurants.

The only physical sign of near years' hard work at Duynefontein giant hole, 15m deep with a circ ference of 1,5 km.

Engineers have been scooping t sands of tons of rock, sand and gr from the area and are now busy "firr up" Koeberg's future foundation pumping in a mixture of gravel cement. When the hole is filled in a later this year work proper will start.

Engineers on site are optimistic the project will come on stream, dea time. "We're about two months ahea schedule," says Berger.

Oil-saving drive 'is paying off'

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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.

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Plea to save SA's coal

23/5/77

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 Botha 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

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372

Electricity for blacks 'should come before TV'

RDM 24/5/77

RDM 24/5/77

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 45th 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.

Countdown on oil — it's later than you think

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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 only running out of oil faster than they realise, but they are also running out of time in which to cater for future energy needs.

So loud have been the warnings that there must be a danger that we will clap our hands over our ears and hope the problem will go away. After all, since the turn of this century pundits have been saying that the world will run out of oil within the following 30 years.

The latest report — "Energy: global prospects 1985-2000", published by McGraw-Hill — puts the prospect succinctly: "The end of the era of growth in oil production is probably at the most only 15 years away."

The non-communist world could face the prospect of an oil shortage as early as 1981-1983.

This is strong stuff, coming as it does from businessmen (including oil industry men), planners and academics in 15 countries pulled together in a Workshop on Alternative Energy Strategies.

But their conclusions are broadly in line with those contained in the World Energy Outlook report by the Organisation for Economic Co-operation and Development, and in the report prepared for President Carter by the Central Intelligence Agency.

The workshop concludes in its 291-page report that there is a danger in the world energy situation becoming critical before it seems serious. Most governments and businesses made planning projections only five to 10 years ahead.

Consequently, energy gaps that opened up beyond 1985 were invisible or, if perceived, often turned aside with the explanation that something would turn up.

That must be the inherent danger in Britain where North Sea oil should provide a cushion of energy self-sufficiency through the 1980s and domestic natural gas production should last until the end of the century.

Evidence that the world is using more oil than it is finding could also influence Britain's policies relating to the rate of depletion for North Sea reserves. However, if all the major oil producers adopted a strict conservationist policy the world could face an energy crisis even sooner than 1985.

Professor Carroll Wilson, of the Massachusetts Institute of Technology, who has been project director of the workshop in the past three years, says in the foreword: "Petroleum demand could exceed supply as early as 1983 if the Opec countries maintain their present production ceilings because oil in the ground is more valuable to them than extra dollars they cannot use."

The more likely timescale for oil demand overtaking supplies was thought to be 1985-95. "We don't have much time to learn how to replace, or even decrease our dependence on the fuel that for three decades has fed the expansion of Western living standards and the hopes of all nations for material betterment. Time is our most precious resource."

How much time will depend on economic growth rates over the next 20 years or so, on how quickly major oil consumers can implement new energy and conservation measures, on how much oil will be found and on how Opec producers adjust the flow valves on crude exports.

On the first point the workshop has based its calculations on growth rates ranging from a low of 3,5% to a high of 6% a year. Two assumptions were made for the rate of gross additions to free world oil reserves: a high rate of 20 000-million barrels a year and a low rate of 10 000-million barrels annually, as against an historical rate of 18 000-million barrels a year.

Taking the most optimistic line, production could continue to meet demand until the year 2004. This assumes a low economic growth rate — a situation which could lead to other problems like continuing high unemployment — the discovery of much more oil and no limitation on Opec production.

On the other hand if the world enjoys a high growth rate and Opec limits its production to 33-million barrels a day, non-communist countries could find themselves running short of oil in the early 1980s.

Such a level of production in Opec would require a high degree of restraint on the part of its members. For in its World Energy Outlook report the OECD reckons that in 1985, given present energy policies, Opec production should be almost 40-million barrels a day.

The Central Intelligence Agency went further, forecasting that world demand for Opec oil would be 47-million to 51-million barrels a day by 1985. This would imply Saudi Arabian output of 19-million to 23-million barrels a day, which is about twice its current production.

The workshop also recognises the influence of Saudi Arabia. Put simply, if Saudi Arabia were to cap its production at the present level, world oil supply would fail to meet the desired demand within four years.

Either way the time scale is short.

And it appears that there is no point in the world looking to natural gas to fill the energy gap. According to the workshop, by the year 2000 natural gas production in the major consuming countries will probably [illegible] thanks to reserves in Opec countries and in Russia.

But the costs and risks of imported gas will have to be compared with those involving the development of other fuels or energy sources.

Thus the workshop reaches the blunt conclusion that "the change from a world economy dominated by oil must start now."

But change to what?

For as it points out the alternatives need five to 15 years to develop and the urgency of demand for replacement fuels will increase rapidly during the 1990s.

The most obvious path for nations to try is energy conservation

For example, it forecasts that by 2000 cars may average twice today's mileage a gallon. Buildings may cut their energy demands by a third more. — Financial Times.

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

28/5/72 Star

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.

BENEFITS

"But some of the devices have other benefits, like an electronic ignition system which does away with points," he said.

The AA is testing a South African-designed speed regulator. Its primary purpose is to make driving more restful (the speed does not waver, uphill or down, until the brake is applied, so on the open road the foot can come off the accelerator and eyes off the speedometer).

Mr Bothma feels the device could save fuel in that it overcomes sloppy driving.

The AA is also going to examine claims that radial tyres reduce fuel consumption.

TESTS

The Fuel Research Institute has been testing one or two "fuel savers" a month. But they have not impressed the director, Mr C la Grange.

"The solution is to have enough Sasols," 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 running petrol engines on gas from a charcoal fire was demonstrated in November by Mr Ben Gerber, of Naboomspruit.
- A closed fuel system was reported in January. It involves heating a secret liquid to convert it to a gas which runs the engine, then trapping and cooling the gas to convert it to its liquid state again.

"It's the refrigeration principle in reverse," said the inventor, Mr C van der Made.

R.D.M 10.6.77

Restrictions cut petrol sales by 22 pc

HOUSE OF ASSEMBLY. — 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 general knowledge 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. If 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 the 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. — Sapa.

Pretoria's petrol conundrum

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Fin Mail 10/6/77

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 AHI 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, Assocom is compiling its own memo along similar lines.

Bored pump attendant . . . time to untie that knot

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 megalitres.

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 93 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 settled into a wage freeze, while the effect of recent administered price hikes has still to be felt. 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 standstill 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 500m, excluding working capital, township development, housing and interest 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 supplier 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 refiners 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 much, so an overall cut in crude throughputs can only be achieved if there is an overall drop in demand for the whole range of products they produce.

Now that it has probably been proved that — in SA — petrol is price sensitive, and that speed restrictions are an effective curb on consumption, government may yet be persuaded 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: 7 Average annual payments in kind to regular White farm employees, selected years 1950-1973 by sub-region (R)

Year	North-Eastern	Central	Border	Coastal	E. Cape	Wool price c/kg
1949/50+	111	112	98	52	88	88
1956/57+	217	264	93	51	128	114
1964/65	160	140	84	53	88	80
1972/73	210	195	100	[illegible]	[illegible]	[illegible]

Piet's 'petrol saving' device

R.D.M. 16/6/77 (55)

STAFF REPORTER

VEREENIGING backyard mechanic, Mr Piet Walker, 34, 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 testedf 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 R150. 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.

Atom board 'will lose by move'

STAR 17/6/77

Star 17/6/77

John Patten, 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 delegates 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 MP, commented today that the decision by the IAEA to deprive 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-Reuter 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 statute 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

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utive Committee shall direct. The Provincial
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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.

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STAR 22/6/77 (5-5)

The oil shortage will start between 1985 and 1995, regardless of price increases.

White living standards are going to be hit, and hit hard, in the next 15 years.

Headlong into the great energy crisis

● "The coming energy crisis is going to hit hardest at white living standards. We will look back on the sixties and say that was the golden age." MIKE NICOL of CARE discusses a shock energy report with one of South Africa's top energy economics experts.

CARE

Perhaps in 1987, a historian will look back at the '70s as the decade of grand illusions. A decade that was shaken in its early years by the oil crisis, and then people gradually realised they were facing a full-scale energy crisis, yet did not want to admit it.

When the Workshop on Alternative Energy Strategies (WAES) published their sobering report — "Energy: Global Prospects 1985 — 2000" recently CARE talked with Professor Bill van Rensburg in his office at the Rand Afrikaans University about the implications for South Africa.

He was unequivocal:

● White living standards are going to be hit, and hit hard;

● Coal is our greatest asset;

● Nuclear energy may be one of the most expensive pipe-dreams we've ever indulged in;

● Without the electric car our transport system will splutter to a standstill.

At the earliest, the world could face an oil shortage by 1983, at the latest, in the 1990s. Either way there are going to be continuous price rises and possibly a tightening up on supplies which puts South Africa in a precarious position.

VULNERABLE

"We are vulnerable because we are not politically popular," says Professor van Rensburg, "but it would be difficult to have our supplies cut off as more than 70 percent of the world's tanker-transported oil has to go round the Cape sea route."

However, South Africa's problem is not so much obtaining oil as reeling under its staggering costs.

Energy economist Professor Bill van Rensburg sees South Africa heading into hard times when the energy crisis bites.

"Our economy is not in a healthy condition. We have a balance of payments problem and any oil price hikes are just going to make matters worse."

The answer is to conserve oil. As the majority of our oil is used for transport, conservation means finding alternative fuels.

An obvious alternative — "which should have been encouraged for urban use years ago" — is the electric car.

A shift from an oil-dominated economy is also a priority. But to what? The WAES report says coal largely backed up by nuclear power. Professor van Rensburg only partly agrees. He is highly sceptical of nuclear energy's role.

URANIUM

South Africa sits on the free world's second largest supplies of uranium but the capital cost of nuclear power stations is soaring.

In fact, the Koeberg nuclear station at the Cape, he pointed out, may cost closer to R2 000-million than the original R1 000-million.

"Excluding more sophisticated developments like the fast breeder reactor, the world's uranium resources are very much smaller than the coal reserves and countries like Sweden and Australia — which have large reserves — might continue to oppose extraction," says Professor van Rensburg.

"I believe that unless the escalation in the capital costs of nuclear power plants can be stopped, or unless the fast-breeder reactor is brought into commercial use quickly — and answers can be found to the environmental and safety problems — nuclear power may not take a significant contribution to world or South African energy supplies, ever."

In the end, he said, it is coal that will tide the country into the next century.

DEPENDENT

"We are in a fortunate position here as we have always been heavily dependent on coal. It supplies about 75 percent of our energy requirements.

"Yet even here there are some serious problems which will have to be solved. Firstly, we have to increase the extraction percentage, and secondly we will have to apply considerable research to making our low grade coal economically feasible.

"Unfortunately, a large proportion of our coal is low grade, so research will have to aim at extracting from this coal higher grade fractions for special energy use."

As for solar energy it will be used mainly for domestic and agricultural purposes during the next 20 years, despite South Africa's ideal climate.

The effect of the coming energy crisis is going to hit hardest at white living standards.

"Right now we need to improve the living standards of the black, coloured and Indian populations. We need to close the wage gap and this means that whites will have to make sacrifices.

"I expect," he concluded, "that white living standards will drop between 30 and 50 percent over the next 15 years, but then perhaps we have had it too good for too long," says Professor van Rensburg.

Changes we must face...

The report of the Workshop on Alternative Energy Strategies was compiled by a group of 35 business, Government and academic leaders from 15 countries who spent three years analysing the energy situation.

They conclude:

● The oil shortage will start between 1985 and 1995, regardless of price increases. Measures to restrain the supply of oil will only hasten the shortage.

● Change from a world economy dominated by oil must start now. Alternative energy sources will take five to 15 years to develop.

● Nuclear power could make an important contribution to global energy supply, if the industry is accepted by the public, and uranium mining is rapidly expanded.

● Coal will contribute substantially to energy supplies.

● Natural gas can meet projected demand provided expensive inter-continental gas transportation systems are developed.

● Other fossil fuels will not supply much energy before the year 2000.

● Apart from hydro-electric power, solar, wind and wave power are not likely to contribute greatly until next century.

... alternative uses and zero scrap value, but 200 units can be used for the Bellville job. In addition it will be necessary to buy 3000 units of Type C at R10 each for the Bellville contract.

Both jobs will take exactly one year.

The Managing Director asks you to consider which of the two alternatives is most profitable.

Draw up a table showing the opportunity costs involved in each.

What advice would you give?

(50%)

FIN. MAIL

URANIUM CARTEL 24/6/77

The best laid plans

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Under the guise of the second annual meeting of the Uranium Institute, SA and other representatives of the five-member uranium cartel have been meeting secretly in London this week to ponder the disturbing events of the past fortnight. One particularly unsettling thought for the SA delegates is that the cartel's *raison d'etre* — to insulate the free world nuclear power market from the competitive pressures of the US energy conglomerates — may have backfired badly.

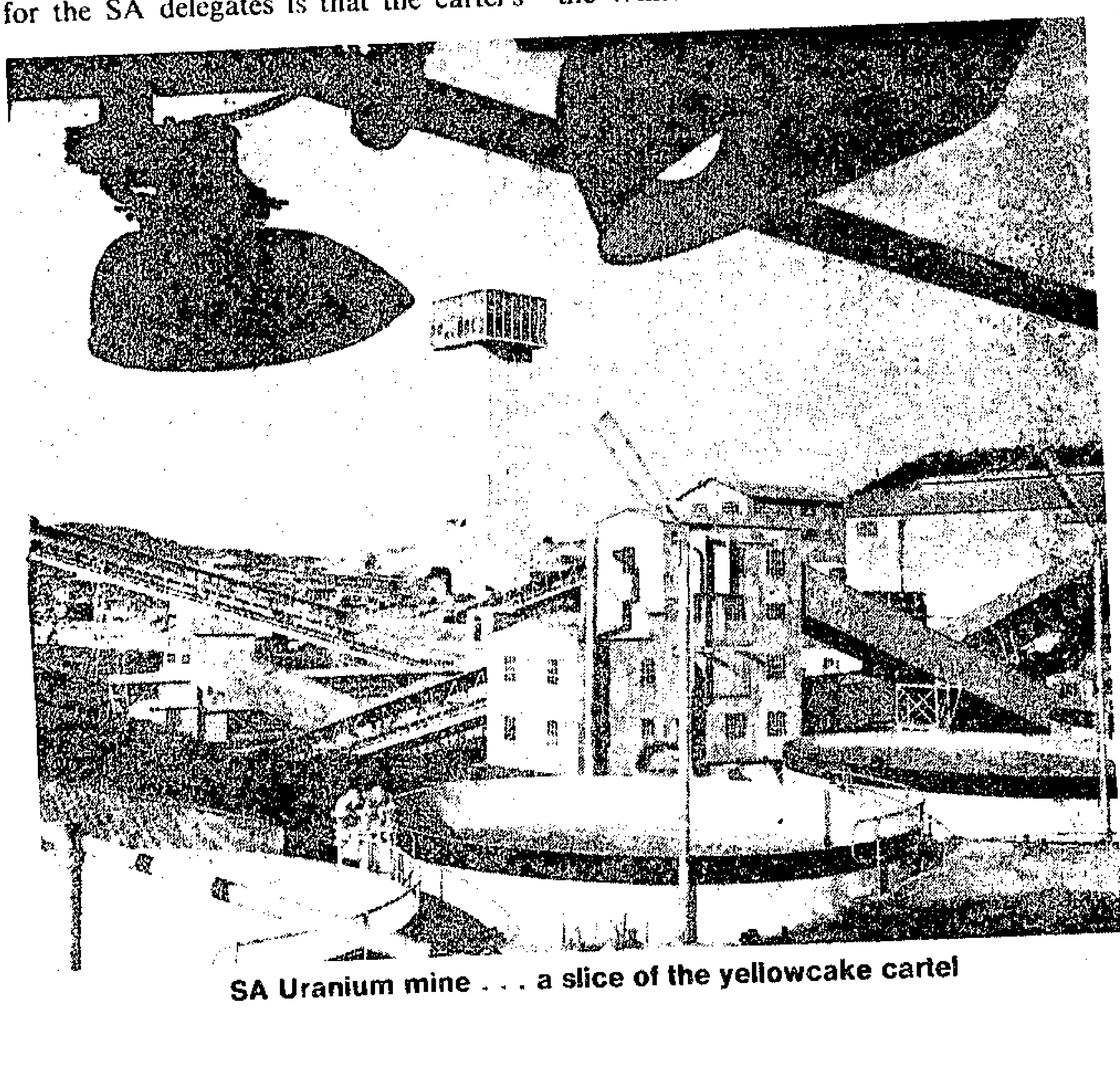
The cartel's current round of troubles began early last week when a US district court judge from Virginia flew to London and set up shop in the US embassy. Officials of the Uranium Institute, which now bills itself as the industry's think-tank, as well as executives of Rio Tinto were forced to give evidence on the operations of the cartel. The hearing is an important part of a suit involving Westinghouse Electric Company's decision to break contracts with dozens of American power companies to furnish enriched uranium fuel at prices well under current market levels. At one point in the questioning, Rio Tinto officials even took the bizarre step (for a foreign company) of pleading the Fifth Amendment to the US Constitution — which protects witnesses from self-incrimination.

Later in the week, a Congressional panel wrung a confession out of top Gulf Oil Corporation executives that they were not unwillingly dragged into joining the cartel's then-secret operating committee through their Canadian uranium marketing subsidiary. Moreover, the committee heard testimony that Gulf officials were the active movers at a 1974 meeting in Johannesburg that resulted in a major round of uranium oxide price increases that eventually filtered into the domestic American market.

There is little that the US Congress or the White House can do to legally reach the cartel. The Americans may not have to do anything, aside from whatever sanctions may be in store for Gulf, for the Congressmen also heard evidence that the price fixing club may have sown the seeds of a number of important problems for itself:

- Australia's current government is not the only one troubled by the cartel disclosure, which originated there a year ago. In Ottawa, the shaky government of Pierre Trudeau is clearly on the defensive in the Canadian Parliament despite counter-arguments that the cartel was needed because the American Government kept uranium prices artificially low to discourage competitors;
- While the cartel's price increases have led to increased development of uranium reserves around the world, the US has been a major beneficiary of the new activity. It's estimated that \$170,7m was spent in US exploration and development in 1976 (\$122m in 1975). And US production of the U_3O_8 ore has rebounded from the 1974-1975 low of 11 500 short tons to 13 500 last year; and
- If the cartel had hoped to whipsaw the giant US reactor makers such as General Electric and Westinghouse, the very disclosure of the cartel's existence may have ruined any chances. Westinghouse, especially, faces billions of dollars in losses because it guaranteed buyers of its reactors long-term enriched fuel contracts at laughably low prices by today's standards. But last year dozens of power companies ranging from the government Tennessee Valley Authority to local firms had the contracts broken — the suppliers charged that the cartel had artificially distorted world prices and that the contracts, which had been made in good faith, were unreasonable and unenforceable.

Freed of those cost burdens, the big American reactor companies are now free to compete in the world market not only with their reactors but with their own uranium. In the last year alone General Electric has taken over Utah International while Atlantic Richfield merged with Anaconda. Their profits will be all the greater thanks to the unintentional efforts of the cartel.



SA Uranium mine . . . a slice of the yellowcake cartel

1. The analysis in the quotation is correct.
2. The quota...

30/6/77 N/MERCURY

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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.

Rondalia's development manager, Mr. Campbell Smith, said Rondalia believed a review of the current petrol restrictions was justified.

Rondalia had suggested that "far-away" resorts and hotels should be given authority to issue guests with permits to get petrol for return journeys after spending at least two consecutive nights at the hotel or resort.

(a) Zero
(b) Greater than
(c) One
(d) Greater than

1. (a) and (b) only.
2. (b) only.
3. (c) only.
4. (d) only.
5. None of them.

31. If the demand for strawberries ... bad harvest which reduced outp... ld

1. Lower the price of strawberries.
2. Raise the income of strawberry farmers.
3. Have no effect on strawberry prices.
4. Lower the incomes of strawberry farmers.
5. Both 1. and 4. above.

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.

1/7/77 N/Mercury 55

Petrol ban 'overkill'

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. Undertandably, rationing is rejected as a last-resort measure because of the high administrative costs — estimated in the region of R8 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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10 - 19,9	1	14	-	-	6[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	98
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300 - 499	56	23 485	53	20 768	271	106 373	186	73 396	19	7 383
500 - 999	176	134 427	100	73 114	485	350 535	415	303 004	21	14 926
1 000-1 999	263	382 319	98	137 796	330	462 774	443	624 192	12	15 783
2 000-4 999	206	603 268	27	68 078	179	514 783	252	768 965	7	20 516
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2/7/77 N MERC

Petrol trio chased with gun

Mercury Reporter

A DURBAN North motorist fired warning shots when he saw three Africans allegedly siphoning petrol from the tank of his car while it was parked in the driveway of his home early yesterday.

Mr. E. M. Payne, of Terrence Place, awoke about 3 a.m. and saw three Africans at his car. With his revolver he went out to investigate.

The Africans fled and he fired two warning shots as he chased after them.

A boy aged about 12 was caught seconds later. Police are looking for the other two.

SOURCE: Department of Statistics.
Report on Agricultural and Pastoral Production 1972 - 73.
Agricultural Census No. 46 Report No. 06-01-10.

ARGUS 14/7/77

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N-power 'ring' in SA predicted

The Argus Correspondent

JOHANNESBURG. — A series of large nuclear power stations dotting South Africa's coastline has been predicted by Mr Jan Smith, general manager of Escom.

Mr Smith was addressing a meeting of the Akademie vir Wetenskap 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.'

POWER SOURCE

Most of South Africa's power is still produced by burning coal at power stations near inland coalfields, such as those in the Eastern Transvaal, he said.

South Africa's first nuclear power station is being built at Koeberg, Western Cape.

Mr Smith said electricity would by the turn of the century, double its share of the South African energy scene.

At present only 20 percent of the country's energy needs were provided by electricity. He predicted this would rise to 40 percent by the year 2000.

WILL DROP

The use of coal as an energy source (excluding its use in power stations), would drop from the present 30 percent of the country's energy needs to only 10 percent by the turn of the century.

Mr Smith added that in real money terms, taking into account the rand's purchasing power, electricity cost the consumer the same as it did in 1954, and 10.5 ...

SOUTHERN ... ARCH UNIT

ARCH DIVISION,
OF ECONOMICS,
ATTIE BUILDING,
OF CAPE TOWN,
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TELEPHONE 69-8531 (Ext. 453 440)

1977.

Dear Collea...

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A copy of ... enclosed. We hope that you will find it use...

N.3. ! || We would b... d send us R1,00 to help cover the cost of pr... his report.

Thank you ... you also for attending.

Yours sinc...

FRANCIS W...

FARM LABOUR

This essay concerns th-

FIN MAIL 8/7/77

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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 Malcom 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 joined 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.

Malcolm Fraser . . . a cosy chat with Carter

...requirements for seasonal labou[r] are met locally, by the women [...] work for casual rates. They a[re] the wives and children of permanent farm workers. Some farms employ less than 5 permanent workers, others more than 50. Yet the living and working conditions of the farm worker, while they vary significantly, are the outcome of the same development and the same farm structure - everywhere there are the symptoms of poverty and deprivation - illiteracy, high infant mortality, inadequate clothing, poor nutrition, endemic alcoholism.

* 13 farmers and 50 workers were interviewed in separate questionnaires. The conditions on 16 farms in Citrusdal are set out in the tables attached.

Business Mercury

N. Mercury 13/7/77

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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 2 326 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.)

Appointment

Inflation rise and growth fall problem for Opec

14 July 77

RDM.

WASHINGTON. — Organisation of Petroleum Exporting Countries 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 \$2-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 \$2 500-million to \$37 500-million.

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 1967-72 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 wel-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 \$13-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." — Reuter.

Deficits facing non-oil LDCs

WASHINGTON. — The non-oil less developed countries (LDCs) face a higher current account deficit in 1978 than the \$37 500-million 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. — Reuter.

Natal Mercury 15/7/77

Petrol sales notice was 'out of date'

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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 5601 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.

D.D. 15/7/77

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 0,22c on diesel which it says were offered in retailiation 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.

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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 lopped 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 were, 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 was 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

(55) RDM 16/7/77

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 pc energy

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RDM 16/7/77

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 1976 was 1,036c.

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.

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Escom rates need review, say officials

S(2r 16/7/77

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 Executive 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 186 percent in three years."

The IMTA states that local authorities bought 30,7 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 householders 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 received up to four months accounts in less than a fortnight.

MR HEUNIS . . . won't intervene.

D.D, 14/7/77

Petrol price war hots up

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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. Tessell, 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.

N. Mercury 18/11/77

(55)

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 Zaki 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. Ezzeddin Mabrouk whose country is usually among those pressing for higher prices, said a freeze would be completely unacceptable.

The majority of ministers refused, however, to commit themselves.

Algerian minister Mr. Sid Ahmed Ghozali said it was too early to speak in detail about 1978 prices. — (Sapa-Reuter.)

N. Mercury 19/7/77

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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 - [illegible]

Another uranium contract

RDM 22/7/77

SS

Financial Reporter

ANGLO American Corporation's giant metallurgical complex serving its Free State mines has begun production — not yet at full throttle — and has signed up a further long-term uranium contract.

This will call for extension of the treatment facilities and project planning has started.

The contract provides for interest-free consumer loans.

Uranium production by the complex in the June quart[illegible] totalled 52 [illegible] kg (23 7[illegible] kg [illegible] March).

No profit is recorded from [illegible] scheme during commission[illegible] as revenue received and co[illegible]missioning charges incurred a[illegible] capitalised. Uranium oxi[illegible] production from the scheme [illegible] being stockpiled to meet co[illegible]tractual commitments and [illegible] build up in-plant inventory.

Completion of the flotati[illegible] acid and gold plants of the com[illegible]plex is behind schedule, but fu[illegible] production should be achieved [illegible] the current quarter.

D. COM[illegible]

The langua[illegible] Free State is Afrikaans[illegible]ican language, good communica[illegible]ily result.

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.

Andriese Koopman, 37, was born on a farm 10 kilometres away, married a woman born on a nearby farm. He doesn't know how long she was on the
farm, but she was there befo ... baas. He
worked on 1 other farm near ... because the
pay was too low. She has be ... nth: now
she does casual work 1 or 2

The farmers claim that worke ... ot capable of
work other than manual labou ... sition from
unskilled to skilled work, t ... ed to the
transition from rural to ur ... t this is true,
it is the outcome of the sor ... ught to produce.
By withholding from the farm ... eting him in the
unremitting and unform task ... the farm system
reproduced in its workers a ... its own. The
contrast between the farm wo ... ople from Elands-
kloof some of whom work on t ... between a
people whose social and econ ... iated, and a
people who, though wage labo ... ng of their own.
Most conspicuously, they are ... l articulate
a history.

Elandskloof Mission had belo ... k and was sold
to a local farmer, who as re ... unity of 27
families. The farmer took r ... ls also. One
family stayed behind to work ... owed no animals,
no garden, no crops. Accord ... of had been
shelter for people who would ... o wanted to
avoid the costs of living in ... re were
'opstokers' who did not want the people to work for the farmer. However, 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.

Power cuts tomorrow

D.D. 23/7/77

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EAST LONDON — It will be cold lunch or braai tomorrow for a large number of people using Escom electricity.

Escom has to do some essential maintenance on its electrical apparatus and electricity will be cut off from 8 am to 4 pm.

People affected include those who live in Beacon Bay, Gonubie, Abbotsford, from the Ducats substation to Brakfontein, Fredsonia, Kwelegha, Cintsa, Cefani, Nahoon Valley, Homeleigh Halt, Thorn Park and the area to Kingsdale Farm.

Escom Personnel may have to come into properties to get at lines and consumers are warned to treat all installations as live in case the electricity is switched on during the day. — DDR.

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 has 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 labour was needed. 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 week. R9,50 is not enough for food and clothes, and his wife must work in the picking season - but the farm is nearby and 'die baas hinder my nie'. He has Std. VI. There are 4 children. One is at school at Elandskloof, another at Roggebaai Teachers Training College in Cape Town, a 3rd in Std. VII at Ceres High School - which is the cheapest school for him to send her to.

Saul Titus was born and grew up in Elandskloof, and is married with 7 children. He has Std. V and a driver's licence, so on being expelled from Elandskloof he became a driver for the Clanwilliam Municipality at R15 per month and lived on a farm next door. After 12 years as a driver he became a painter at R20 p.w. in Citrusdal, then travelled to Worcester to be an operator for a construction firm at R28 p.w. He has a bakkie with which to return to his wife and family at weekends. Five children are at school - 1 is in Std. V at Worcester, the others are in lower standards at Citrusdal.

Jacobus George 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 Kousbokkeveld 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/....

Sunday Times 24/7/77

The tax gusher

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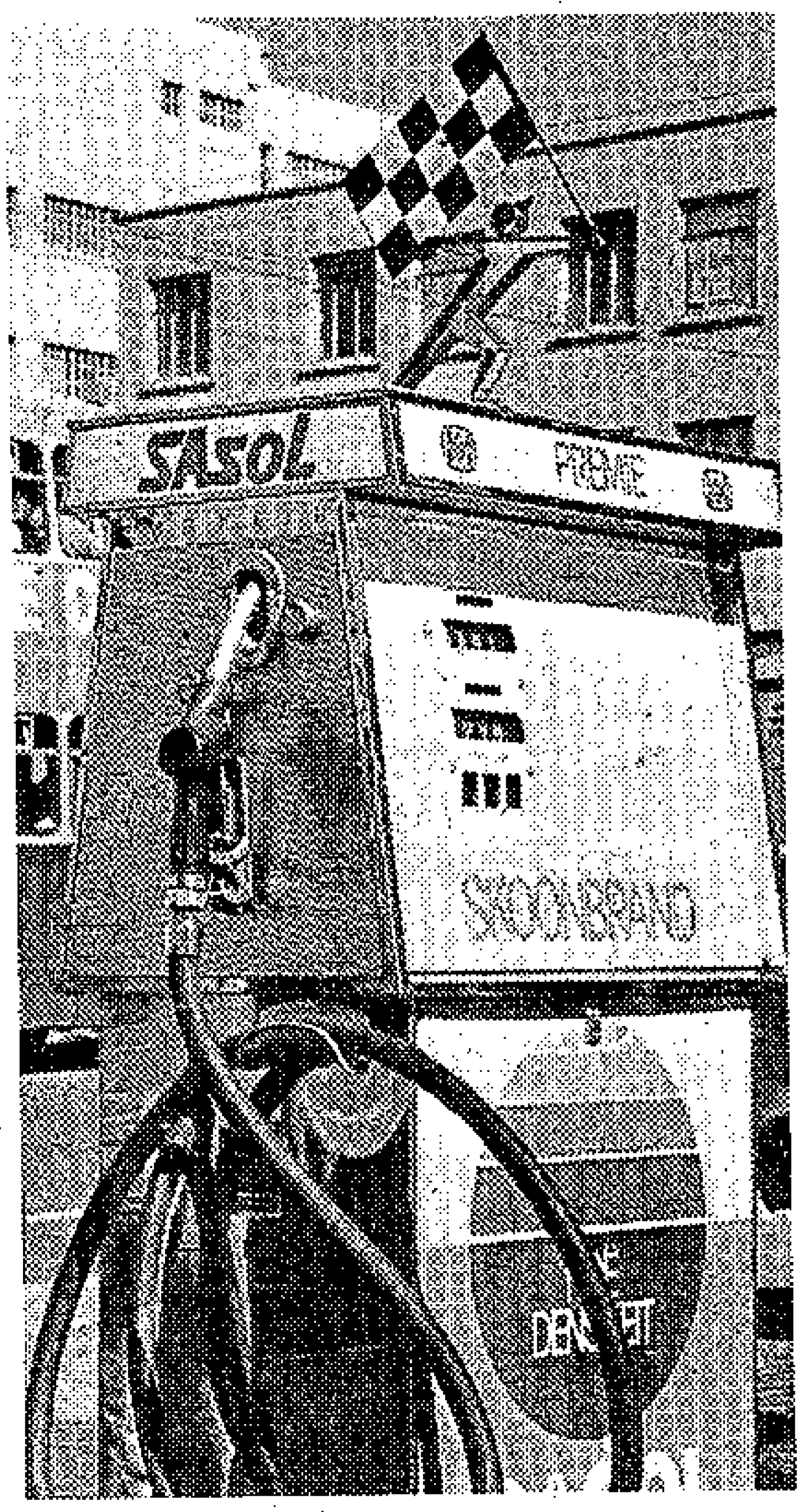
Almost half you pay for petrol goes to State



THE Government is the big winner in South Africa's R1 000-million a year petrol industry.

Every time you pull up at the pumps, 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.

MARTIN CREAMER

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 28,6c a litre. The State takes 10,3c of this in levies and duties and the Railways another 3,2c in pipeline charges.

Pushing up inflation

The motorist who spends R10 on petrol gives the State R4,74, the refinery R3,97, the garage owner 65c and the oil company 64c.

"The State take more than we do," a petrol company spokesman lamented this week.

South Africans see the petrol price as a symbol of the inflation spiral. When it goes up, everything goes up.

Duty on petrol has more than trebled in the last ten years and the Railways' pipeline charges have more than doubled — despite anti-inflation manifestos.

Last year the Railways profit of R111-million from pipeline tariffs prompted an attack by the convener of the Afrikaanse Handelsinstituut's petrol committee, Mr H. T. van der Merwe. He accused the Railways of using Highveld motorists to subsidise uneconomic services.

It's all a big secret

Only last week the Government introduced another 0,4c a litre levy for the National Road Fund. And the Minister of Economic Affairs, Mr Chris Heunis, revealed recently that R218-million from petrol sales had been paid into the Strategic Oil Fund, which finances Sasol II.

Besides this, the State-owned Sasol has the right to have a Sasol petrol pump at every filling station in the Transvaal and Free State at low cost.

A petrol industry spokesman told me.

"Garage investment works out to an average of about R37 000 a pump. But Sasol has the right to operate from private ... an investment of something like R3 000."

On the oil company side, Government legislation prevents a clear profit picture emerging. Oil companies refuse to reveal the details of prices from oilfield to refinery.

"I can't tell you about this. If I did, I would be breaking the law," an oil company man said.

Two months ago the Department of Commerce wrote to the oil companies reminding them that information on petrol comes under the Official Secrets Act.

Price cut — and still solvent

So nobody outside the industry or Government know what an oil company pays for a barrel of crude from its Middle East source, the landed price in South Africa, the cost of refining and the quantities of oil imported.

All the consumer has to go on is the annual reports published overseas giving the profits of the multinational oil companies. Some make between R2 000-million and R3 000-million a year.

Figures like these, coupled with last week's short-lived petrol price war, rekindle doubts among motorists that petrol profit margins cannot be cut.

Mr Alphons Hough, managing director of Total, said only four months ago: "If anyone wants to put us in the red, all he has to do is drop the petrol price by half a cent a litre."

Yet Esso did just that last week — and didn't complain about being in the red.

Which put consumer watchdog Mr Eugene Roelofse on the attack: "If the petrol companies can cut prices, can they be as badly off as they have been claiming?"

The petrol price has gone up 11 times since 1971 — twice this year, in January and March. From 10c a litre it now stands at 28,6c a litre.

If the present trend continues, Professor J. D. van Wyk and Professor A. G. K. Lutsch, of the Rand Afrikaans University, estimate that motorists will be paying R1 a litre by 1983.

Prof Lutsch says that if prices continue rising, cars will have to be dispensed with by the year 2 000.

If last week's price war does nothing else, it may at least postpone another petrol price rise this year. The petrol companies have been pushing for one for some months. They met in Johannesburg this week to discuss it.

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 Roelofse said.

He thought a truce might have been called so quickly in the price war because someone "leaned on" Esso to force it back into line.

It is clear, however, that if public suspicion and antagonism are to be removed, the oil companies and authorities will have to present all the facts.

A call for petrol conservation is gaining momentum worldwide. In South Africa the need to conserve relates to saving foreign exchange.

There is also a lobby that supports steep petrol taxes to curb consumption.

Price COULD come down

UK oil company in massive Tvl coal strike

Sunday Times (B. Times)

24/7/77

(55)

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 30 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 R6,2-million on coal mining projects in the Middelburg area.

A R4-million cash payment is to be made to the publicly quoted Kanhym Investments for a 50 per cent share in its Eikeboom coal deposit, while BP has also bought for R2,2-million the farm Hartebeesfontein, 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 R65-million coal-mining project in the Ermelo district, with oil company Total and Trans-Natal, where General Mining has a large interest.

N. Mercury 25/7/77

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Up taxes on petrol plea

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.

The additional revenue should be put into a research fund.

Mr. Hough said individual consumers were too casual about the critical energy situation.

The Government did not take sufficiently drastic steps to formulate practical energy policies.

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 . . .

DD 26/7/77

(55)

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.

PE Mercury 26/7/77

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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 2,2540 marks compared with last Friday's rate of 2,2575 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 annualised 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-orientated concerns in America."

N. Mercury 27/7/77

'Don't burn coal' say boffins

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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.

N. Mercury 27/7/77

Oil firms accused of abuse

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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 it was not time for the entire petrol marketing system to be overhauled.

"The events of the past few weeks have demonstrated the oil companies' unnecessary disregard of too many of the basic elements of free marketing," he said.

According to Mr. Veerheem, consumers first heard of "underhand price cutting, then an almost still-born public price war." He said this was followed by threats to cut off supplies to discounting 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 re-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-orientated basis. He said this would also mean that filling stations could allow the consumer quantity and cash discounts.

(102) See DJ 144/1 - 3/778/12, Det. A. J. Hoffman to Inspect 1912. Also "Rex v. Mkosi Mkemeseni", op. cit.

(103) See DJ 144/1 - 3/778/12, Secretary for Justice to Chie 3 Jan. 1913.

(104) Ibid., Secretary for Justice to Roos, 17 March 1913.

(105) Ibid., Statement by Nkuku, 16 June 1912.

(106) Ibid., Det. A. J. Hoffman to Inspector in Charge, CID,

(107) "Statement by Jan Note", SA, Department of Justice Annu 237-238.

(108) Napier Devitt, Memories of a Magistrate (London, 1934),

(109) See, for example, Sunday Times, 27 Oct. 1935. In 1935, under "Chief Hlovu", set up the Isitshozi on the west R this gang had features almost identical to those of the B. Davidson, Report on Southern Africa (London, 1952),

Squabble delays energy project

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RDM 27/7/77

BRUSSELS. — Torn by nationalistic 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, 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 R160-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

(55)

RDM 28/7/77.

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 Straszacker, 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 6,5% from 1976 to 1985.

"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 Duvha. 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 R643-million, of which R159-million, or 25%, 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 R370-million raised in 1975, R323-million was foreign finance. Last year R500-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 1976 totalled R215-million (R168-million in 1975), which represented 32,8% 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 R280-million this year, about R90-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

N. Mercury 28/7/77

Big electricity rises unlikely

(55)

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. Straszacker 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 R2 100 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 R800 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 R159 million, or 25 percent came from internal sources. External loans provided the balance.

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 R370 million raised in 1975, R323 million was foreign. Last year R500 million of a total of R718 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 (R618 million in 1975), which represented 32,8 percent of total expenditure.

Interval

However, included in that amount is R57 million, interest on internal loans and 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 R90 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.

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.

SUNDAY TIMES, Business Times, July 31, 1977.

Energy crunch is near, report warns

55

By TONY KOENDERMAN

THE real energy crisis — in which the world oil shortage will become a permanent feature — may be as close as eight years away, according to the Workshop on Alternative Energy Strategies.

After a two-and-a-half year study, the workshop concluded recently that:

- The supply of oil will cease to meet demand probably between 1985 and 1995.
- If Saudi Arabia holds its production at the present 9-million barrels a day, the crisis could occur in 1981.
- Not even a 50 per cent increase in present oil prices will delay the crunch.
- It will be difficult to satisfy demand even if all the alternative energy sources are developed with the utmost vigour.

The study, conducted by experts from 15 countries under the auspices of the Massachussetts Institute of Technology, has been published by McGraw Hill as a book entitled "Energy: Global Prospects 1985-2000."

"The change from a world economy dominated by oil must start now," the report says. "The alternatives require five to 15 years to develop, and the need for replacement fuels will increase rapidly as the last decade of the century approaches.

"Even with prompt action, the margin between success and failure in the 1985-2000 period is slim."

The most important constraint on oil production is likely to be not the technical limitation, but the decisions by oil-supplying nations to hold production down in order to prolong the life of their reserves.

This means that although the era of growth in oil production is at the most 15 years away, there will be a decade or so thereafter when oil production will be on a plateau.

Even the most optimistic assumptions concerning new discoveries and improved recovery techniques do not materially alter this scenario.

"For nations to continue to increase their consumption of oil in the hope that more optimistic estimates might prove to be correct is to run the real risk that the peak in oil production could be brought forward. This would make the necessary adjustments in energy consumption patterns much more severe," the report says.

So what of the alternatives?

World coal reserves are perhaps six times those of oil. However, the potential of coal will only be realised if it receives the necessary recognition and if satisfactory solutions to associated environmental problems are found, the study concludes.

The United States has more than half the Western world's coal reserves, but it may not be prepared to damage its environment, deplete its reserves and expand its transportation systems to provide coal for export.

Clearly, with these doubts, the sky is the limit for South African coal exports.

The report also says that the conversion of coal into oil, such as at Sasol, could also expand the market. However, the maximum contribution from this source is estimated at the equivalent of 2-million barrels of oil a day, or less than 3 per cent of the minimum world demand expected by the year 2000.

The biggest question marks hang over the future supply of nuclear energy. A vigorous expansion programme could lead to nuclear energy contributing as much as 21 per cent of primary energy in the year 2000 (equal to total Western world oil consumption in 1975), but the contribution is likely to be much less unless major obstacles are overcome. These include safety and environmental factors.

Natural gas reserves are large, but remote from main users. Oil sands and shales will only make a small contribution by 2000 despite enormous reserves.

Renewable energy sources such as sun, wind, tides and hydropower will not become significant until the next century.

With so many problems surrounding potential sources of energy, the report emphasises, the world cannot afford a delay in finding solutions.

The danger, it says, is that the energy situation could become critical before it seems serious.

D.D. 2/8/77

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 Katlehong, 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.

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(55)

Fuel theft pay-out

N. Mercury 2/8/77

Mercury Correspondent

JOHANNESBURG — Sasol has offered to pay the East Rand Administration Board R4 500 following the discovery of a 28 331 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.

TABLE OF CONTENTS

55

D.D., 3/8/77

Nuclear power station in PE?

PORT ELIZABETH — A nuclear power station may be built here by the early 1990s if the price of coal continues to rise.

This was revealed by Mr Peter Spencer, chief engineer of Escom's nuclear division.

He said Port Elizabeth would be the choice for a second nuclear power station. — DDC.

Oil companies last who should moot tax levies

D.D. 9/8/77

(55)

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 Co-ordinating 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 over-taxed South African motorist is concerned.

May I suggest to Mr Hough that he pay up, or shut up.

AA: relax petrol curbs

BrD. 13/5/77

(55)

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 selling hours coupled with a "two-tier petrol price system" for weekends. — SAPA.

SAKE-RAPPORT

14/8/77 (55)

NOG EEN MAAK OU OLIE REG

'n NUUTGESTIGDE maatskappy, Condor Oil, gaan 'n gesofistikeerde smeerolieherraffineringsaanleg in die Chamdor-nywerheidsgebied by Krugersdorp oprig en bestuur. Die aanleg sal teen 'n koste van ongeveer R2 miljoen op 'n perseel van 2,2 ha opgerig word.

Die aanleg sal oor 'n aanvangsvermoë van 5 miljoen liter herraffineerde olie per jaar beskik. Die produksie is beplan om in die middel van aanstaande jaar te begin.

Die ontstaan van Condor se nuwe aanleg en die produksie van motor- en nywerheidsolies sal 'n belangrike bydrae lewer tot die besparing van buitelandse valuta, asook die potensiële behoud van die land se hulpbronne.

Sun. Trib. Business in brief 14/8/77

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 35 business, government and academic leaders from 15 countries.

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D.D. 16/8/77 (55)

DAILY

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 Handelsinstituut, 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

FH 19/8/77 (55)

The world is going to need uranium for its power needs in the coming decades. Campaigns of opposition can impede but not halt the industry's inevitable expansion

This week's go-ahead by Malcolm Fraser's government for the mining and export of Australia's uranium reserves has high-lighted one certainty among the welter of doubts surrounding the metal: whatever opposition to its use, world energy needs will ensure future expansion in its demand.

The world will come to need it more and more as demand for oil and gas outstrip supply and this could be as early as the mid-Eighties.

Uranium is the only alternative energy source competitive with coal; and it is already developed to robust engineering standards where society can depend upon it for energy. The significance of this dependability is fast becoming clear, thanks to New York's electricity black-out last month, and the subsequent wave of social disorder.

Four years after the quadrupling of Opec's oil prices, it is obvious that there is no other alternative to nuclear energy on the required time-scale. Most of the alternative advice on energy has been completely naive.

The only other possibility is to conserve energy. But as the hostile reception to President Carter's proposals for cutting US energy consumption illustrates, conservation is acceptable to most people only if it implies no inconvenience. Above all that means no punitive taxes to discourage its use.

Against the single certainty that the world will need large and assured uranium supplies, must be set a daunting list of uncertainties. The six which dominate are: rate of economic expansion; worldwide concern over nuclear proliferation; a worldwide campaign of opposition to nuclear energy in general; the increasing unwillingness of many governments to face up to difficult decisions; a paucity of reliable information about uranium reserves; and a lack of trust between those nations known to have uranium and those most urgently in need of assured supplies. These factors need close examination.

● For most nations, increments in nuclear demand will for the forseeable future be critically dependent on the rate of economic growth. A 1% error here can amplify into a 30% error in demand for nuclear electricity. The slow recovery of the Western world from the recession which followed the oil price increases has caused an over-all revision downwards of 30% on official estimates of nuclear requirements by 1985, compared with only two years ago.

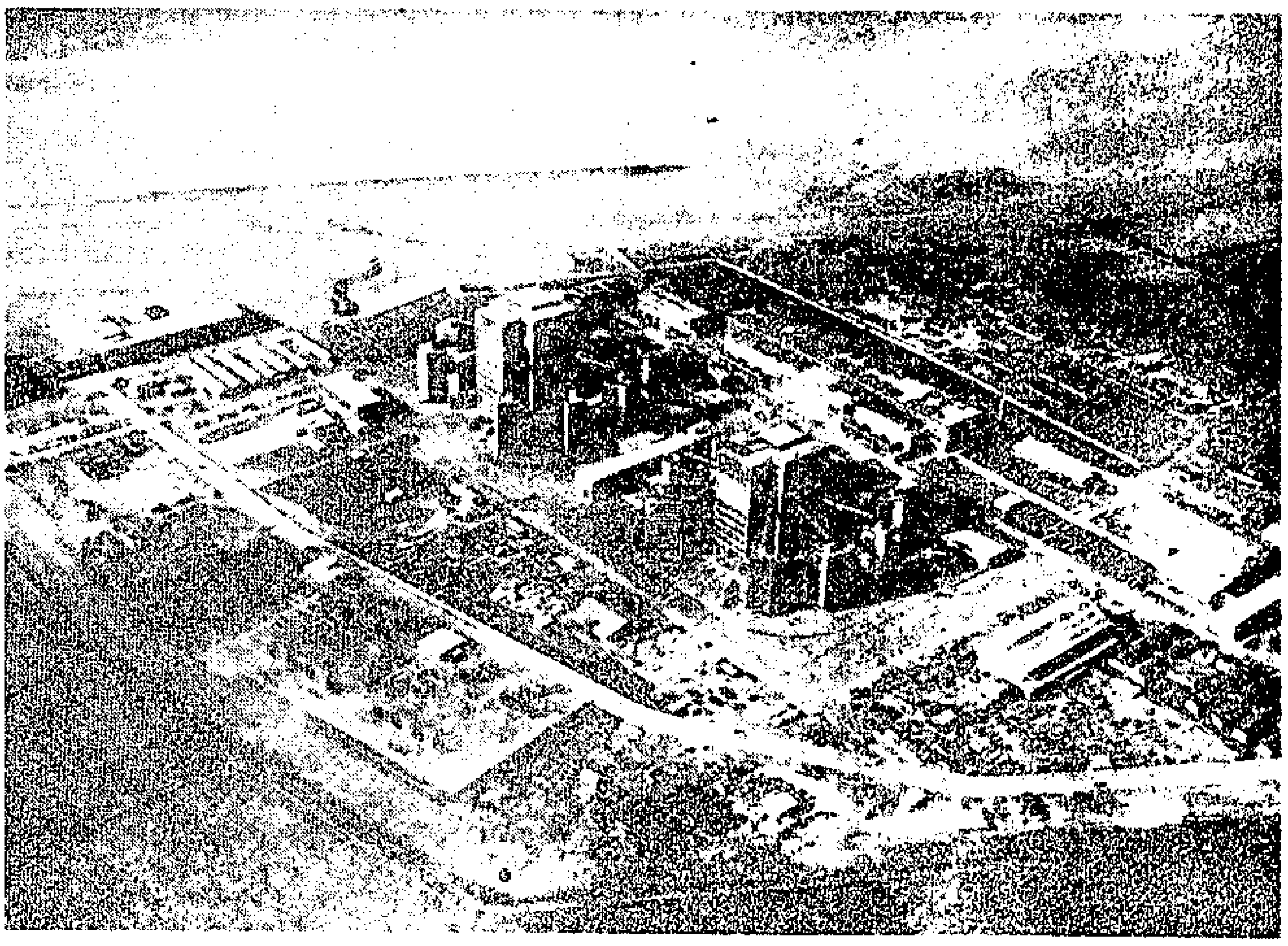
● The US government, acutely aware that its historical command of world nuclear politics was fast declining because of such events as the Indian nuclear bomb explosion in 1974, persuaded two more of the world's major uranium suppliers — Canada and Australia — to join it in re-asserting control.

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 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 ambitions, has begun to delay many nuclear projects in the mid-Seventies.

The campaign is spearheaded by people seeking radical change in industrial society and nuclear energy is a perfect target — an embryonic industry, representing the interests of the most powerful companies; a workforce in which no single trade dominates (in contrast with coal); and great potential for playing on public fears of radiation.



Nuclear power station in UK . . . in the future, a common sight world wide?

● Governments have arrived at no consensus 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 confirm 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 — nine 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.

die land van sieg...

Sake-Rapport 21/8/77

Trek maak weer só

(55)

Deur DAVID MEADES

MET Trek-Petroleum, volfiliaal 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 talle ander oliemaatskappye nie eens hul bestaande posisie kan handhaaf nie.

Volgens Trek-Petroleum se hoofbestuurder, mnr. Sarel Steyn, dui voorlopige syfers daarop dat Trek-Petroleum sy omset in die ses maande tot einde Junie met 22,85 persent tot R61 miljoen verhoog het.

Terselfdertyd mik die maatskappy na 'n syfer van R126 miljoen vir die lopende jaar, wat 20 persent meer as verlede jaar se R105 miljoen sal wees.

Maar hierdie doelwit lyk aan die konserwatiewe kant en 'n mens sal nie verbaas wees as R130 miljoen vanjaar gehaal word nie. Terselfdertyd mik die maatskappy na 'n verhoging van sowat 7 persent in sy volume, wat met 'n verwagte daling 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 verneem dat hierdie prysoorlog heelwat kwaaier was as wat algemeen gelyk het, veral in die groothandelmark.

Volgens mnr. Steyn het die verhoging in die prys van brandstof natuurlik 'n 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 toegeskryf word. Met die insinking in die ekonomie is op almal 'n beroep gedoen om die hand aan die ploeg te slaan. Die reaksie was merkwaardig, sê mnr. Steyn.

Die maatskappy is ook besig om al hoe sterker op die groothandelmark te word. Net in die eerste ses maande vanjaar het Trek sowat 16 persent meer groothandelklante bygekry

● Vervolg op bl. 3.

Trek ,groot' kleintjie

● Vervolg van bladsy 1

as die totaal vir 1976.

Trek het ook nou 'n netwerk van 246 vulstasies, teenoor 234 'n jaar gelede. Die maatskappy hoop om teen die einde van die jaar 250 vulstasies te hê wat sy produkte verkoop.

In vergelyking met die land se groot oliemaatskappye, is Trek nog klein. Maar mnr. Steyn verkies dat daar van hulle as die „groot" kleintjie gepraat word.

Hierdie jong maatskappy, die enigste oliemaatskappy (Sasol uitgesluit) wat deur Suid-Afrikaners beheer word, sal ook nie meer baie lank as 'n kleintjie bestempel kan word as hy sy huidige groei voortsit nie.

Mnr. Steyn wou geen kommentaar oor die winsvooruitsigte van die moedermaatskappy, Trek-Beleggings, lewer nie, behalwe deur te sê dat 'n aankondiging hieroor eersdaags verwag kan word.

Chemico

Daar kan egter aangeneem word dat die maatskappy in staat sal wees om 'n goeie wins aan te kondig, ofskoon verlede jaar se winsgroei seker beswaarlik gehandhaaf sal kan word.

Trek-Beleggings kon in die jaar tot 31 Desember 1976 sy wins ná belasting met 62,5 persent tot R3 334 000 of 16,9c per aandeel verhoog.

Die grootste deel van sy wins is van Trek-Petroleum afkomstig en hierdie filiaal kon sy omset in 1976 met 43,3 persent tot R105,8 miljoen verhoog.

Omdat 'n ander filiaal, Chemico, waarskynlik nog nie winsgewendheid bereik het nie, sal Trek-Petroleum vanjaar weer vir die grootste deel van die inkomste moet sorg.

Dividende

Hoofsaaklik as gevolg van groot vestigingskoste het Chemico verlede jaar 'n verlies van R538 000 getoon. Daar sal waarskynlik vanjaar nog geen wins getoon word nie, maar die kanse is dalk goed dat die verlies baie kleiner sal wees.

En met die groep se volgehoue pogings om produktiwiteit te verhoog, lyk 'n sterk styging in wins vir vanjaar nog meer moontlik. 'n Styging van byvoorbeeld 25 persent sal die verdienste per aandeel tot meer as 21c opstoot.

Verlede jaar is uit hierdie verdienste 'n dividend van 8c betaal en 'n verdere verhoging is moontlik. Maar daar sal eers gewag moet word vir die tussentydse syfers, wat binnekort verwag word.

Verlede jaar is 'n tussendividend van 3c verklaar en 'n verhoging van hierdie dividend, wat verlede jaar op 10 September verklaar is, kan op 'n verhoogde totale uitkering dui.

Nuclear power: the crux is safety

Star 23/8/77

55

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.

Nuclear energy was invented in the laboratory, and that's where its language has grown. Little wonder we are bewildered by its new words and lost in the arguments that keep scientists so sharply divided.

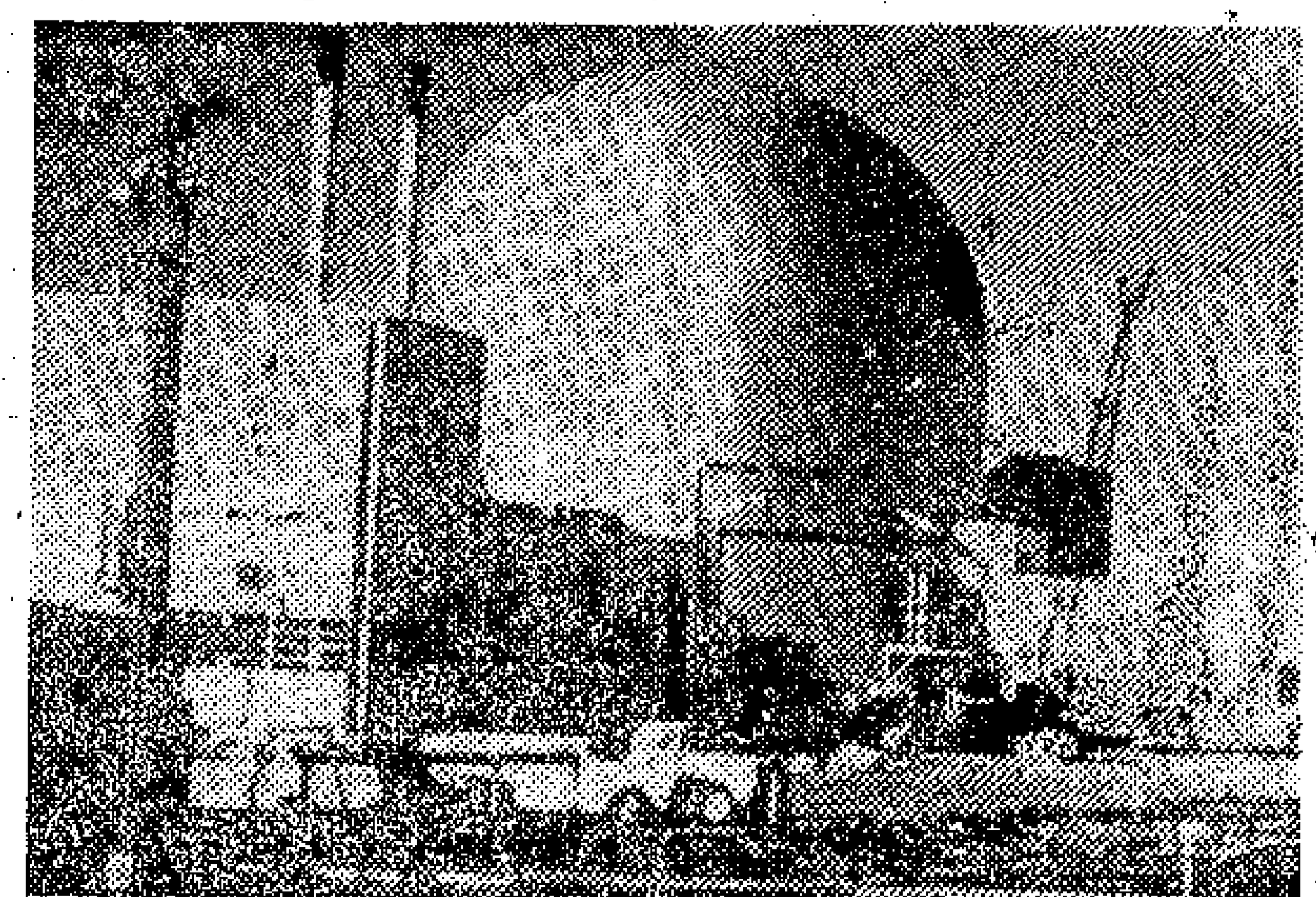
When Nobel laureates throw their weight into the battle too — on both sides — how do you keep score from the sidelines?

There are about 100 nuclear power stations in operation all over the world, and another 200 on order or under construction.

Very simply this is how nuclear power works: inside a nuclear reactor, uranium decomposes to produce heat which generates electricity. At the same time some highly radioactive wastes, such as plutonium, are produced.

The uranium at present used is a rare type, and its reserves are likely to run out in the next 20 years. By that time scientists hope to have ready the fast breeder reactor, which uses plutonium instead of uranium.

This reactor has the almost magical ability to "breed" more nuclear fuel than it consumes. In fact it will double the plutonium on hand every 10 years.



"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 these things are safe enough." And that's what the bother's about — is nuclear power safe enough?

Stringent safety precautions account for one-fifth of the cost of a nuclear power plant. 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 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 fol-

● The Vermont Yankee plant had 17 major shutdowns in its first 19 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 wastes 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 5 000 Mw.

No change in fuel curbs — Steyn

STAR 26/8/77

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Pretoria Bureau

There will be no changes in South Africa's fuel conservation measures.

This was spelled out by the Secretary for Commerce, Mr Joep 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 as the cost of administering such a system "on the present vehicle population of 3,2-million, as compared with the wartime figure of 500 000 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 is 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 R190-million in 1972 to nearly R1 300-million at present."

South Africa may face oil embargo

(55)

D.D. 29/8/77

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 the 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 5 when the recently-constituted Commonwealth Committee on Southern Africa meets to consider the feasibility of giving teeth to sanctions.

The UN committee on sanctions will meet in New York on September 8 to debate the possibility of enforcing oil sanctions.

Mr M Bailey, 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 firstly 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 rands 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 to 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 as 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.

31/8/77

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185

ELECTRICITY NO SHOCKS COUNCIL

Mercury Reporter

N. Mercury

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 Woollam 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 R250 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 sceptism 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 1985. The conference's 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 foreshadowed 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 discredited.

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 2 020. Its report, prepared by Dr Richard Eden and the Energy Research Group at Cambridge, said that by 2 020:

- World energy demand will treble or quadruple, even with strict conservation.
- 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 contracts. 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, laconically commented: "When there ain't no other thing than coal, then the price is goin' to be right."

Sunday Tribune

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55 2/9/77

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

STAAT GEE LAE HOU

RAPPORT, SONDAG, 4 September 1977

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Chemico só geknou

Deur DAVID MEADES

AS die Regering voortgaan om sy daadwerklike steun aan die herraffinering van gebruikte olie kleiner — te maak, kan dit die einde beteken van 'n strategiese bedryf wat maar pas op dreef begin kom. Hierdie bedryf begin nou eers betekenisvol ontwikkel en het staatskontrakte broodnodig.

Dit is die afleiding wat 'n mens kan maak nadat dit vandeesweek bekend geword het dat Chemico, 'n filiaal van Trek-Beleggings waarin Shell en BP ook onlangs 'n belang gekry het, weer 'n groot verlies getoon het.

Die besturende direkteur van Trek-Beleggings, mnr. Donald Masson, het aan Sake-RAPPORT bevestig dat 'n deel van Chemico se verlies toegeskryf kan word aan die feit dat 'n groot staatskontrak in die onlangse prysoorlog tussen die groot oliemaatskappye verloor is.

Chemico en ander herraffineerders van gebruikte olie is tradisioneel die verskaffers van smeerolie aan die staat. Maar Chemico moes die afgelope ses maande toesien hoe 'n internasionale oliemaatskappy 'n kontrak van 2 miljoen liter by die staat van hom wegneem.

Dit was hoofsaaklik weens die feit dat dié oliemaatskappy die olie teen 'n baie laer prys aangebied het. Die prys was trouens laer as wat die prys van dieselfde smeerolie vier jaar gelede was.

Oorskot

Intussen is die prys van ru-olie telkens verhoog en 'n mens kan die vraag vra of dit nie dumping was nie, sê mnr. Masson. Dit is bekend dat daar op die oomblik wêreldwyd 'n oorskot aan olie is.

Hierdie smeerolie word — uit 'n ingevoerde produk vervaardig en plaas verdere druk op die betalingsbalans.

Mnr. Masson wou nie verder oor hierdie aangeleentheid uitbrei nie, maar dit is duidelik dat hy en ander herraffineerders van gebruikte olie alle rede het om ongelukkig te voel.

Dit het ook in 'n stadium gebeur waar daar binne die volgende maand of wat wetgewing gepromulgeer sal word wat dit verpligtend sal maak om gebruikte olie vir herraffinering te bewaar.

Chemico se aanleg naby Krugersdorp het R5 miljoen gekos en het 'n vermoë om 45 000 ton smeerolie per jaar te produseer. Dit kan vir die land miljoene aan buitelandse valuta bespaar en werk maar op 'n derde van sy vermoë. Intussen is Mobil ook besig om 'n soortgelyke aanleg, hoewel heelwat kleiner, op te rig.

Shell en BP het ook in die begin van die jaar 'n regstreekse belang van altesame 30 persent in Chemico gekry. Hulle is ook minderheidsaandeelhouers in Trek-Beleggings.

Chemico het verlede jaar 'n verlies van R538 000 getoon, wat tot groot hoogte aan sy vestigingkoste toegeskryf is. Maar in die eerste ses maande vanjaar is 'n groter verlies as in die ooreenstemmende tydperk verlede jaar getoon.

Volgens mnr. Masson was dit ook tot groot hoogte weens die feit dat rente en waardevermindering weer 'n groot hap geneem het. Die aanleg is ook vir baie groer volumes gebou.

Opgelos

Weens die gesofistikeerdheid van die aanleg was daar ook heelwat tegniese probleme wat die afgelope ses maande nie uitgestryk kon word nie. Dit het daartoe gelei dat die aanleg later as wat verwag is begin produseer het.

Hierdie probleme is nou hopelik opgelos, sê mnr. Masson en die direksie van Trek is vol vertroue dat dinge oor die volgende ses maande aansienlik sal verbeter. Dit kan net moontlik wees om 'n winsdrempelpunt te bereik.

MNR. DON MASSON, besturende direkteur van Trek-Beleggings. Hy voel ongelukkig oor wat 'n mens byna dumping van ru-olie op die SA mark kan noem.

Blou pomp laat rol

SASOL se blou pompe werk nou oortyd. Die geld stroom in en hierdie petrochemiese maatskappy is vinnig besig in wêreldstandaarde 'n reus te word. Sy finale state is nog nie bekend nie, maar sy omset het in die jaar tot einde Junie byna R700 miljoen en 'n voorbelaste wins van sowat R60 miljoen lyk moontlik.

Sasol se voorsitter, mnr. D.P. de Villiers, het vandeesweek op die streekkonferensie van die Sentraal-Transvaalse Streekkomitee van die Afrikaanse Handelsinstituut terloops na Sasol se resultate vir die afgelope jaar verwys.

Hy het gesê dat die omset die afgelope jaar van R562 miljoen tot R680 miljoen gestyg het. Dit is 'n styging van 21 persent. Mnr. De Villiers het ook 'n aansienlike verhoging in wins in die vooruitsig gestel.

Die wins voor belasting het in die jaar tot 30 Junie 1976 meer as R52 miljoen beloop. 'n Styging van sowat 20 persent in hierdie syfer sal die wins tot heelwat meer as R60 miljoen verhoog.

En die Regering het ook alle rede om in sy skik te voel. Sasol sal volgens mnr. De Villiers vanjaar aan die staat byna R160 miljoen in die vorm van maatskappyen aksynbelasting betaal. Sasol betaal net soos enige ander maatskappy belasting.

Ons sê . .

MNR. DONALD MASSON en ander manne in die bedryf vir die herraffinering van gebruikte olie het reg om ongelukkig te voel wanneer die staat kontrakte wat tradisioneel by hulle tuisgehoort het, wegneem net omdat die prys dalk 'n sent of wat per liter goedkoper is.

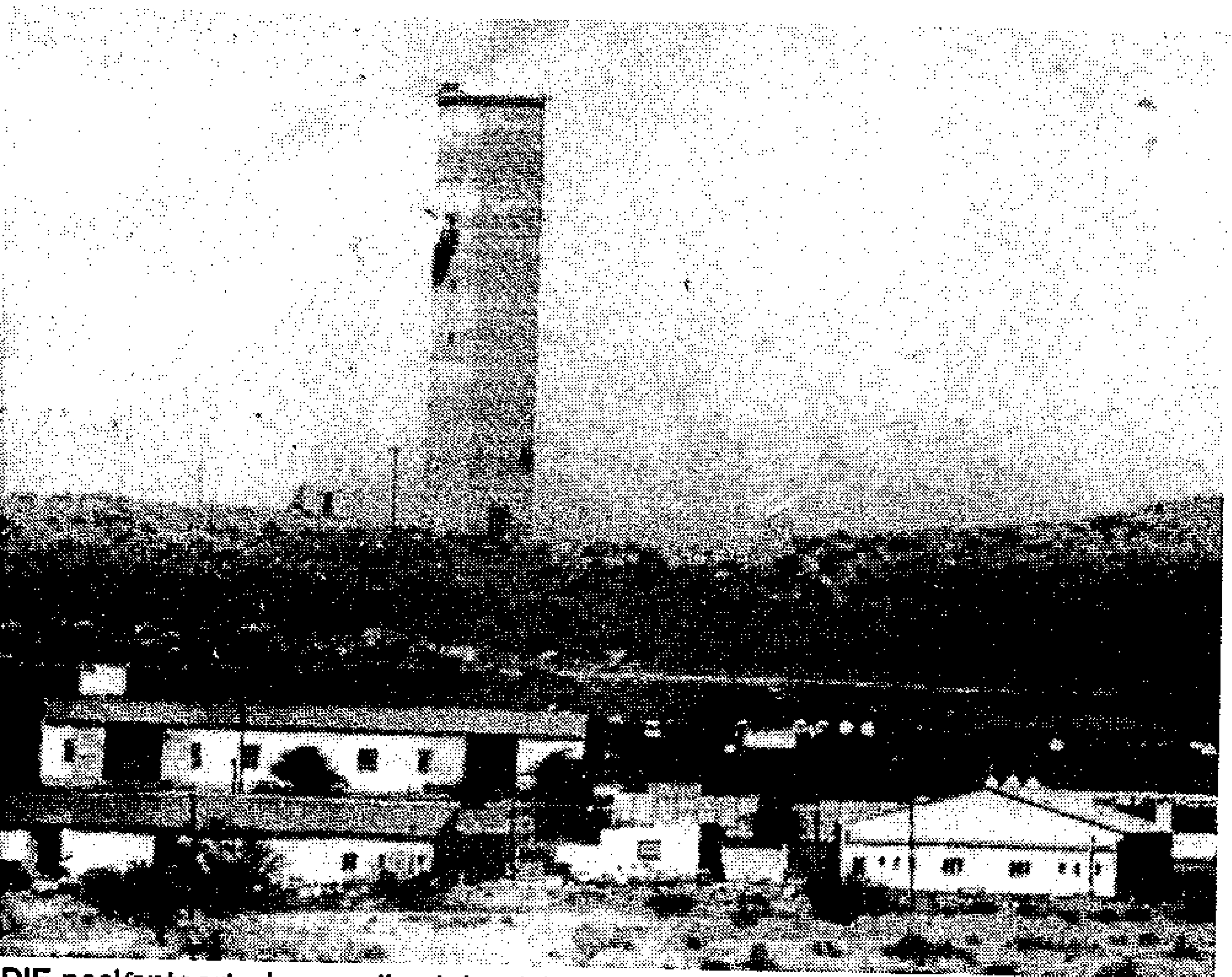
Dit is natuurlik die staat se reg om kontrakte toe te staan aan wie hy wil en met die kwaai besnoeiing in die begrotings van 'n hele paar staatsdepartemente tel elke sent.

Maar daar is ook sulke bedrywe wat as strategies bestempel kan word. In moeilike tye en boikotte is sulke bedrywe waardevol en hierdie bedrywe is gewoonlik bereid om op gelyke voet mee te ding.

Maar so dikwels gebeur dit dat dumping deur buitelandse groepe enige mededinging geheel en al uitskakel. In sulke gevalle behoort dit die staat se plig te wees om daardie strategiese bedrywe te steun.

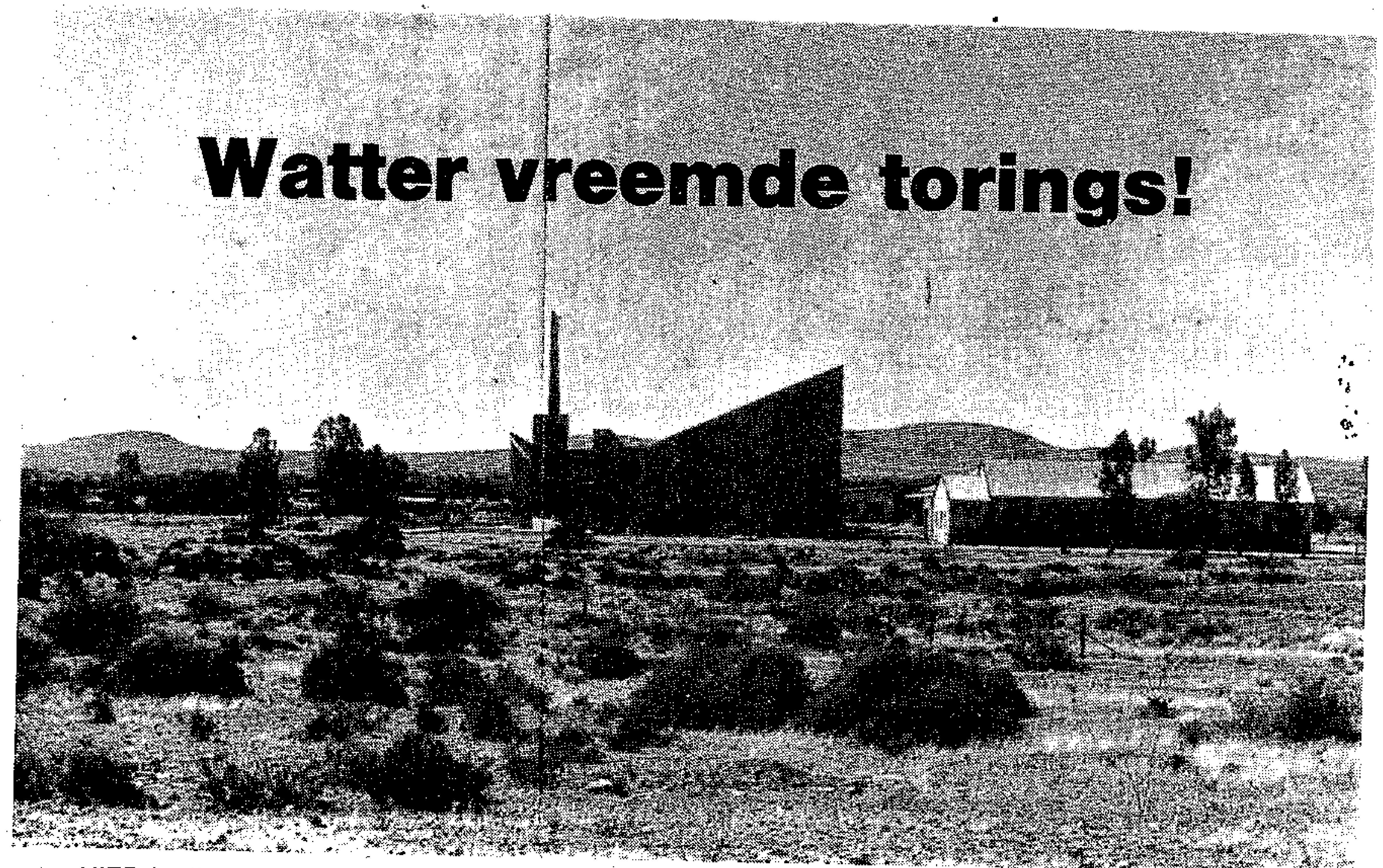
Die herraffineer van gebruikte smeerolie verminder nie net vermorsing nie, maar bespaar die land ook baie aan buitelandse valuta en het die potensiaal tot groei. Maar wanneer die groot oliemaatskappye, met miljarde tot hul beskikking begin pryse sny, kan 'n jong plaaslike bedryf maklik geknou word — veral as hy nog boonop die steun van die staat verloor.

Die ‚Upington-poets'



DIE poskantoortoring op die vlakte lyk glad nie na die dinge wat die Amerikaners se satelliet by Upington wou gewaar nie. Maar dit is die enigste toring wanneer 'n mens die pad vat na die woestyn noord van Upington.

Watter vreemde torings!



HIER is die enigste toring op Grootdrink, dié van die pragtige nuwe NG kerk vir die mense van die Kalahari.

Foto's: BERNARD JORDAAN

Hulle is al hartlik siek...

Van JOHAN STEYNBERG
GROOTDRINK (Noord-Kaapland)

HIER in die bossiewêreld tussen Upington en Grootdrink kry 'n man eesdae fluks opdraand as jy oor atoombomme wil kom praat. Die altyd riendelike mense is nou al hartlik siek vir koerantmense van oor die wêreld wat bel of self kom soek na die plek waar die Amerikaners en usse sê Suid-Afrika is op die punt om 'n kernbom te laat ontplof.

Ry maar self die paar kilometer oos van Upington na waar die merikaners se satelliet gesê het daar staan 'n ding reg om te ontplof. aar is geen teken van die dinge wat die satelliet sou gesien het nie. Die bied is die ene kleinhoewes.

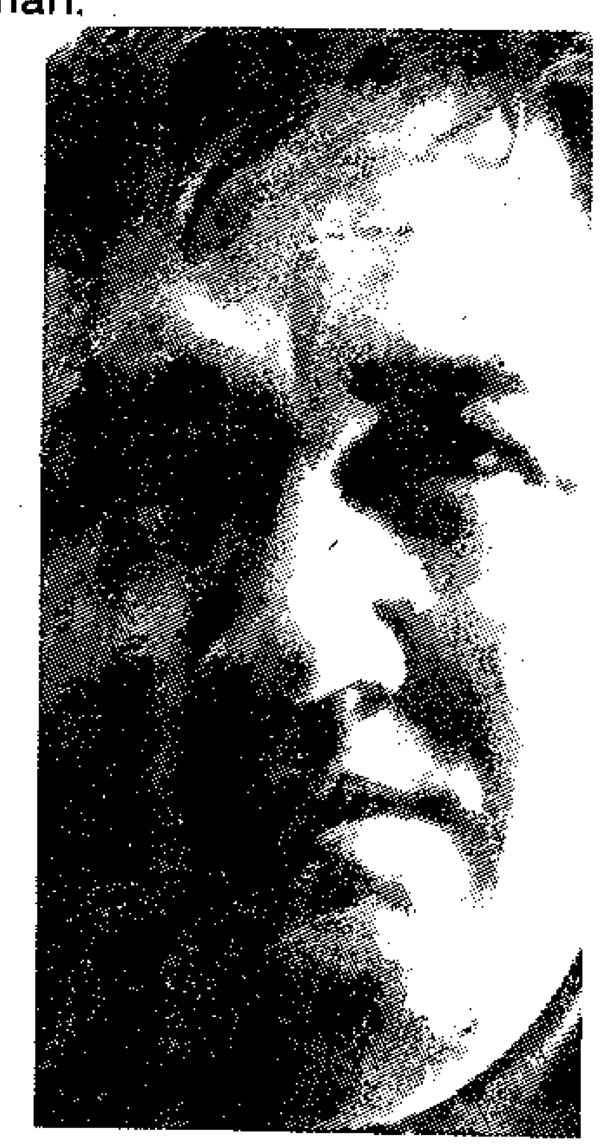
In die omgewing van Grootdrink sê die mense al wat miskien 'n tploffing van enige aard kon veroorsaak, is die wynkelder daar naby. Op Upington is die joviale mnr. Bossie Botha, stadsklerk, aan die oord: „Ek dink daardie satelliet het self die grootdrink gehad." Dis al re dat hy koers vat in Grootdrink se rigting en hy het nog nooit iets sien wat die satelliet sou gesien het nie. Buitendien, sê mnr. Botha, hy gesien het en hy het geweet dis dié bom op Upington se drumpel, sou hy nie meer daar gewees het nie. 'n Mens leef nie so in die skadu van verskrikking nie.

Mnr. Koos Nieuwoudt, rekenmeester, 'n man bekend om sy humorsin, vat die ding saam met 'n ligte Engelse vierletterwoord. Vandat hy die eerste keer die storie oor die atoombom gelees het, het hy gedink dit is wat hy gesê het dit is. Onsin. In plekke op Upington waar die manne se elmboë winkelhaak maak, is die taal sterker. En hulle beduie ewe vriendelik hulle is nou regtig moeg vir mense wat kom soek na die bom. Daar is nie so iets nie.

Wat die Amerikaners sou gesien het, is: 'n klompie skure rondom 'n toring in die woestyn en 'n entjie verder weg nog 'n toring. Rondom Upington is dit darem nog nie woestyn nie — daarvoor moet jy noord ry tot in die Kalahari.

Loop jy 'n boer raak wat vertel op 'n buurplaas in die Kalahari staan die gedoente. Hy gee ook 'n lengtegraad en afstand. En dan ry jy die honderd kilometer of wat tot in die woestyn en wonder agterna of die knipoog wat hy sy vriend in die geselskap gegee het, nie tog iets beteken het nie. Want daar is niks.

Op pad na die woestyn was daar darem 'n poskantoortoring as ligte troos.



MNR. KOOS NIEUWOUDT: „Ek het van die begin af gedink die bomstorie is pure onsin."

MNR. BOSSIE BOTHA, stadsklerk op Upington: „As ek geweet het hier is 'n bom op Upington, het ek al lankal padgegee."

Van MARILYN ZEELIE
PARYS

IN Frankryk word al klaar van die Upington-poets gepraat. Dit is nadat waarnemers weer gekyk het na die beweringe van Frankryk en Rusland dat Suid-Afrika sy eie kerntoetsterrein in Kaapland het.

Skerp vrae oor die bestaan van die foto's van die beweerde toetsterrein word gevra. Hoekom is dit nie aan die wêreldpers beskikbaar gestel soos dié wat in 1962 van Kuba se geheime basisse en verlede jaar van die Russe se lugbasis in Somalië geneem is nie?

Volgens Franse en Amerikaanse senior amptenare het die Amerikaanse presidensiële adviseur, mnr. Gerad Smith, langs Frankryk se pres. Valéry Giscard d'Estaing gesit terwyl hy na die foto's gekyk het. Dit is glo deur 'n spioen-satelliet geneem.

Pres. Giscard was geskok deur wat hy as valsheid aan die kant van Suid-Afrika beskou het, en het opdrag aan sy minister van buitelandse sake, mnr. Louis de Guiringaud, gegee om aan die wêreld te sê dat Frankryk definitiewe inligting oor die beweerde toetsterrein het.

Hy was egter nie bereid om die bron bekend te maak nie.

Maar mense vra waar is die foto's dan? By twee vorige geleenthede het die Amerikaners satelliet-foto's aan die wêreldpers gegee om as bewys vir beweringe oor geheime basisse te dien. Hoekom nie dié keer nie? word gevra.

Dit is bekend dat pres.

Waar's die foto's dan? vra die Franse

Leonid Brezjnjef, wat die beweringe teen Suid-Afrika begin het, geen satelliet-foto's gehad het nie. Die Amerikaners weet nie eens waar hy aan sy inligting gekom het nie, maar meen dat dit moontlik deur 'n Russiese agent in Suid-Afrika aan hom oorgedra is.

Die moontlikheid dat 'n besoekende swart nasionalistiese leier, soos Robert Mugabe of Joshua Nkomo, die gerugte in Moskou kon versprei het, is ook nie uitgesluit nie.

Die eerste noukeurige kaartvertolking van die beweerde toetsterrein oos van Upington is Maandag deur diplomatieke bronne aan die Franse tydskrif Express gegee. Maar die gebruiklike inligting oor breedte- en lengteligging is nie verstrek nie.

'n Franse lugverkenningsdeskundige het vandeesweek gesê dat Amerikaanse deskundiges in die verlede dikwels met die interpretasie van satelliet-foto's oor beweerde kernterreine in Rusland gefouteer het. Dikwels was dit niks anders nie as groot fabrieke wat gefotografeer is.

Dit kon maklik die geval met die beweerde foto's van Upington gebeur het, meen hy. Dit is moeilik om 'n satelliet-foto wat van honderdmyl bokant die aarde geneem is, presies korrek te lees. Dit kan wees dat die Amerikaners om dié rede die foto's nie aan die pers wil gee nie.

Ondanks dringende kabels en oproepe wat tussen presidente en premiers gevlieg het, praat die Franse nou glimlaggend van die Upington-poets.

The risk of failure is … apital for
basic requirements suc … seeds and
other inputs at the … arketing produce;
and the difficulty of … vourably-treated
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Placed in this si … probably judge
that it is not worth h … nergy and
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from migrancy than fro … ged conditions.
(The Ceylon Report rec … eylon . (61))

This outcome is n … market forces.
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many potentially viabl … availability
of cheap labour and ch … e farmers to
stay in business. The … ion of
resources and a distor

(55)

SASOL CAN SAVE US FROM AN EMBARGO

By ESMOND FRANK

Sun. Trib. Finance. 4/9/77

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 R350-million a year at today's prices.

South Africa spent R1 015-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 power petrol driven engines.

By 1990, say the experts, only 23 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 1.5-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 ammonia.

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.

D.D. 6/9/77

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 strangle - hold 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.

City Council. 53/

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...e 1976 amendment the Act now makes it not only an offence ...oreign African' (defined as a person born outside Rhodesia) ...: in a closed labour area (presently the main urban areas) ...ep in employment such a person already in employment. ...amendment to the Act will only apply to men, but the Minister ...t it could be amended to apply to women. The 69 000 foreign ...pt in agrarian or mining employment would appear to be those ... be first affected by this measure. They constitute 35 ... total number (196 000) of foreign male workers in 1975.

...GN AFRICAN WORKERS IN RHODESIA

1972-75

	...gn			All Workers		
		...male	Total	Male	Female	Total
1972	203 658	18 130	221 788	696 663	105 177	801 840
1973	201 987	18 461	220 448	733 497	119 487	852 984
1974	199 333	18 418	217 752	766 055	123 373	889 428
1975	195 725	18 296	214 021	861 482	127 158	928 640

TABLE 7.

FOREIGN AFRICAN WORKERS IN RHODESIA

1956-75

Year	Number	% of Total
1956	309 775	50,8
1961	278 373	45,4
1969	229 154	34,0
1972	221 788	27,7
1975	214 021	23,0

Source: Rhodesia, Final Report on the September 1961 Census of Employees, C.S.O., Salisbury; Rhodesia, 1969 Census of Employees, C.S.O., Salisbury, (mimeo); C.S.O., African Employees By Country of Origin, DL/978/15, Salisbury, (mimeo)

As an ....

D. D. 6/9/77

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Cutting costs of wiring buildings

PRETORIA — The Bureau of Standsrds 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. — SAPA

FROM THE ACTING RECTOR

FR. 77.77

CONFIRMATION

For the benefit of the parents of the Confirmation candidates I would like them to know that the confirmation will take place on Sunday 23 October at 5.00 p.m. The candidates will be confirmed by Bishop Patrick Matolengwe who will also celebrate a Mass and all the newly confirmed will make their first communion at this service.

It is important that the candidates should attend classes and Mass regularly every week in preparation for their Confirmation. I say this because some of the candidates have not been very regular of late and I appeal to the parents to come with them to Church on Sundays in order to encourage them and to continue doing so after they have been confirmed, so that the candidates will continue to be regular communicants after they have been confirmed.

Probably the main reason why so few candidates remain faithful after they have been confirmed is because of the lack of interest of many parents. You as parents can help the candidates by showing more interest and encouraging them to be regular worshippers during their instruction period and after they have been confirmed. Young people require guidance and encouragement otherwise they tend to stay away and this is why so many who have been confirmed in the past fail to continue to be regular members of the Church.

I therefore appeal to parents and godparents 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 Prisoners awaiting execution
Tue. 2nd "Political" prisoners
Wed. 3rd Pass Law prisoners
Thu. 4th Warders and guards
Fri. 5th Makers and executors of the laws
Sat. That all may share a vision of the glorified Christ
Sun. in Justice and ... South Africa

... Ascension Parishes
... Mitchell's Plain
... those ministering to
... squatters
... neighbouring Parishes
... Order of the Holy Paraclete

Price of oil falls

DD 8/9/77

LONDON — Oil prices are tumbling as major producers try to counter a glut produced by stagnant demand and high stocks.

Kuwait has now cut prices, hoping to avoid losing business and making further cuts in production.

It is offering to trim the price of its heavy crude oil by 12 cents a barrel below the current price of 12.37 dollars.

North Sea oil has been affected by the price downturn, although its price is holding up because it is closer to the major markets.

An estimated sixth of the production capacity of the member states of the Organisation of Petroleum Exporting Countries has been shut down to reduce the surplus. — DDC.

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Durban firm gets world-wide rights

Electronics deal a pleasant shock

BILL FAILL N. Mercury Bus. 9/9/77

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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 R17 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.

S.A.

No power hike for Border

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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 19,7 per cent.

The increased tariffs will range from 26,3 per cent for the Orange River undertaking to 5,3 per cent in the Western Cape.

The increase in the densely-populated and industrialised Rand and Free State area will be 19,7 per cent. In the Eastern Transvaal prices will go up 20,3 per cent and in the Northern Cape by 21,4 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 it 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 national supply system to 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. — SAPA.

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UK assurance over oil boycott

D.D. 14/9/77

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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.

The British reply, in the form of details of a Foreign Office press conference on Monday, 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 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 replies to questions at Monday's conference on a report that Britain would not veto such a resolution.

A 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.

Meanwhile, US officials are studiously avoiding committing themselves on 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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Canelands seen as big source of energy

Bus. N. Mercury 15/9/77

Finance Reporter

THE canelands of Natal could become a major source of energy for South Africa in time of crisis, 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 "agriculture's answer to the oil crisis," which was attended by approximately 60 people at the university last night.

The professor said that the huge quantities of bagasse collected from the canefields could be turned into a reservoir of energy as an alternative to oil.

Bagasse is used to manufacture the chemical furfural, from which an octane substance called sylvan can be manufactured.

Fuel substitute

Sylvan can be used as a substance for petrol.

A furfural plant has been established at Sezela by C.G. Smith 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.

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... set in motion.

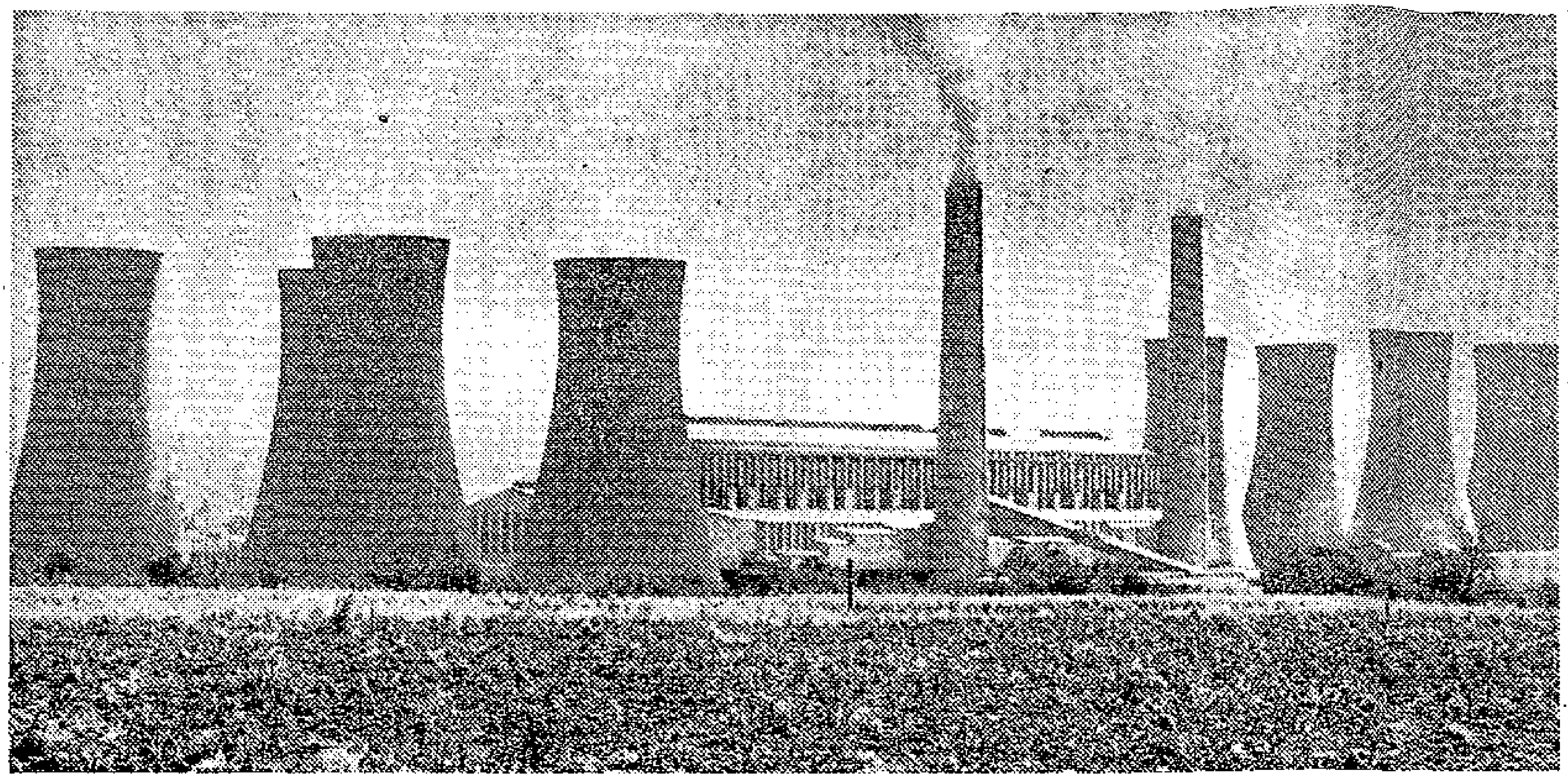
... complex and difficult to ... Besides, ... effects ... railroads ... The reliance ... Economies ... vulnerable ... Nor does ... and ... consequences ... and ... large number ... longing ... motivating ... history ... fic approach ... in ... possibility

(14) Hunt, History, 1968, p. 14.

(15) Gould, Hypothetical History.

(16) Hunt, History, 1968, p. 14.

(17) Andreano, p. 87.



POWER ON DEMAND — the huge public-owned organisation is committed to an expansion costing thousands of millions of rands.

Escom giant could be

(55) STAR 16/9/77

By The Star's Insight Team

Escom, South Africa's giant supplier of electricity, could be heading for major financial and organisational trouble.

The huge public-owned organisation is committed to an expansion costing thousands of millions of rands.

The expansion is necessary to keep pace with the growing demand for electric power. According to sources with inside knowledge of Escom, however, it comes at a time when:

- Morale within some key sectors of the organisaion is low.
- Communication between certain technical officials and top-management is "difficult."
- Unwise investment decisions threaten to increase electricity costs unnecessarily.

One former official told The Star he had resigned because it had become impossible to work under frustrating circumstances.

Many of the allegations about Escom concern the Koeberg nuclear power station project.

The Star was told that there were now serious questions on whether Koeberg could ever be economic and that it was "next to impossible" that the project could ever be finished on time or at the cost estimated.

Escom, it was said, should have totally re-evaluated the nuclear project when it became clear that escalating costs had invalidated the figures on which the decision to build the station was based.

Escom, sources claimed, had:

- failed to assemble an adequate team of nuclear-trained engineers to oversee construction of Koeberg;
- allowed the French contractors, Framatone, huge escalations in contract price without an adequate check on whether the increases were justified.
- been unable to keep the Atomic Energy Board, which has the responsibility of overseeing the project from the safety angle, fully briefed on design progress.
- failed to review the project when rising costs called its viability into question.

● Escom has refused to comment on the allegations made in the accompanying article. Mr J C Uys, Escom public relations manager, told The Star the commission would not reply unless The Star identified its sources of information.

Mr Uys said that if people wanted to accuse Escom of anything they should have the moral courage to put their names to their statements. The Star is satisfied with the bona-fides of its sources and with the fact that they are in a position to know what they are talking about. For career reasons they are not prepared to be identified.

Overseen project

One source told The Star that a project such as Koeberg should be overseen by a team of at least 30 engineers of whom half should be men experienced in the nuclear field.

Escom, however, had only about 15 engineers on the project of whom only two had nuclear experience.

To make matters worse communications with the French contractors were difficult and at one stage it was impossible to obtain information from them.

When information was supplied the drawings were all in French and the only two engineers on the project who understood the language, a Swiss and a Frenchman, had to work full-time trying to translate thousands of drawings and documents.

Escom had, however, tried to recruit more engineers for the Koeberg project but had been unwilling to pay competitive salaries.

Four recruiti[ng] drives overseas (n[ot] solely for the nucle[ar] project) had result[ed] in the appointment [of] exactly eight peop[le] for the Koebe[rg] project of whom t[wo] or three had sub[se]quently resigned.

On the last recru[it]ing drive, held in 19[..] in continental Europ[e] the United Kingd[om] and the United Stat[es] 109 qualified peop[le] had been interview[ed] but because salar[ies] were not attracti[ve] only one engineer h[ad] accepted a post.

Cost escalation

On the question [of] cost escalation [at] Koeberg The Sta[r's] sources said that t[he] French bid to bu[ild] the nuclear power s[tation] tions had been fina[n]cially less attracti[ve] than the Americ[an] Dutch tender.

For reasons of inte[r]national politics a[nd] pressure on Sout[h] Africa the decision [to] accept the French te[n]der might be justified.

After the acceptan[ce] of the tender, howeve[r]

heading for trouble

further cost rises took place.

On one occasion the French asked for another R50-million after some specifications had been changed. This was accepted by Escom within a week which, according to The Star's sources, meant that no detailed study of whether the price hike was justified had been made.

Cost overruns generally were more readily accepted at Escom than they would be in a private company, the sources said.

When projects overran their budgets there was seldom any stern action by Escom's top management.

In any case cost control had become difficult, if not impossible, due to a major blunder over the commission's computer services.

In January 1975 the most sophisticated computer system in the country had been installed to provide constant and detailed information on costing and engineering. The previous system, which had worked "after a fashion" was dismantled.

Keeping electric current flowing—th[illegible] is rising.

Concern voiced over Koeberg nuclear project

● Cost overruns at Escom were more readily accepted than they would be in a private company.

By earlier this year the new system was still not working properly which made it extraordinarily difficult to keep track of costs.

Computer problems had also spilled over into the accounts department and resulted in the massive failure to send out accounts that occurred in recent months.

Low morale

Low morale at Escom, The Star's sources said, had been a major factor in the resignations or early retirements of a number of senior men.

In the fairly recent past, Escom had lost a chief engineer, two senior financial men, the senior nuclear engineer, a top planning manager and senior mechanical and civil engineers.

The corporation had, in the past, managed to produce cheap electricity largely by virtue of the fact that low-cost coal was readily available and because of the economies of scale realised by building extremely large powe[r] plants.

Now things were changing and with it becoming more and more difficult to raise capital overseas Escom had to finance much of its expansion from its own resources.

In these circumstances it was essential that management keep the tightest possible rein on costs and should scrutinise all investment decisions in detail before giving the go-ahead on new projects.

Unless this was done the cost of electricity would continue to escalate unreasonably.

According to The Star's sources the management grip on costs and investment is still far too loose.

The nuclear power station site—but is it still economic?

ia, 9 April 1975.
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Worker of South Africa,

Britain cagey on UN oil sanctions

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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.

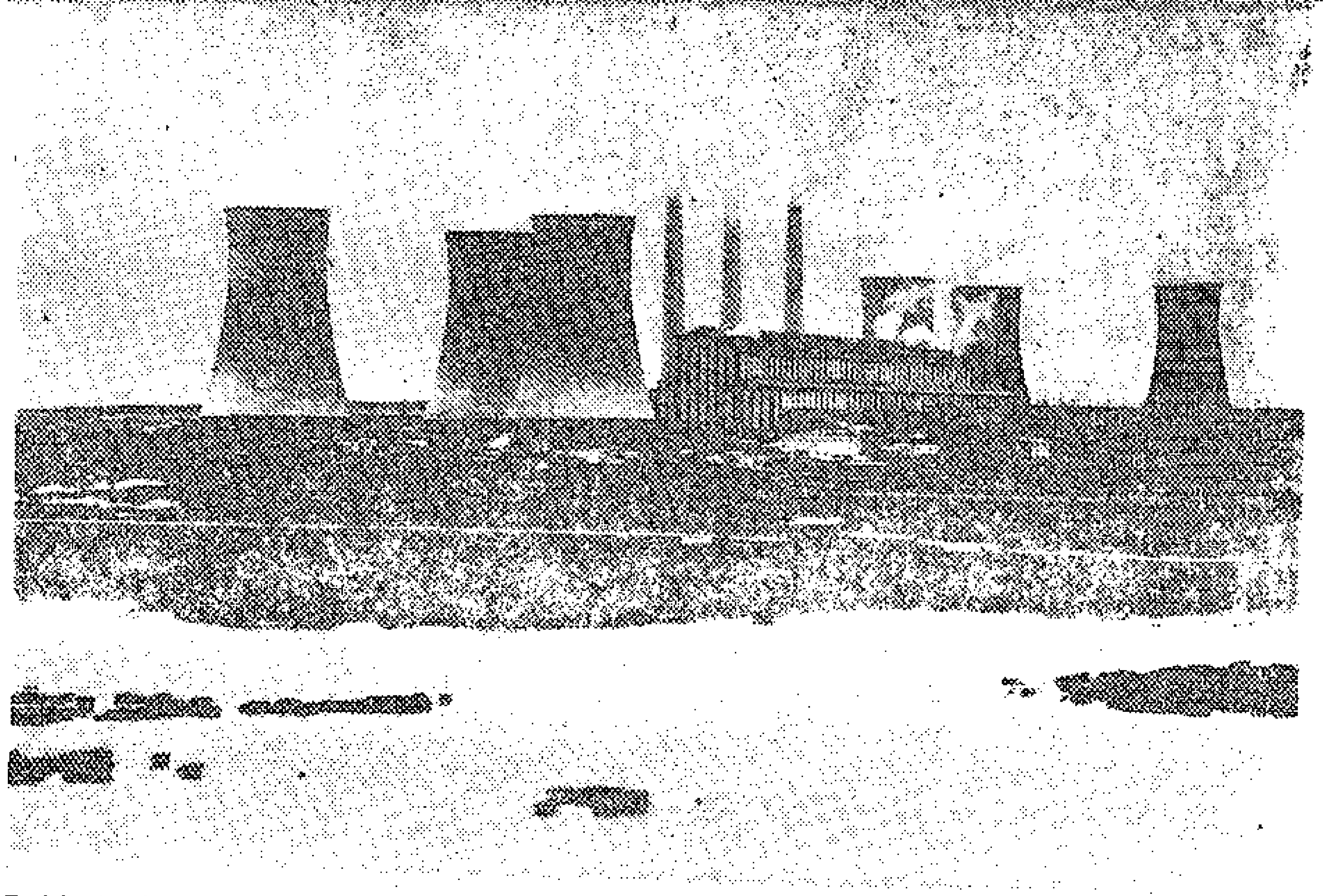
The British reply follows an urgent South African request for clarification of a London report.

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.

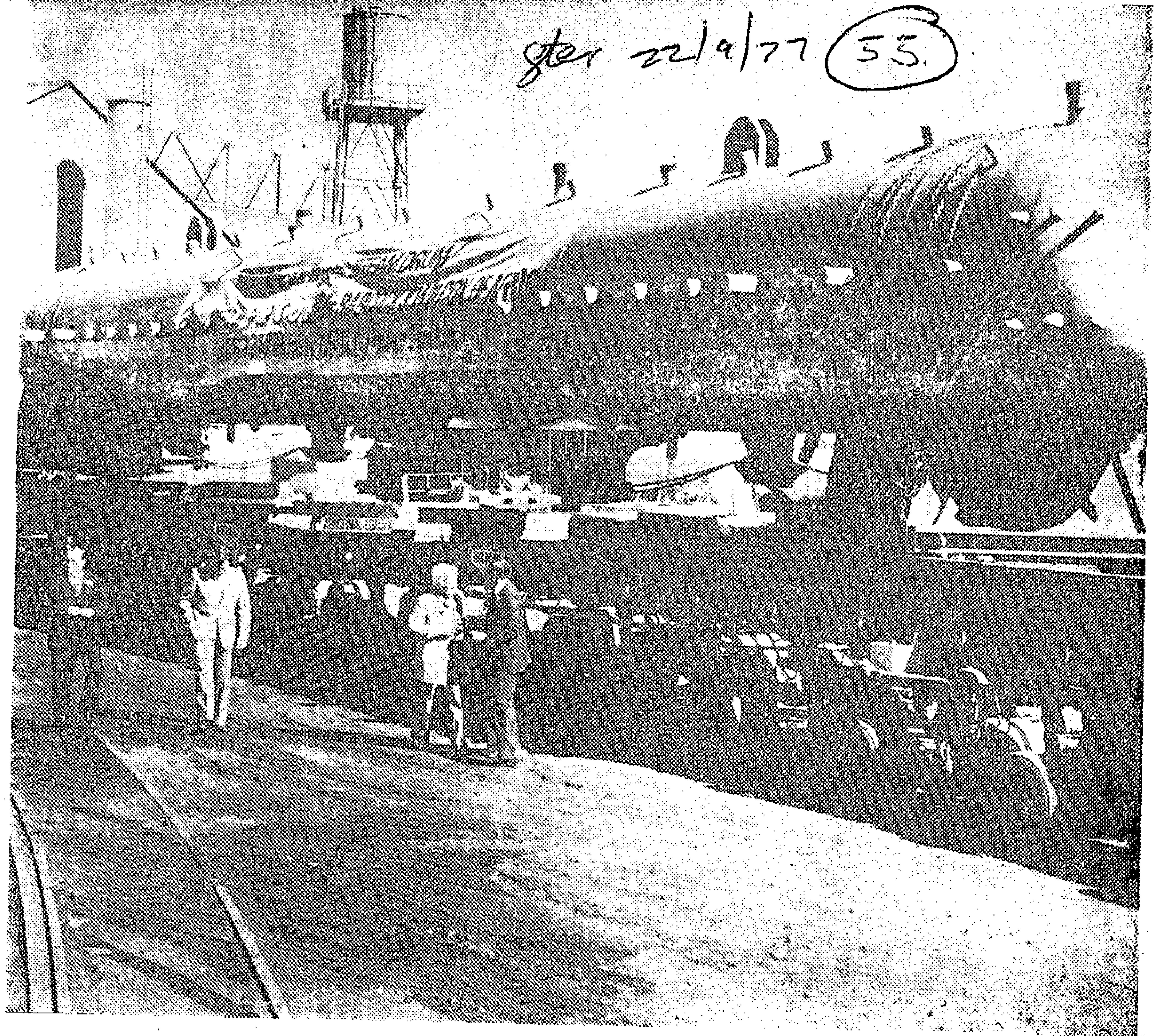
Star 22/9/77 (55)



Behind the impressive facade of an Escom power station may lie a world of technical bickering and cost overruns.

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.



Equipment arriving for the Matla power station — but are tenders awarded haphazardly?

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 fulfills.

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 officially:

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 recommendation, 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 recommendation could have been justified in engineering and economic terms at the coal price ruling at that time.

However, as the change...

Protested

In another instance an engineer's recommendation on chimney heights at a new power station had been altered by his superior.

The engineer is stated to have protested but to have been overruled.

The chimney height was increased, but The Star's sources were unable to say whether this resulted in a significant increase in costs.

Tenders, The Star was told, were treated as top secret by Escom.

One source said that it had been explained to him that tenders had to be secret because on occasions when contracts did not go to the lowest tenderer there could be a row in the Press.

The Star was told that communications between technical staff and top management were often difficult.

"It was impossible to get our views, as the experts, through to the people at the top," The Star was told.

"Everything had to go in memoranda and be discussed at meetings — but often we were not invited to the meetings.

Firms wary

"All we got were secondhand or third-hand telephoned answers that often did not work."

Escom, according to some sources, held its staff by making it difficult for them to get jobs elsewhere.

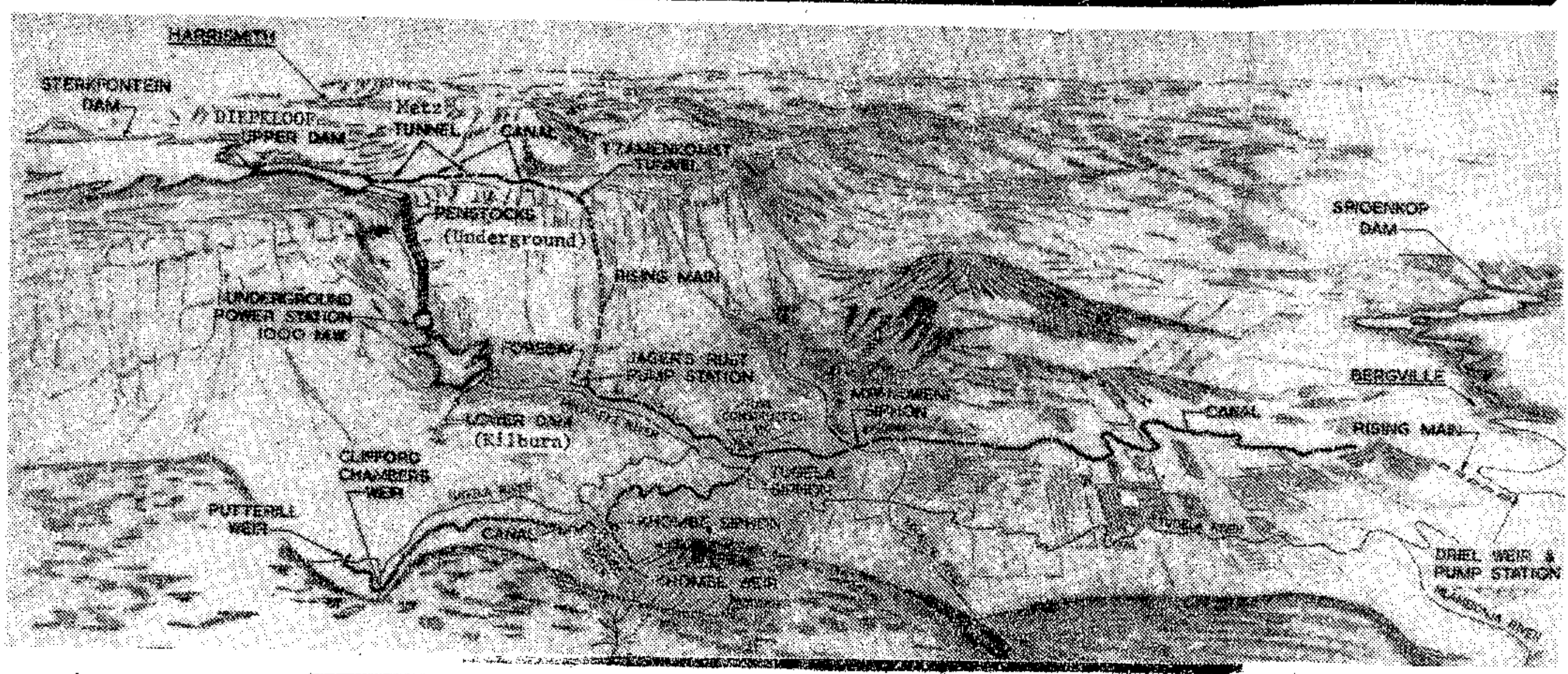
Most companies in the electrical field had to do business with Escom but were wary of hiring Escom staff for fear of prejudicing their relations with the commission.

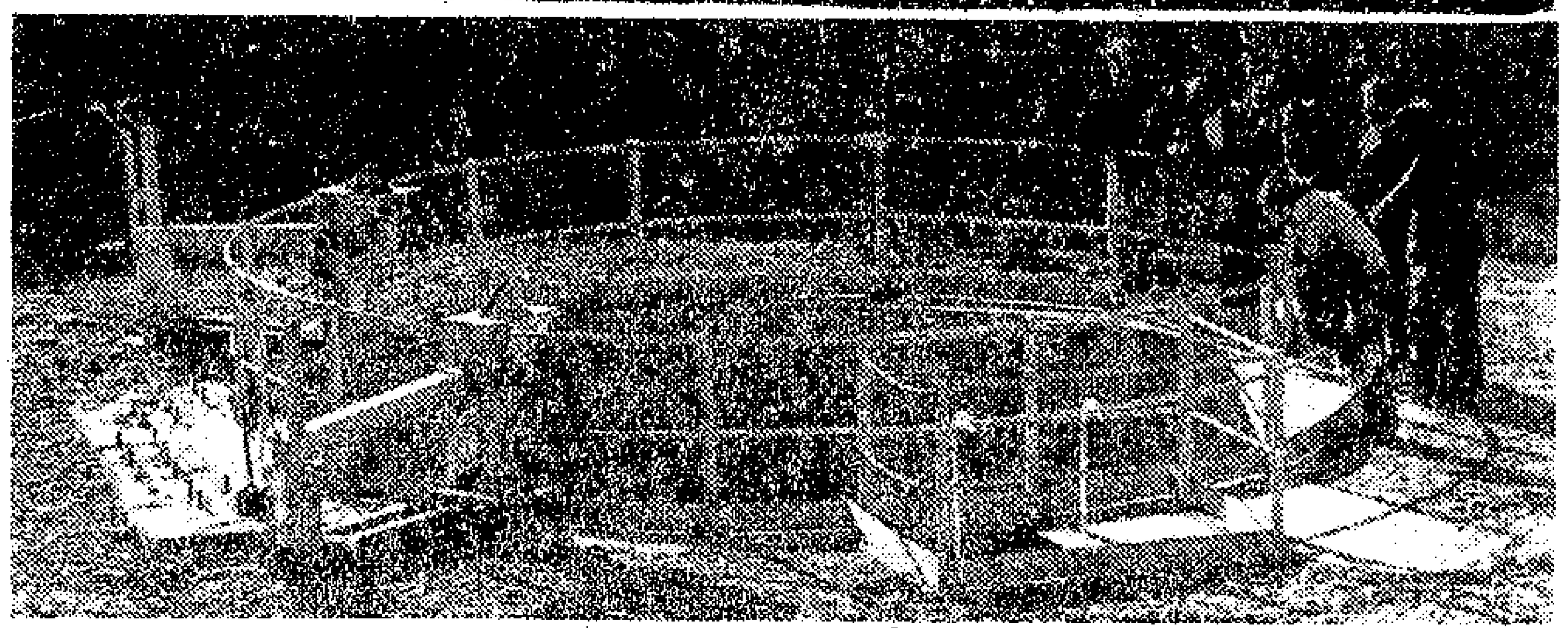
As a result, technical staff unhappy with Escom were often faced with the prospect of leaving South Africa if they wanted to change jobs.

This, apart from anything else, was a drain on the country's skilled manpower.

Supp. to N. Mercury 27/9/77 (55)

ESCOM'S EXPANSION PROGRAMME





A PLAN of the Drakensberg R310 million pumped storage scheme, in northern Natal, which will add 1 000 MW to Escom's generating capacity when it is ready for operations in about six years' time.

Left: The 5,5 m concrete collar of the lift shaft which leads to the main machine hall 160 m below the surface.

Power for the future

THE 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.

During the past eight years, sales of electricity by Escom, which now supplies percent of South Africa's electricity consumption, have grown annually by more than nine percent.

Escom expects national consumpion to increase at average compound rate about 6,5 percent during 10 year period from 76 to 1985.

It is expected that over same period Escom's al sales will increase at an average of about seven per t a year.

The rate of increase in the amount of electricity used in South Africa exceeds the population growth rate and, the past 30 years, came ,9 percent a year.

Escom now has an installed capacity of 12 500 in 19 coal-fired power stations, 2 hydro-power sta- and 2 gas turbine stations. The hydro capacity is MW. The two gas turbine stations can add 171 each during peak demand, and for reserve duty.

COAL BASE

The future expansion of Escom's generating capacity, at least until late in next decade, will be based on coal which – as a primary energy source – directly and indirectly provides about 75 percent, South Africa's energy.

At present two major coal-fired power stations, each with a capacity of 00 MW are being constructed. A third similar station has reached its final design stages.

The equipment ordered Escom comes from a world market with Germany, the United Kingdom, France, Italy, Sweden, an and the united States the major suppliers.

Escom's first step in the nuclear direction was taken 1976 when a turnkey con- for a PWR nuclear power station was placed with a French consortium.

The Koeberg nuclear power station, near Cape Town, will have two reactors each with a capacity of 922 MW(e). Construction is proceeding and the first set is to be commissioned at the end of 1980. The second a year later.

Hydro electricity, due to climatic and geographical reasons, will never form a major part of Escom's generating capacity.

The Drakensberg pump storage scheme in northwestern Natal will add 1 000 MW within the next five to six years. The total potential of hydro power of economic significance in this province is about 5 000 MW. A smaller pumped storage scheme near Tulbach, northeast of Cape own, could add a further 1 000 MW.

During 1977, Escom accepted (plus or minus) 820 MW of electricity from the Cabora Bassa scheme in Mozambique on a commercial basis. This will eventually increase to (plus or minus) 1 700 MW. 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 well ahead. The complexity of this planning, in terms of finance and technical expertise, is fully realised when it is considered that by 1982 Escom will have an installed capacity of 20 000 MW, nd at the enc 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 course which is yielding satisfactory results.

As a public utility which obtained, in the 53 years of its existence, loans from South African, European and American sources it now plans extensive self-financing through allocating funds accuring from tariffs.

Three internal funds – the Capital Development Fund, the Redemption Fund and the Reserve Fund will provide part of the required capital. In 1977, R180 million, as part of a public loan of R250 million, were provided by these funds.

Escom is working towards supplying as much as 65 percent, of its total capital requirements through its self-financing programme.

The importance of such future planning must be evaluated against the background of expected capital expenditure (at 1977 prices): Escom is committed to a capital expenditure amount of R2 100 million in respect of contracts already signed.

NEW PROJECTS

These contracts cover all of Escom's major capital expenditure projects presently being undertaken including Koeberg nuclear power station (1 844 MW), Matla power station (coal-fired, 3 600 MW), Duvha power station (coal-fired 3 600 MW). Capital expenditure for the financial year 1976 amounted to R643 million, of which 25 percent was obtained from internal sources.

In respect of contracts already placed extended credit facilities for 66 percent of the totals have been successfully negotiated.

The role which Escom plays in the national economy of South Africa is an important one.

Electricity contributes 20 percent to the total energy consumption in this country – which means that Escom provides approximately 17,8 percent 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 investments.

Construction prices down

CONSTRUCTION and engineering prices are now about 10 percent, cheaper than they were a year ago in spite of statutory steel and other price increases, states Mr. Len Taylor, joint managing director of Bentley and Taylor Structural Engineering, Durban.

Mr. Taylor says that tender prices are being slashed to get contracts. In order to keep the wheels turning some companies were operating at cost,

There was little alternative and only the established, efficiently run companies, with sound financial backing, would survive.

"The recession in the construction industry is with us because people are like sheep. We follow each other with thoughts like: Should we expand now or wait and see what happens in Rhodesia?

"The Government and business leaders should make a positive approach to the present construction industry's slump and now

Oil sanctions

FIN MAIL
30/9/77

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This bogey is gaining strength at the UN. But SA is by no means as vulnerable as many think

Of all the talk of sanctions and embargoes against SA currently gathering momentum at the UN, that of a total oil blockade sends the iciest shivers down South African spines. For, goes the widely held assumption, the Republic is totally dependent on imports of crude oil. Without it, we're doomed.

Indeed, all our crude oil requirements are imported. But, unlike Japan, the UK and even the US, this country does not run on oil. Of our total energy needs — and it's really energy that we're talking about — only about one quarter is based on oil. Coal keeps SA's wheels turning.

This doesn't mean we don't need oil. We do — at an estimated rate of some 320 000 barrels a day (bpd) or 15,4 Mt a year. At about R80/t this means a foreign exchange drain of almost R1 300m a year.

Our own oil production, from Sasol I, the country's oil-from-coal plant, amounts to an estimated 5% of petrol demand, which is pretty meagre. So an oil boycott, assuming that all oil-producing nations would agree to it, bearing in mind the current world glut of oil, and assuming that a blockade could be effected, would have grave consequences for our economy.

But would it bring SA to its knees?

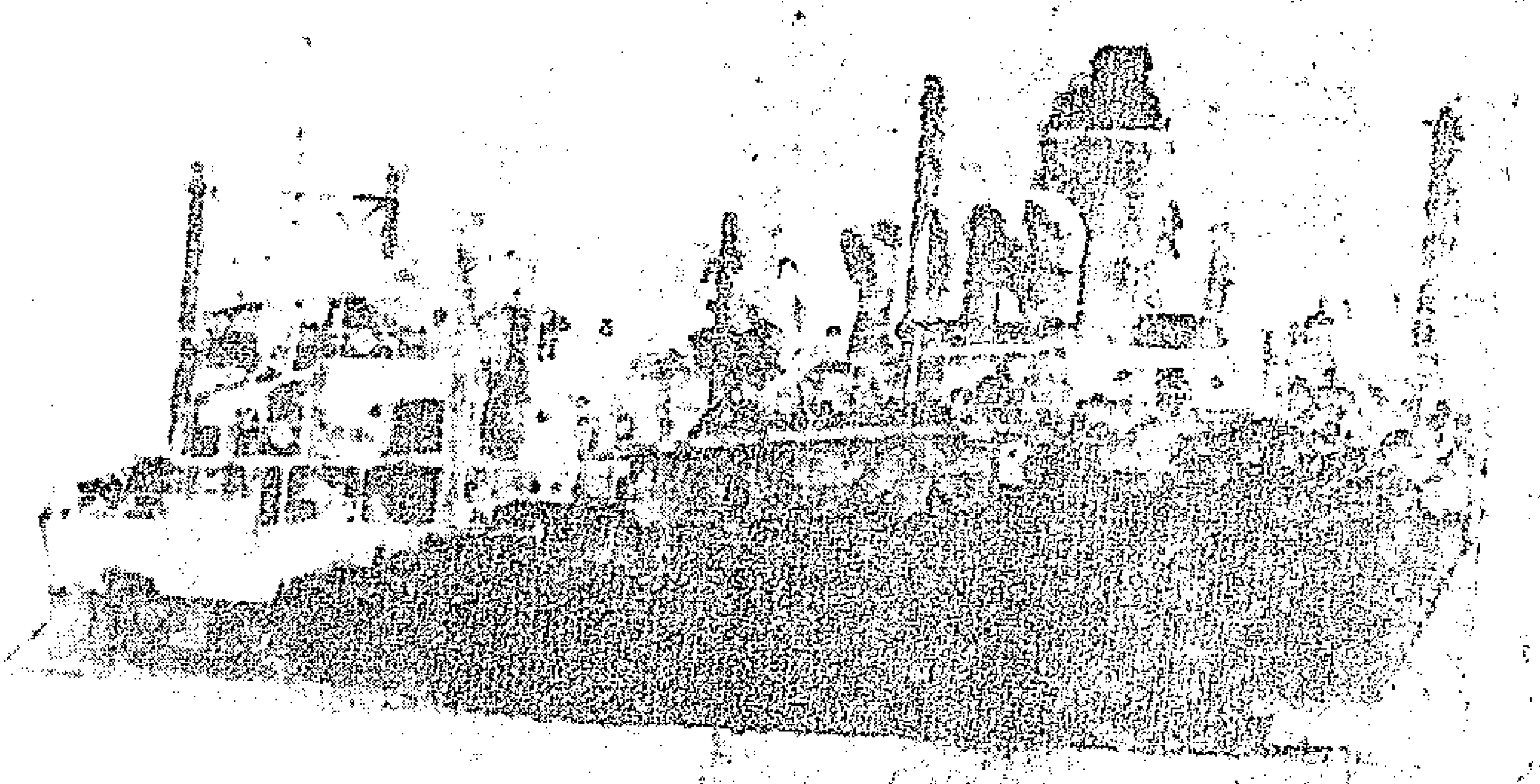
In a seige, oil's major importance is as a source of energy and transportation. At present, SA's four major refineries produce almost 60% of a barrel of oil in the form of light and middle distillates — petrol, paraffin, diesel fuel, etc. Almost 25% is in the form of heavy ends, industrial furnace oil, bunkers, etc (of which we have too much).

But the refineries have embarked on plant upgrading programmes (at an estimated total cost of R160m) which will change the ratios by 1980. By then, hopefully, they'll be producing about 69% in light and middle distillates and only some 16% of the heavy stuff.

Fat lot of good this exercise will be, of course, if there's no crude pouring in to be refined. But what is important is that, in the face of an immediate oil blockade, the country needs time. Until 1980 81 to be exact, when the giant Sasol II oil-from-coal plant comes on stream.

And time SA fortunately has, because of the fact that its planners have been not-so-quietly stashing away crude oil in disused mines and various other holes in the ground since the middle Sixties. Current estimates (although nobody *really* knows) is that the Republic has crude oil reserves of some 42Mt, or just over two and a half years' supply at present consumption.

In the face of sanctions, however, this supply would be stretched in a number of ways. There would have to be very strict energy saving measures, cutting back on domestic transportation (air, road and rail). For while petrol is a problem, diesel



Flashback to the Beira Blockade . . . grabbing a sanctions buster

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Urgent import protection pleas made to Government

Sun. Trib. **Finance Reporter** 2/10/77

THE growing concern of local industrialists over protection from import competition in what they claim are strategic industries is reflected this week in urgent pleas from the electric machine and chemical industries.

The electric machine industry, made up of GEC Machines, Siemens and Hawker Siddeley Africa Machines, have made an urgent application to the Government for import protection.

Spokesman for the industry, Vic Penaluna, marketing manager of GEC Machines, points out that most countries of the world, including Australia, have protection for electric motors, but in South Africa the protection (which was initiated many years ago) covers only the very small machines up to 250 kw.

Electric motors could be classed as a strategic industry because the motors are required for any new electrical plants such as for Escom and the mines. Growth of the industry keeps pace with the growth of electrical supply in the country and needs have doubled over the past 10 years.

Penaluna adds that the industry is confidently expected to double again in the next 10 years and to meet anticipated demand the three companies in this industry have just undertaken mammoth expansion plans running into millions of rands.

Unfortunately the industry cannot meet the low prices of imported electrical machines, especially those from Japan, who, Penaluna explains, often sell at subsidised prices.

Because contracts for this type of equipment are usually placed two to three years in advance, the recession is only just starting to make itself felt in the industry. There seems to be little in the way of orders ahead, although for the past year, the industry has been booming with orders from Sasol II, Richard's Bay heavy mineral deposits, and Anglo American's Ergo project.

Meanwhile a hard-hitting plea for State corporations to buy South African when it concerns strategic industries, instead of supporting imported and generally subsidised competitive products, was made by Hendrik Smit, chairman of Sentrachem, in the group's annual report.

He says: "With the country going through a particularly difficult period it is sometimes highly disappointing to find State corporations importing requirements which are available from local sources, merely because favourable credit facilities are offered through the Government-assisted export subsidies in the supplier countries."

His views have been echoed recently by spokesmen not only from the electric machines industry, but also from the cables, chains and aluminium sectors, who have all been hard-hit by State department buying of imported products, sometimes referred to as "dumped".

Smit adds that ineffective or insufficient duty protection for local industry is another matter which should be remedied as the possible inflationary disadvantages of more effective protection for appropriately selected industries would be far outweighed by the advantage derived from fuller employment and an improved balance of payments.

He adds that if the South African economy is to recover fully the closest possible co-operation between Government and industry is required. And he urges the Government to formulate an immediate plan of action for promoting industrial growth.

"At present there seems to be an unfortunate absence of action regarding this matter," he states.

Smit advocates a plan of action which he considers the Government would be well advised to follow. It includes the following:

- A review of the tax system as it affects the manufacturing sector — giving tax incentives for capital investment for additional production capacity.

He adds that current investment incentive should be made permanent and improved to avoid a "flat spot" in the investment cycle and to compensate for the escalating replacement costs of new capital equipment.

- A more positive role of the taxation system such as that followed in Sweden, should be carefully considered by the fiscal authorities.
- Greater tax incentives for exports.
- Greater tax incentives for decentralisation such as those followed in other industrialised countries.

Professional, Prop and Manager	1	95	5,72
Skilled	11	153	9,20
Semiskilled	18	337	20,27
Unskilled	23	389	23,40
Admin., Clerical	11	90	5,41

SUNDAY TRIBUNE, OCTOBER 2, 1977

WORLDWIDE LACK OF INTEREST IN FUEL SAVING

By ESMOND FRANK (53)

AN ECONOMIC method of extending the world's rapidly dwindling resources of liquid fossil fuel, such as oil, is being hamstrung by international indifference to fuel conservation.

This allegation is made in a statement released to Tribune Finance in Johannesburg this week by the British Perkins Engines group.

The company claims that the production by refineries 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 maximum fuel availability from crude oil inherent in the [illegible] fuels and [illegible] engine [illegible] statement says [illegible] fossil fuels."

[illegible]

resources and their conversion to liquid fuels are at present obsessed with the need to satisfy the exacting demands of the inefficient gasoline engine.

"This illogical stance reduces the thermal efficiency of coal conversion to gasoline to around 30 percent.

"A fuel suitable for the injected stratified charge engine would raise the conversion efficiency to 70 percent."

Governmental conservation activities expressed through fiscal policies, road speed regulations and environmental legislation, the company observes, have been notable by their absence.

Reluctant

"The automotive industry, as represented by the major United States companies, obsessed with the need to meet progressively tighter exhaust quality standards over a demanding time-span, have been reluctant to adopt new developments," says Perkins.

It adds that while the main oil companies accept the case and feasibility of a wide-cut fuel scenario, they [illegible] progress by [illegible] and [illegible] to their [illegible] and marketing strategies unless forced to do so by [illegible].

"And the regulating bodies have shown almost total lack of interest."

If you like coal fired power stations then you'll love nuclear power stations . . . JAMES CLARKE of CARE compares their records.

How safe are power stations?

Star 3/10/77

(55)

An American environmental medical scientist, Dr Merrill Eisbund, 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 near nuclear plants.

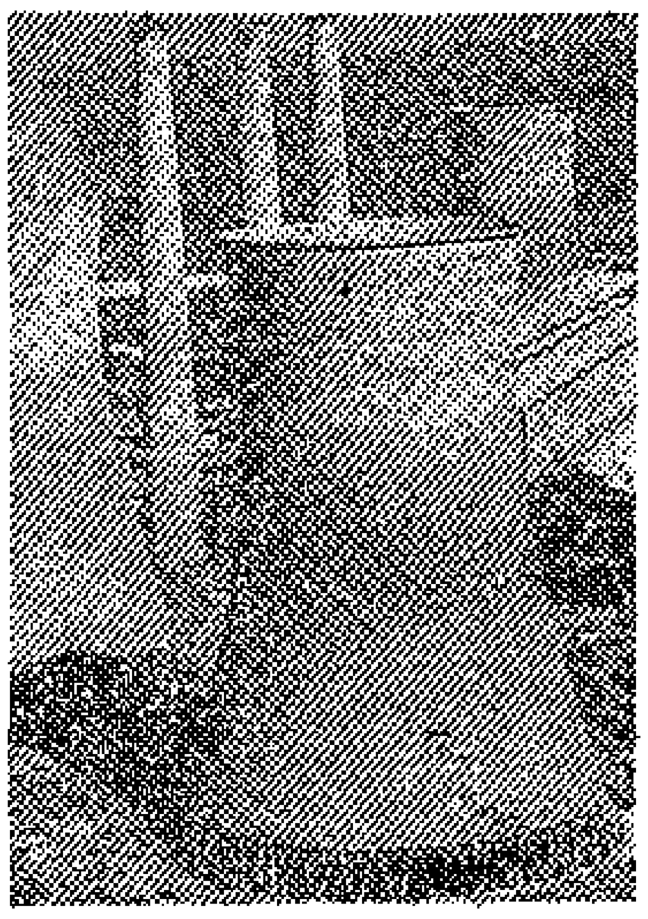
It is quite a thought for those living in the Witbank-Middelburg region. There are now eight power stations in the area.

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 Escom's grid some stations burn more than 30 000 tons a day.

Camden, Hendrina, Arnot and Kriel 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 of 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 432 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.

The 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 surest 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 centring on the argument that the nuclear programme should wait until safe disposal is assured. A number of nuclear scientists agree.

Until then it would be a case of rather the devil you know.

Standard petrol price call

D.D. 4/10/77

(55)

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 well 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 throughout the Republic ... and a standard coal 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 one commodity, it must also be applied to all other commodities. One of the reasons for the abnormally high 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.

Primary So...

Thucydides

Plutarch ... The Rise ...

Xenophon ... Hellenica

Plato ... Symposium

Andocides ... On the My...

... Against A...

Aristophanes ... Frogs

Nepos ... (with Flo...

Aristotle ... Constitut...

Isocrates ... XVI Conce...

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N Mercury 4/10/77

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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 if 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 then 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 spoilt South Africans wear spectacles.

MARTIN A. DONALDSON

Glenwood

(55) FM 14/10/77

Schlesinger . . . a sombre warning

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 "12 energy 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

Star 6/10/77

PARIS — Major oil consuming nations will today sign a series of agreements on the development of new energy sources to reduce their dependence on oil in the next decade.

Members of the International Energy Agency (IEA) plan to co-operate in developing coal, solar energy, water, subterranean rock, and wind power as alternate power sources.

The agreements, including two to be signed in Bonn tomorrow, will be part of the 19-nation IEA's campaign to ward off what the agency's experts believe could be a crippling energy crisis from 1985 onwards.

They predict a world shortage of oil if action is not taken now to curb growing consumption, particularly in the United States.

Informed sources said 17 IEA countries, the leading industrial nations of the non-communist world, would be involved in one or more of the projects, as well as the European Common Market as a group.

The programmes are designed to find ways of squeezing maximum energy out of available natural resources.

West Germany and the United States will co-operate in a scheme to refine liquid derived from coal and to improve the extraction of coal gas.

Other projects cover solar power experiments in southern Spain, ways of tapping the energy in the so-called "hot rock" far below the earth's surface, and low cost production of hydrogen from water.

The agreements are being signed as the IEA's second Ministerial conference ends today with targets expected to be set for energy conservation up to 1985.

The IEA, formed in 1974 after the five-fold increase in oil prices, brings major energy consuming countries together to co-ordinate supply policies and to explore new fuel sources and conservation techniques.

At the opening session of the Ministerial conference yesterday, speakers warned governments against being lulled into a false sense of security, because of a temporary oil glut as new fields in the North Sea, Alaska, and Mexico start production.

Conference chairman Mr Alastair Gillespie, Canada's Energy Minister, said these new reserves added only a few years to the world's oil supplies at current consumption levels.

The IEA forecasts that, by 1985 unless present policies are changed, world demand for Opec oil will be 42-million barrels a day, compared with 31-million barrels now.

Agency experts said that, while it was technically possible that Opec production capacity by the middle of the 1980s could reach 44-million barrels a day, only a few oil producers would wish to maintain maximum output. — Sapa-Reuter.

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They don't need our bunkers

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Sunday Times · Business Times 16/10/77

By TONY KOENDERMAN

THE BUNKERING of international shipping in South African ports is 40 per cent below what it was before the reopening of the Suez Canal in June 1975, according to oil industry sources.

This has had a marked effect on the refining industry here, as heavy fuel oil represents about 25 per cent of the product out of the barrel.

The problem has been accentuated by a reversal of the pattern of conversion by industry from coal to fuel oil.

And although two-thirds of the 30-million barrels of oil carried daily on the international sea lanes goes round the Cape, none of these oil tankers put into South African ports for refuelling.

This fact is of significance in the light of the threat of oil sanctions, because it demonstrates that the international oil trade is not dependent on the goodwill of South Africa.

However, about 60 per cent of the dry cargo shipping that passes the Cape on its way to and from the Far East is dependent on refuelling here.

South African oil companies have been making expensive modifications to their refineries in order to extract a greater proportion of the lighter fractions, particularly petrol and diesel fuel, and less heavy fuel oil from the barrel.

But there are limits to what can be done with an existing installation.

The rising curve of demand for petrol has also levelled off since the 1973 oil crisis, and current demand is about the same as it was four years ago.

Restrictions on trading hours, speed limits, the depressed economy and television have all combined to hold demand down.

This puts oil company profitability under considerable pressure. The companies have not had an increase in their absolute margin on petrol sales since 1960, which means that the gross mark-up against the duty-paid landed cost of oil has declined from 37 to 10 per cent.

Said an oil company executive: "We have been very lucky if we have maintained profits during this period, but the capital employed has risen tremendously."

Dit sukkel lekker!

RAPPORT 16/10/77

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TERWYL Suid-Afrika afstuur op 'n ernstige energiekrisis, gaan dit maar broekskeur om die oorblywende steenkooltjies te administreer, te beheer en beleid te implementeer.

Só skets afgevaardigdes by vandeesweek se energiesimposium in Pretoria die prentjie in private gesprekke.

Die Departement van Mynwese sê vir die mynmaatskappye: Jong, julle moet meer steenkool uit die grond haal.

Maatskappy: Goed, maar dit sal my soveel kos.

Mynwese: Jammer, ek het niks met die prys te doen nie. Dit word deur die Departement van Handel bepaal.

Handel maak die prys. Hy het geen enkele geoloog of myningenieur nie. Dis 'n liewe, goeie departement, maar die tegniese kennis het hy nie om prys te kan bepaal nie.

Die mynmaatskappy myn om 'n wins te kan maak. Die prys is laag. Steenkoolpilare is goedkoper om die dak op te hou as stutwerk. Net 30 persent van die steenkool word uitgehaal. Die res bly ondergronds, vir die land verlore.

Dr. Franz Quass, voorheen van Soekor, is in ope debat kwaad vir die mynmaatskappye. Deur hul herwinningskoers op te stoot na 50 persent, die Amerikaners se mikpunt, is daar nog genoeg steenkool vir dekades en dekades in Suid-Afrika. Hy wil die mynbase Siberië toe stuur.

Dr. Bill van Rensburg wys hom daarop dat die Amerikaners se 50 persent 'n mite is. Dis nader aan 14 persent.

Evkom, groot-groot aankoper van steenkool, is deur wet verplig om sy steenkool ten goedkoopste aan te koop. Die Pryskontroleur se pryse tel nie vir hom nie.

Hy bie ten laagste. Die myn moet kostes sny om wins te maak. Onder die grond groei die steenkoolpilare.

Ons moet 'n sentrale energiebeheerliggaam hê wat sal toesien dat sterk seksionele belangegroepe nie die ewewig versteur tussen prys en die mynkoste nie, sê 'n man oor 'n koppie tee. After all, ons is 'n kapitalistiese land.

Daar word nou gesê ons is oor vyftien jaar in die pekel met ons steenkool. Die uitvoere gaan opgestoot word. Mag dit gebeur? vra 'n man met druiwesap in die hand.

Verlede jaar verstrengel die beplanningskabel heeltemal. Die Departement van Handel stel die Gefedereerde Kamer van Nywerheid in kennis: Sê asseblief vir jou lede hulle moet by olie bly. Hulle moenie oorskakel na steenkool nie, ons het nie genoeg nie.

Suid-Afrika het bitter min goeie steenkool. Die bietjie hoëgraadse steenkool wat daar is, moet vir metallurgiese doeleindes benut word.

Van iewers moet 'n opdrag aan die verbruiker kom: Jy moet 'n steenkool met 'n hoër as-inhoud gebruik, die ander is broodnodig vir die verwerking van ons staal en ander produkte.

Die opdrag kom nie. Dit lê iewers verstrengel in aanbevelings en kommissieverslae, sê 'n ander.

Die bietjie mense wat ons het om dinge bymekaar te help pluk, is versprei en die koördinasie nie altyd van die beste nie.

Daar is 'n handvol by die Departement van Beplanning se sekretariaat; hopeloos te min.

Daar is 'n paar by die staatsmyningenieur se kantoor. Hulle kyk na veiligheids- en gesondheidsaspekte by die steenkoolmyne.

By Geologiese Opnames is 'n paar geoloë wat kyk na die geologiese aspekte van steenkool.

By die Atoomkragraad kyk 'n paar na uraan.

Die private maatskappye het heelwat meer mense en heelwat meer kundigheid in sake soos geologie, mynbou en steenkoolverdeling. Maar hulle word nie betrek by die beleidsaspek nie.

Iewers moet daar een sentrale liggaam kom. En 'n nasionale energiebeleid.

REFER

International Boundaries
Provincial Boundaries
Multiple Track Railways
Single Track Railways
Electrified Railways
Narrow Gauge Railways
Service Railways
National Roads
Main Roads
Secondary Roads
Other Roads
Tracks and Footpaths
Power Lines
Telephone and Telegraph Lines
Post and Telegraph Offices, Police
Stations and Posts, Stores, Hotels,
Schools and Places of Worship
Lighthouses and Marine Lights
Marine Beacons
Trig. Beacons (Number to right and height bel

Steenkool, uraan kan dalk nie betyds red nie

KRISIS MET SA ENERGIE

VAN DIE vier geleerdes glo net dr. Frans Quass, heel links, dat die energie-oordeeldag nie so naby is nie. Die drie ander, prof. Bill van Niekerk van die RAU, prof. Ian Fells van Brittanje en dr. Ab Flowers van Amerika, regs, waarsku in 1985 gaan die energiestroom begin opdroog.

Lees ook DINK WEER op bl. 19

SUID-AFRIKA is op pad na 'n krisis met sy steenkool en uraan — die twee energiebronne wat tot dusver wyd beskou is as voldoende om die land ondanks oliesanksies en tekorte langdurig aan die gang te hou.

Ontstellende gegewens oor hoe min steenkool ons werklik oor het en die uiters beperkte rol wat uraan, sonkrag en ander alternatiewe bronne van energie in krisistye kan speel, is dié week in Pretoria by 'n energie-simposium van die WNNR uitgengesit.

Die room van Suid-Afrika se olie-, steenkool-, uraan- en sonkragkenners plus kenners uit Amerika en Brittanje het daar die huidige en toekomstige energiebehoeftes van Suid-Afrika en die wêreld uitgepluis. 'n Prentjie is geskets wat selfs die kenners in die gehoor geskok het.

Uit die mond van dr. Dawid Kotzé, direkteur van energie by die Departement van Beplanning.

● Suid-Afrika se groot energie-alternatief, steenkool, gaan binne vyftien jaar moontlik nie in ons behoeftes kan voorsien nie. Die stories dat ons steenkool 'n paar honderd, selfs duisend jaar, kan hou, is onsin.

● Die tweede groot hoop, die yslike uraanafsettinge, verteenwoordig in die praktyk net 'n vyfde van Suid-Afrika se steenkoolbronne en sal dus nie baie lank as alternatief vir steenkool kan dien nie. Dis omdat vandag se kernreaktors sulke reuse hoeveelhede uraan as brandstof nodig het.

● Nog geen ekonomies ontginbare olie- of gasbronne is gevind nie en die enigste ander noemenswaardige bron van energie — hidro-elektriese krag — kan in Suid-Afrika maar net 'n klein rol speel weens die watertekort.

● Son-, wind-, getykrag en ander bronne van hernieubare energie sal nie betyds 'n noemenswaardige rol kan speel nie; en

● Die Groot Krisis, die dag wanneer die vraag na olie groter gaan wees as die aanbod, word om en by 1985 verwag.

In wese het dr. Kotzé se referaat en die hele boodskap van die simposium neergekom op 'n noodkreet: Mense, ons, die tegnoloë, sal julle nie betyds kan help nie. Noodmaatreëls moet getref word en dit moet nóu getref word.

Die skokkendste van alles was dat dit duidelik geblyk het dat Suid-Afrika vier jaar ná 1973 se oliekrisis en met net nog vyftien jaar oor om die ontginning en benutting van sy kosbare steenkool en uraan ten beste te beplan, nog geen nasionale energieplan het wat dit moontlik sal maak nie.

„Regerings is verantwoordelik vir die formulering en implementasie van 'n samehangende en geïntegreerde energiebeleid. In besonder is daar 'n behoefte om korttermyn-lapmiddels te vervang deur buigsame langtermynbeplanning en om te voorkom dat korttermynmaatreëls langtermyndoelwitte in gevaar stel . . . 'n totale energieplan het 'n dringende noodsaaklikheid geword," het dr. Kotzé gesê.

Dr. Kotzé se aaklige prentjie van waarnatoe Suid-Afrika en die wêreld op pad is, is beaam deur kenners soos prof. Ian Fells, voorsitter van die Brandstofinstituut aan die Universiteit van Newcastle in Brittanje; prof. Bill van Rensburg, nuwe hoogleraar in energiestudie aan die RAU; en dr. Ab Flowers van Amerika.

Hul waarskuwing stem ooreen met 'n verslag wat pas by die Harvard-Universiteit gepubliseer is nadat 75 verteenwoordigers van die 15 grootste Westerse olieverbruikerslande 'n ondersoek na alternatiewe energiebronne ingestel het.

Hierdie verslag en ander dringende waarskuwings van Westerse tegnoloë het verlede week grootliks daartoe gelei dat Amerika by monde van sy energieminister, James Schlesinger, gewaarku het dat politieke onrus in die tagtigerjare gaan uitbreek indien die wêreld nie nou stappe doen om olievoorrade te spaar en alternatiewe energiebronne te ontwikkel nie.

In Pretoria, buite die splinternuwe lesingsaal, die trots van die WNNR, in die teekamer en by die hotel waar die afgevaardigdes tuis was, is die benarde toestand waarin navorsing oor en die benutting van Suid-Afrika se energiebronne tans beplan word, druk bespreek.

Die gefragmenteerde, ongekoördineerde pogings moet saamgevat word onder 'n enkele departement van energie, is gesê. Die burokrate sal die situasie nie betyds kan red nie. Dit moet 'n statutêre liggaam wees, met energiekommissarisse aan die hoof, was die ander denkrigting. Oor een punt was daar konsensus: hoe ook al of wat ook al, dit moet nou gebeur.

Dis dringend omdat dit tot dertig jaar verg om nuwe tegnologieë te vestig en dit baie tyd kos om nuwe myne en kernreaktors op dreef te kry.

Verskeie afgevaardigdes het 'n omvattende program bepleit waarin die gewone man — en politici — ingelig moet word oor die omvang van die vinnig naderende krisis. Die algemene geloof is dat die tegnoloë iewers met kern- of sonkrag 'n deurbraak sal maak. Dis presies wat nie besig is om te gebeur of betyds kan gebeur nie, is gesê.

So lyk die prentjie:

Kernkrag: Die snelkweek-reaktor, wat meer brandstof ontwikkel as wat hy gebruik, is nog steeds in die ontwikkelingstadium. As konvensionele reaktors op groot skaal aangebou sou word om die verwagte tekorte aan te vul, sal die wêreld se bewese uraanafsettinge binne twaalf jaar gedaan wees.

Net om in die helfte van die jaar 2 000 se verwagte energietekort te voorsien, sal daar van nou af elke week wêreldwyd drie kernreaktors van 1 000 MW elk tot aan die einde van die eeu opgerig moet word, sê prof. Fells. Daar is, afgesien van die uitwissing van die wêreld se bestaande uraanafsetting, geen hoop dat dit gedoen sal kan word nie.

Steenkool: Dis die enigste vorm van energie wat op die kort termyn verligting kan bring. Maar ontsaglike probleme word ondervind om dit op groot skaal te ontwikkel, insluitende die beskikbaarheid van kapitaalreserwes, die behoud van omgewingstandaarde, die verkryging en opleiding van werkkragte, lang afleweringstydperke van masjinerie en lang vestigingstydperke van tot vyf jaar per myn.

En wat Suid-Afrika betref, kan ons binne vyftien jaar probleme met ons reserwes ondervind indien die verwagte aanvraag gemeet word aan die beskikbare voorrade.

Hidro-elektriese krag: Dit verskaf tans 1,7 persent van die wêreld se energie. Dit kan moontlik teen enorme koste en omgewingsprobleme binne dertig tot veertig jaar verdubbel word, sê prof. Fells.

Son- en windkrag en ander bronne van energie: Optimisties gesien, kan dit teen die jaar 2000 hoogstens in 10 persent van die wêreld se energiebehoeftes voorsien.

Dr. Kotzé skets die gevolge van die komende energietekort:

● 'n Stormloop gaan ontstaan na die wêreld se laaste oorblywende fossielbrandstowwe.

● Die opul-lande gaan al hoe militanter raak in hul eise en die pryse van olie ingrypend verhoog.

● Die meeste lande sal chroniese betalingsbalansprobleme ondervind, buitelandse handel sal afneem, werkloosheid sal hoogty vier en daar sal ekonomiese en maatskaplike agteruitgang wees.

● Die prys van alle produkte wat baie energie in die vervaardigingsproses verg, sal ingrypend styg.

Doen iets voordat dit te laat is, was die pleidooi dié week uit Pretoria.

Energie: 'n Krisis

WANNEER kry Suid-Afrika eendag 'n nasionale energiebeleid? Hoe lank nog voordat daar uitsluitsel gegee word oor die Petrick-kommissie se belangrike aanbevelinge oor die steenkoolbedryf? Wanneer word die gebrekkige koördinasie en fragmentasie beëindig wat heers tussen die mense wat besluite moet neem oor die benutting van Suid-Afrika se lewensbelangrike energiebronne?

Niks het die verwarring, die gebrek aan koers en antwoorde op die komende energiekrisis beter geïllustreer as die vraag wat die WNNR se dr. R. B. Anderson dié week op die energie-simposium in Pretoria gestel het nie.

Mense, het hy met verwysing na onrusbarende waarskuwings oor die komende krisis gevra, wat staan Suid-Afrika te doen?

Dr. Dawid Kotzé het die antwoord gesien in 'n gebalanseerde benutting van Suid-Afrika se uraan- en steenkoolbronne.

Van die Atoomkragraad sê mnr. R. B. Anderson het 'n teenantwoord gekom: Koeberg se kernsentrale kos R1 000 miljoen, en sy prys kan verder styg. In terme van sy reuse-koste lewer hy maar net 1 000 megawatt.

„Uit 'n ekonomiese oogpunt gesien, kan ons vir geruime tyd nie na kernkrag kyk om in Suid-Afrika se kragbehoeftes te voorsien nie, selfs al was die tegnologie en kapitaal beskikbaar," sê die man van die Atoomkragraad.

Prof. Bill van Rensburg, voorsitter tydens hierdie ope bespreking, wys op die stelling reeds gemaak deur die Atoomkragraad se mnr. K. T. Brown: Deur Koeberg-reaktors te gebruik, die enigste wat vandag se tegnologie kan lewer, sal ons uraanreserwes daal tot 20 persent van ons steenkoolreserwes. Hulle vreet net te veel krag.

Sonkrag is 'n hulp, maar geen antwoord nie. Deur sonverwarmers op groot skaal aan te bring vir die verhitting van water, kan minder as 1 persent van die huidige gelewerde Evkom-krag bespaar word, sê die kenner by die WNNR se bounavorsingsinstituut, mnr. W. N. Cawood.

Selfs vir hierdie bietjie verligting sal regeringshulp nodig wees — verpligte aanbring van sonverwarmers in staatsgeboue, hospitale, slagplase, miskien belastingtoegewinge aan die mense wat dit wel aanbring. Dis reeds die geval in Rhodesië, waar spotgoedkoop hidro-elektriese krag beskikbaar is. In Israel word reeds 25 persent van alle huishoudelike 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 energiebeleid gee nou aanleiding tot ernstige kritiek. Die eerste skote het enkele weke voor vandeesweek se kongres geknal.

In sy intreerede as hoogleraar in energiestudies by die RAU het prof. Van Rensburg gewaarsku dat een van die belangrikste redes vir die gebrek aan die bewaring van energie en die ontwikkeling van nuwe bronne die houding is „van die oorgrote meerderheid politici in die Weste, wat nie hierdie komplekse probleem verstaan nie en meer daaroor besorg is om die volgende verkiesing te wen as om die ongewilde stappe te steun wat noodsaaklik is as die Weste die Opec-wurggreep wil afskud".

Veels te min word gedoen om die publiek en leiers in te lig oor die omvang van die probleem, het hy gesê. Baie van die navorsing is ongerig, die regte mense om die probleme op te los, word nie in genoegsame getalle opgelei nie, en ons verkwis die tyd tot ons beskikking.

Hoe nader die professor aan eie huis gekom het, hoe skerper was die kritiek:

„Ons doen hopeloos te min navorsing op die meeste gebiede van die energieprobleem en lei nie naastenby [illegible] op om hierdie probleme te ondersoek nie. Ons publiek en beleidmakers lewe meestal in 'n salige gekkeparadys en daar is tans min sprake van 'n geïntegreerde energienavorsingsprogram.

„Wat energie-beleid betref, is die meeste groepe in die openbare sowel as die publieke sektore meer daaroor besorg om hul eie belange te beskerm as om saam te werk vir die instelling van 'n gesonde energie-beleid en 'n uitvoerbare energieprogram," het hy gesê.

Hy het gepleit dat die private sektor ten volle betrek moet word by die opstel en implementering van 'n nasionale energiebeleid.

„Die huidige oorkoepelende raamwerk, wat bestaan uit 'n Kabinetskomitee vir energie, 'n beleidskomitee vir energie wat bestaan uit verteenwoordigers uit die staat- en semi-staatsektore, en 'n sekretariaat in die Departement van Beplanning en die Omgewing, blyk in die praktyk onvoldoende te wees om hierdie uiters belangrike taak aan te pak.

„Daar is nie voldoende kanale vir raadpleging met die private sektor nie en baie belangrike besluite oor energie kan geneem word sonder dat die energiebeleidskomitee geraadpleeg word.

„Ek het hoë agting vir die werk van die sekretariaat, maar hy is hopeloos te klein om die hele probleem te takel. (Daar is ses of sewe kenners, sê hy later. Vergelyk dit gerus met die sowat 1 000 beroepslui in diens van die Departement van Landbou.)

Wat steenkool betref, het hy gepleit vir 'n nasionale steenkooldatabank sodat volledige inligting oor alle eienskappe van alle soorte Suid-Afrikaanse steenkool op deurlopende basis beskikbaar sal wees. So 'n inventaris is tydens die dienstydperk van die Petrick-kommissie ondersoek, maar nooit weer op datum gebring of uitgebou nie. Inteendeel, dis „gruwelik" verwaarloos.

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gemoedig word, met volle voorsiening vir die herstel van die oppervlakte en arbitrasie vir die aankoop van myn- en oppervlakregte. Baie meer aandag moet geskenk word aan die skeiding van kwaliteitsgrade om te verseker dat ons skaars bronne van hoëgraadse of metallurgiese steenkool nie verbrand nie.

Prof. Van Rensburg is een van die manne wat, soos die Petrick-kommissie aanbeveel het, pleit vir die instelling van 'n statutêre liggaam met heeltydse energiekommissarisse en genoeg kundige personeellede met duidelike wetlike magte.

'n Finale besluit oor die aanbevelinge van die Petrick-kommissie, wat onder meer handel oor die noodsaaklikheid van steenkoolbewaring, hoe dit gedoen moet word en netelige sake soos die uitvoer van steenkool, is dié week deur verskeie van die simposiumgangers bepleit. Selfs deur dr. Franz Quass, voorheen van Soekor, die een man wat stroomop gebeur het in die vaste oortuiging dat Suid-Afrika nog sommer volop steenkoolvoorrade het.

Die gesloer met die Petrick-aanbevelings vertel ten beste hoe sukkelend dit op die oomblik op beleidsgebied gaan.

Toe die Departement van Beplanning in 1967 'n omvattende opname van

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sonder beleid

Dink Weer

Onder redaksie van Rykie van Reenen en Andries van Wyk

Suid-Afrika se steenkoolbronne gelas, moes hulle vasstel dat die Regering se Steenkooladviesraad 'n aantal jare lank geen enkele vergadering gehou het omdat hulle klaarblyklik geen probleme vir die steenkoolbedryf voorsien het nie.

Daar is bevind dat bewaring noodsaaklik is en uitvoerige aanbevelinge 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 Petrick-kommissie gelas om ondersoek in te stel na die wenslikheid van steenkoolbewaring.

Die Petrick-kommissie het die Van Rensburg-verslag bevestig en hom sterk ten gunste van die bewaring en 'n algehele hersiening van die prysbeheerstelsel 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 Petrick-aanbevelinge. 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 gegrond. 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 energiebedeling nou so dringend bepleit word.

„Ons het," sê prof. Van Rensburg, „reeds jare en honderde miljoen ton steenkool vermors."

CT 21/10/77

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OIL in R1,7m cash deal

By Paul Dold
Financial Editor

OVENSTONE INVESTMENTS is selling its 92 percent stake in Ovco Construction Holdings and the deal will lead to a cash injection into the Oil group of some R1 750 000. Last night's announcement said the deal would have no material affect on OIL's earnings or net assets.

Oil will be selling the Ovco holding company but retains the construction and building interests; thus the Bellandia arm will remain part of the group.

The identity of the buyer has not been disclosed but I gather it is not a Cape Town group nor is it listed.

Ovco minorities are to be offered 275c a share in line with what major shareholders will be receiving which is a handsome premium on the current price of 60c. The pref offer is 120c for every 6 percent pref.

Minorities will be delighted at the bid, and for OIL's part the R1 750 000 cash will be handy at a time when the fishing industry is going through a lean period.

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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.

Natal Mercury 25/10/77

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Capital told of hydro-power plan

Mercury Reporter

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 Tradings Committee yesterday Mr. Waddy suggested the council updated 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.

RAPPORT 23/10/77 (55)

SÓ MOR KRAG

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 steenkoolreserwes daagliks vermors omdat die bewaring van energiebronne nie deel is van Evkom se opdrag nie, sê mnr. Mike Johnson, navorser by die WNNR in Pretoria.

Al waarin Evkom tans belangstel, is dat sy kragsentrales heeldag vol-uit moet werk, want hoe meer elektrisiteit verbruik word, hoe beter word sy kapitaaluitgawe aan kragopwekkers benut. Só sal Evkom voortgaan om die land se „goedkoop" steenkool op te brand, indien daar nie dadelik vereis word dat die bewaring van ons energiebronne ook een van Evkom se doelstellinge moet wees nie, sê mnr. Johnson.

Kenners wat verlede week die energiekongres van die WNNR bygewoon het, meen ons steenkoolreserwes sal in die huidige trant minder as dertig jaar hou. Mnr. Johnson was een van die sprekers en het op 'n vraag gesê dat hy en die WNNR se Bounavorsingsinstituut nou besig is om die hele kwessie van die Carlton se kragverbruik te ondersoek.

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 besparing aan skakelaars en ligbuise — wat langer hou as hulle nie kort-kort aan- en afgeskakel word nie — is groter as die besparing wat hulle sou hê 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 praktyk sê mnr. Johnson: „Ek kan nou al sê dat Evkom geen aandag 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 energiebronne nie, sê mnr. J. Norman, Evkom se hoofingenieur. Ook dit is nie aan hom opgedra nie.

Die wetgewer se opdrag aan Evkom moet dringend gewysig word om energiebesparing in te sluit, sê 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 dadelik begin word om vooruit te beplan en om alternatiewe energiebronne te ontwikkel. Tot dusver is daar nog net vaagweg gepraat van kernkragsentrales en vrede met ons swart buurstate sodat ons hul groot hidro-elektriese bronne kan benut, sê hy.

Sover vasgestel kon word, is Pretoria die enigste stad in die land wat reeds stappe gedoen het wat tot moontlike elektrisiteitbesparing kan lei.

Deur 'n nuwe tariefstelsel word huishoudelike verbruikers aangemoedig om 'n toevoerpunt met 'n kleiner vermoë te aanvaar. Só word die verbruiker verplig om suiniger met sy krag te werk. Die stadsraad se kapitaaluitgawe word op hierdie manier gesnoei en die stad hoef minder duur elektrisiteit van Evkom af te kry.

27/10/77

Daily Mail

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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 loss leaders.

"I think South Africa must learn from other countries. We would be failing in our duties if we did not warn consumers against over-reacting, which would lead to millions of rands 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.

(55)
FM 28/10/77

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 *piece de resistance* another 30 MW will be wired direct to Beira and about 5 MW consumed locally.

Off-site progress isn't quite so spectacular with Hidroelectrica de Cabora 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.

ties in cases where a second bond is needed.

Bifsa speakers urged the government not to create a maze of restrictive legislation to deal with a situation that has already been corrected by the market.

Many of the Fouché commission's proposals, particularly the stringent ones aimed at regulating the activities of township developers, were criticised at Plettenberg Bay as unjustified interference with the free enterprise system.

Most important, Bifsa delegates argued that while the aim of the Fouché commission was to find ways of providing more houses at lower cost, implementation of some of its suggestions could lead to just the opposite.

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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 P 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 R78,9 million and after tax profit R53,7 million. Sales turnover of group products rose to a record of R681,3 million from R562,4 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 900 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 as before the cost of the township and housing, interest during construction and working capital, should remain within the previous estimate of R2 458 million.

If proper allowance is made for the effect of the devaluation of the Rand and escalation in material, equipment and labour costs over which Sasol has no control, the definitive estimate again demonstrates, within a margin of error of less than ten per cent, the accuracy of Sasol's first global estimate of the capital cost submitted in May *1974 and on which the Government decision to proceed with the project was based.*

From the outset it has been pointed out that the economic

the pre-tax profit of the past year with that of the previous year, an adjusted figure of R5 million more realistically indicates the actual increase in profit. When evaluating the increase in after-tax profit from R30,1 million to R53,7 million the same considerations apply. Furthermore, you will notice from the accounts that the tax has been materially reduced by higher investment allowances on new plants commissioned in Sasolburg during the year under review.

The sales turnover of group products for the year was R681,3 million. If the cost of purchased feed stocks is deducted from this figure, R389,7 million remains, representing the value added to the raw materials and feed stocks processed. Of this figure, R156,6 million was paid to the Government in the form of excise and income taxes.

The delay in completion and commissioning of the gas expansion scheme, to which I shall refer again later, led to a considerable loss of production which will extend into the current accounting period. Notwithstanding this adverse development and the reduction in demand for a number of products, the turnover at constant factory prices for the year under review, showed a modest increase of 2 per cent.

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 R26,3 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 contribute 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 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 Kominic. 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 contemplating the construction of gasification plants to augment their dwindling natural* gas resources.

being maintained during the construction period between escalation in the capital cost of plant on the one hand, and the price of OPEC crude oil on which the price of Sasol's products largely depends, on the other. Taking into account the escalation of capital costs and increases in the OPEC crude oil price to date, the calculated initial profitability of the undertaking at full production remains virtually unchanged. The actual profitability after commissioning could, however, still be influenced by the movement of OPEC crude oil prices during the remaining construction period in relation to the escalation of plant costs in that period.

I should like to remind you that the main object of Sasol II is to diminish South Africa's dependence on imported petroleum and to reduce the heavy outlay in foreign exchange to pay for these imports. The estimated saving in foreign exchange when Sasol II is in full operation, is R350 million per annum.

Because South Africa has to import the bulk of its petroleum requirements and will have to continue doing so even after the completion of Sasol II, any increase in crude oil prices will harm the national economy, and add to the heavy burden which oil imports have already placed on the country's foreign exchange resources.

Should the crude oil price continue to rise after completion of Sasol II, as is widely predicted, the saving in foreign exchange which will be brought about by the project, will not only increase, but the profitability of the project and its value to the country will be enhanced.

The 1976/77 period was very frustrating for energy planners in most parts of the world. Capital cost inflation and the lack of buoyancy in most economies created financing problems for the planners who had envisaged huge energy schemes for the substitution of petroleum immediately after the 1973 oil crisis.

In the United States it was particularly noticeable how the 1977 Carter energy plan, directed largely towards the conservation of energy, differed almost completely from the 1973 Nixon "Project Independence" which had visualised self-sufficiency in energy by the early 1980's, mainly by means of petroleum substitution projects and the development of new domestic energy sources. In fact, oil imports increased in the meantime from 35 to 46 per cent of the total United States oil supply.

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. There is no doubt that the conversion of coal to oil requires large capital investment. But the same applies even to conventional energy conversion, as evidenced by the financing problems being experienced in furnishing new electricity generation capacity.

Over the last few years a stronger awareness has developed of the need to use to best effect our main source of energy, i.e. bituminous coal. In this regard a brief comparison of the Sasol II technology for producing oil from coal with that of electricity generation from coal, is relevant. The amount of energy in the products of Sasol II which is obtained from a ton of coal, is in fact about 15 per cent more than the energy which is obtained in the form of electricity from the same ton of coal in the most up-to-date coal-burning power station of conventional design.

The team of men who will take up the leading positions in our Secunda operation have now been selected and have begun the task of setting up the organisation that will be responsible for commissioning, operating and maintaining the new works and mine.

Sasol is fortunate to have assembled over the years a strong team of skilled and experienced operating personnel at the Sasolburg plant. Most of the key operating positions at Secunda can therefore be filled from within the organisation with all the advantages which will accrue from this arrangement. For the remainder we will recruit the required staff locally. Detailed programmes have been drawn up for the training of these recruits.

The movement of staff to Secunda will create many opportunities for plant personnel to acquire greater responsibilities at Sasolburg. As staff are reassigned to Secunda, existing departments will be reorganised to achieve even greater manpower efficiency.

Financial results

The group profit before tax of R78,9 million mentioned in my opening remarks indicates an increase of R26,5 million over the results of the previous year. Although the continuous increase in profit is a source of great satisfaction to the people of Sasol, it is only fair to remind shareholders that the results of the past two years are not comparable. In the previous year's accounts it was explained that the "last in – first out" method of stock valuation was introduced for the first time, and this change in method of stock valuation and other non-recurring adjustments reduced the previous year's published pre-tax profit by an amount of approximately R21,5 million. When comparing

Sasolburg operations

In spite of poor geological conditions encountered in the southern area of the mine, an increased total of 4,7 million tons of coal was mined at the Sigma Colliery during the year. The longwall unit contributed 1,1 million tons. Nearly two years after installation, production from the unit is still somewhat lower than originally planned, but Sigma's longwall operation is nevertheless regarded as one of the more successful applications of its kind known in the mining world today. The experience gained enabled us to plan improvements to the mining equipment which will be introduced early in 1978. It is confidently expected that these modifications will lead to a further substantial improvement in the performance of the unit.

The longwall operation at Sigma is leading to considerably improved recovery of our coal resources in the Sasolburg area, and the experience gained here, will be invaluable for our Bosjesspruit mine at Secunda.

At Sasolburg, pure gas production from existing facilities exceeded the forecast for the year. Steady and efficient operation of the Fischer-Tropsch synthesis units was maintained throughout the year. One of the three Synthol reactors at Sasolburg was extensively modified. This was done to test at full commercial scale the heat removal system which will be incorporated in the Sasol II reactors. It was clearly demonstrated that the new reactor design represents a substantial advance in Sasol's Synthol technology.

In the previous Chairman's Address the possibility of a delay in the gas expansion scheme due to manufacturing difficulties, was anticipated. I regret to say that this project suffered a most serious setback when critical gasification equipment which had been under outside fabrication for a considerable period, could not be completed and supplied to the project. Hurried arrangements had to be made for equipment on order for the Sasol II gasification plant to be diverted to Sasolburg in order to minimise the loss of production as much as possible. Completion of the project is now scheduled for early 1978 but additional gas should already become available before the end of 1977.

Extensions to the coal handling and preparation facilities, oxygen plant and gas purification plant, forming part of the gas expansion scheme, have all been completed and successfully commissioned.

Continued attention is being given to loss control in factory operations. The injury frequency rate during the year per million manhours was reduced to the lowest level yet of 1,38 compared with 2,53 the previous year.

Refining

The improvement reported last year in the results of Sasol's crude oil processing in the Natref refinery has been maintained and consolidated. Even though heavier crude oils were processed by Natref, a most satisfactory yield of white products of 84,3 per cent was obtained. This high yield of white products, consisting mainly of motor and aviation fuels, compares very favourably with the yield of 60 to 65 per cent at the coastal refineries. At Natref, therefore, much less imported crude oil is required to produce the same quantity of products than is the case at the coastal refineries. The higher yield at Natref is made possible by the hydro-cracking facilities which have continued to operate satisfactorily during the year.

Marketing

Sales of chemicals exceeded R121 million and exports achieved a new record of nearly R12,5 million, compared with R8,4 million during the previous year. The bulk of our exports was high melting-point Fischer-Tropsch waxes, for which the demand increased rapidly during the year.

The down-turn in the economy reduced the demand for a number of our products, mainly ethylene and butadiene which are feedstocks to the plastics and rubber industries, and industrial gas for distribution by Gaskor. The lower demand is likely to extend throughout the present financial year. In the case of Gaskor this should, however, be offset by additional sales in the Olifantsfontein industrial area which has been served by Gaskor from the third quarter of 1977.

Despite adverse conditions in the civil engineering construction industry, sales of bitumen and road tars through our affiliated company, FTS Binders (Pty) Limited, showed an increase.

Research and Development

During the year the needs of Sasol II again received the highest priority amongst our research and development activities. Very good progress was made in developing a scheme for the treatment of liquid effluents for Sasol II. The system which was selected will convert aqueous effluent to cooling water.

Further work was done in our Sasolburg research laboratories and pilot plants to ensure that an improved catalyst would be available to the Sasol Synthol process to be used at Secunda.

Sasol II project

An advanced level of activity has now been reached in all facets of the project. Design engineering work was 50 per cent complete at the end of the year under review and 90 per cent of the engineering will have been completed by the end of 1977. Procurement has advanced to the stage where all major contracts and purchase orders will have been placed by the end of 1977. Civil construction work at the Secunda site is in full swing and mechanical erection work has started in earnest.

Up to the end of the financial year 228 contracts had been placed with South African contractors and consultants. The total value of these contracts and purchase orders for equipment and materials placed locally amounted to R838 million.

It is estimated that R1 405 million, or 57 per cent of the total capital cost of the project, will be spent in South Africa. This is a considerable achievement for a project of this magnitude and sophistication. Foreign purchases and contracts are concerned mainly with specialised and proprietary equipment not manufactured or normally obtainable in the Republic. The favourable ratio of South African expenditure to total capital cost could not have been achieved without a deliberate policy of giving preference to South African manufacturers and contractors wherever it was technically and economically justifiable. In this way, despite the economic recession, the workshop capacity of local manufacturers of equipment and materials such as pressure vessels, exchangers, dished ends and piping will be utilised to a very high degree.

By the end of the year under review, approximately 6 million manhours had been spent on construction work. The labour force currently engaged in construction on the site, is approximately 10 000. This figure will increase to about 15 000 when the peak of construction is reached towards the end of 1978. In accordance with Sasol's objective to maximise the use of South African labour on construction, extensive training programmes have been set up by the managing contractor to augment the skilled and semi-skilled workers who are being recruited in the local labour market.

Outside the factory boundary, the infra-structure consisting of rail and road access, drinking water supply, domestic sewage treatment and temporary electricity supply, has been completed. The first heavy equipment to be imported through Richards Bay and transported by road to Secunda, arrived on site in September 1977.

At the Bosjesspruit Colliery, mining operations commenced at the western shaft system on 1 June 1977 to prepare the mine for full production when the main plant goes into operation. Seventy per cent of the surface facilities have been completed, including the western shaft system.

By using a combination of longwalling and mechanical continuous mining methods, it is estimated that at Bosjesspruit approximately 60 per cent of the mineable coal reserves will be extracted as opposed to an average of about 30 per cent in the case of the conventional board and pillar mining method used in South Africa. Sporadic dolerite intrusions in the Bosjesspruit coal field are expected to complicate mining operations somewhat, and techniques are being developed to establish the presence of such intrusions well in advance of short-term operations.

At the end of the year under review, 585 permanent housing units had been completed in the township of Secunda and the population stood at approximately 2 800. The proclamation of the township took place on 22 June 1977.

Conclusion

It would not have been possible to undertake a project of the magnitude and extent of Sasol II without the dedicated men and women of Sasol; those directly engaged on the project, those assisting in specialised fields and in particular the group looking after our existing operations and through their efforts providing the cash so vital to the success of our new venture.

The good progress on Sasol II would have been impossible without the goodwill and excellent co-operation received from the many authorities involved in the planning and execution of the project. We are indeed grateful for the assistance provided by the various government departments, the Transvaal Provincial Administration, the Reserve Bank of South Africa, the Railways and Harbours Administration, the Posts and Telecommunications Authorities, Escom, the Rand Water Board and the Southern Transvaal Bantu Administration Board.

I wish to thank my colleagues on the Board for their loyal support and active co-operation. I welcome Mr G A Macmillan and Mr J A Stegmann, who joined the Board during the year, and wish to pay tribute to Mr E Carter and Mr M T de Waal, who have retired as directors for their valuable contribution during their period in office.

Sasol profit climbs, No 2 plant advances

RDM 28/10/77

(55)

By CHRIS CAIRNCROSS
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 muscle 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 R53 700 000 compared with R30 100 000 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 R5-million difference between last year's pre-tax profit and that of the previous year would give the results 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 (R562 400 000). To give some perspective to the stock valuations, an amount of R291 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 R2 458-million.

As an energy-related industry Sasol's oil-from-coal technology seemingly makes more efficient use of bituminous coal — its main source of raw material — 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 15% more than the energy which is obtained in the form of electricity 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, 228 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 problems centre on difficulties in completing gasification equipment, which is being fabricated outside South Africa.

"Hurried arrangements had to be made for equipment on order for Sasol 2 gasification plant to be diverted to Sasolburg to minimise the loss of production as much as possible," he says.

NM 28/10/77

Sales turnover up for Sasol II

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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 profitabale 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 continuous increase in profit 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 R26,5 million before tax, are not comparable with last year's profits. — (Sapa)

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Suid-Afrikaanse Steenkool,- Olie- en Gaskorporasie Beperk

Voorsittersrede gelewer deur mnr D P de Villiers op die sewe-en-twintigste Algemene Jaarvergadering van die Korporasie op 27 Oktober 1977.

"'n Projek
van die grootte en omvang
van Sasol II
sou nie aangedurf kòn word
sonder die kundigheid en ervaring
van die toegewyde span manne en vroue
van Sasol nie."

Hierdie sewe-en-twintigste Algemene Jaarvergadering is die
eerste wat ons hou sedert die uittrede van dr P E Rousseau as ons
voorsitter. Veral wil ek hom bedank vir sy gewilligheid om nog 'n ter-
myn 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, beteken baie vir ons almal se gemoedsrus. Dr Rousseau het
Sasol as sy lewenstaak beskou en het sy stempel van absolute deeg-
likheid en onverskrokke deursettingsvermoë op die organisasie afge-
druk. Hiervoor sal Sasol hom altyd dankbaar bly.

Die afgelope jaar was weer 'n goeie een vir Sasol. Gekonsoli-
deerde wins voor belasting was 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 R681,3 miljoen. 'n
Voorkeurdividend van R720 000 en 'n verhoogde dividend van R9.8
miljoen op gewone aandele is verklaar.

In Junie vanjaar is die gedugte taak van die samestelling van
die gedetailleerde en omvattende beraming van die kapitaalkoste van
die Sasol II-projek voltooi. Die vorige beraming van die koste van die
fabriek en myn wat laat in 1975 opgestel is nadat op die finale proses-
skema besluit is, was R1 900 miljoen, gebaseer op pryse van Oktober
1975, of R2 458 miljoen met toelating vir koste-eskalasie tot projek-
voltooiing. Ek is bly om te sê dat die omvattende beraming daarop dui
dat die finale koste van die projek, uitgeslote soos voorheen die koste
van die dorpsaanleg en behuising, rente tydens konstruksie en be-
dryfskapitaal, na verwagting binne die vorige beraming van R2 458
miljoen sal bly.

Indien toelating gemaak word vir die effek van die devaluasie
van die Rand en eskalasie in die koste van materiaal, toerusting en ar-
beid waaroor Sasol geen beheer het nie, dan demonstreer die om-
vattende beraming weer eens, binne 'n foutspeling van minder as tien
persent, die akkuraatheid van Sasol se eerste globale beraming van
die kapitaalkoste wat in Mei 1974 voorgelê is en waarop die regerings-
besluit om met die projek voort te gaan, berus het.

Van die begin is beklemtoon dat die ekonomiese lewensvat-
baarheid van die Sasol II-projek afhanklik is van die handhawing

publiseerde winste verminder met ongeveer R21,5 miljoen. As ons
dan die jongste wins voor belasting vergelyk met dié van die vorige
jaar, sal 'n aangepaste syfer van R5 miljoen 'n meer realistiese beeld
van die winsstyging gee. Dieselfde oorwegings geld by die be-
oordeling van die styging in wins na belasting van R30,1 miljoen tot
R53,7 miljoen. Verder sal uit die rekeninge opgemerk word dat
belasting aansienlik verminder is deur die belastingkonsessies wat
toegestaan is op nuwe aanlegte wat gedurende die afgelope jaar in
Sasolburg in bedryf geneem is.

Die verkoopsomset van groepprodukte vir die jaar was R681,3
miljoen. Indien die koste van aangekoopte grondstowwe afgetrek
word, vind ons 'n toegevoegde waarde van R389,7 miljoen. Van
hierdie bedrag is R156,6 miljoen aan die Staat betaal by wyse van
aksyns- en inkomstebelasting.

Die vertraging in die voltooiing en inbedryfstelling van die
gasuitbreidingskema waarna ek later weer sal verwys, het aansienlike
produksieverlies meegebring, wat tot in die huidige boekjaar sal voort-
duur. Nieteenstaande hierdie nadelige verwikkeling asook 'n afname
in die vraag na 'n aantal van ons produkte, het die omset teen
konstante fabriekspryse 'n beskeie toename van 2 persent vir die jaar
onder beskouing getoon.

In verlede jaar se voorsittersrede is dit genoem dat 'n groot ge-
deelte van die onaangewende winste en ander kontantvloei voort-
spruitend uit die huidige bedryf vir die Sasol II-projek aangewend sal
word. Gedurende die afgelope boekjaar is 'n totaal van R26,3 miljoen
aangewend vir die vestiging van die Secunda-dorpsaanleg, behuising
en bedryfskapitaal.

Die program wat gesamentlik met die Regering opgestel is vir
die finansiering van die Sasol II-fabriek en -myn maak voorsiening vir
drie bronne van fondse. Leningskapitaal in die vorm van uitvoer-
krediete sal R492 miljoen bydra. R300 miljoen sal verkry word uit
Parlementêre bewilligings, waarvoor aandelekapitaal uitgereik sal
word, en die balans van die fondse, wat ook as aandelekapitaal
bestem is, sal deur die Staatsoliefonds voorsien word.

en -loodsaanlegte om te verseker dat 'n verbeterde katalisator vir ge-
bruik in die Sasol-syntholproses op Secunda beskikbaar sal wees.

Naas voortgesette navorsing om bestaande Sasol-prosesse te
verbeter, word daar ten opsigte van die langtermyn hoofsaaklik ge-
konsentreer op die ontwikkeling van alternatiewe prosesse vir die om-
skepping van steenkool in vloeibare brandstowwe.

Een van die alternatiewe prosesse waaraan Sasol baie aandag
gee, is die veredeling van steenkool deur 'n oplosmiddel. Hierdie
tegniek, wat bekend staan as SRC, lewer òf 'n vloeistof òf 'n vaste stof,
afhangende van prosestoestande. Die produk kan as sodanig as 'n
besoedelingsvrye brandstof gebruik word of dit kan verder verwerk
word tot motorbrandstof. Ons voel egter oortuig dat dit 8 tot 10
jaar sal duur voordat die SRC-proses vir die vervaardiging van motor-
brandstof gereed sal wees vir volskaalse kommersiële aanwending.

Alhoewel ons SRC-werk hoofsaaklik op die vervaardiging van
motorbrandstof toegespits is, was 'n interessante newe-resultaat die
bevinding dat die Sasol-proses uitnemend geskik is vir die veredeling
van Australiese bruinsteenkool tot 'n SRC-vastestof wat as plaasver-
vanger vir hoëgraadse kookssteenkool in die Japannese staalnywer-
heid gebruik kan word. 'n Samewerkingsooreenkoms is gesluit tussen
Sasol en 'n konsortium van Japannese maatskappye bekend as
Kominic. Volgens hierdie ooreenkoms sal verdere loodsaanlegwerk in
Sasolburg gedoen word. Sodra hierdie fase bevredigend afgehandel
is, sal 'n demonstrasie-aanleg in Australië gebou word, voordat daar
voortgegaan word met die oprigting van 'n volskaalse kommersiële
aanleg. Sasol dra geen finansieringsverantwoordelikheid nie, maar sal
lisensiegelde ontvang in ruil vir die kundigheid wat aan die onder-
neming beskikbaar bestel word.

Sasol se kennis en vernuf op die terrein van steenkoolverede-
ling bly steeds in aanvraag in baie lande van die wêreld. Vanjaar sal
Sasol 'n volskaalse vergassingstoets op Texas-bruinsteenkool in
Sasolburg uitvoer. Adviesdienste word nog steeds gelewer volgens
ooreenkomste met vier konsortiums van Amerikaanse gasversprei-
dingsmaatskappye wat die oprigting van vergassingsaanlegte oor-
weeg om hulle kwynende aardgasbronne aan te vul.

Sasolburg bedryf

pryse van OPEC-ru-olie wat in 'n hoë mate die pryse van Sasol se produkte bepaal. Inaggenome die eskalasie van kapitaalkoste en verhogings in OPEC-ru-oliepryse tot op hede, bly die onderneming se oorspronklik berekende winsgewendheid teen volle produksie feitlik onveranderd. Die werklike winsgewendheid na inbedryfstelling kan egter nog beïnvloed word deur die beweging van OPEC-ru-oliepryse gedurende die oorblywende konstruksietydperk in verhouding tot die eskalasie van aanlegkoste gedurende dieselfde periode.

Ek herinner u graag daaraan dat die hoofoogmerk van Sasol II is om Suid-Afrika minder afhanklik van ingevoerde petroleum te maak en om op hierdie wyse die groot besteding aan buitelandse valuta te verminder. Die beraamde besparing aan buitelandse valuta wanneer Sasol II in volle bedryf kom, is R350 miljoen per jaar.

Omdat Suid-Afrika die meeste van sy petroleumbehoeftes moet invoer, en selfs na voltooiing van Sasol II sal moet voortgaan om dit te doen, sal enige verhoging in die ru-olieprys die nasionale ekonomie skaad en ook die swaar las vermeerder wat olie-invoere reeds op die land se buitelandse betaalmiddele plaas.

Indien, soos algemeen voorspel word, die ru-olieprys aanhou styg na voltooiing van Sasol II, sal die besparing aan buitelandse valuta nie slegs toeneem nie, maar sal die winsgewendheid van die projek en sy waarde vir die land aansienlik verhoog word.

Die tydperk 1976/77 was vir energiebeplanners in die meeste wêreldelde besonder frustrerend. Kapitaalkoste-inflasie en 'n gebrek aan lewenskragtigheid in die meeste ekonomieë het finansieringsprobleme geskep vir die beplanners wat onmiddellik na die 1973-oliekrisis reuse energieprojekte vir die vervanging van petroleum in die vooruitsig gestel het.

Veral in die Verenigde State was dit opvallend hoe die Carter-energieplan van 1977, wat hoofsaaklik op energiebesparing gemik is, feitlik geheel en al verskil van die Nixon "Project Independence" van 1973, wat self-versorging ten opsigte van energie teen die vroeë 1980's beoog het, veral deur petroleumvervangingsprojekte en die ontwikkeling van nuwe inheemse energiebronne. In werklikheid het olie-invoere intussen toegeneem van 35 tot 46 persent van die Verenigde State se totale olietoevoer.

Met geredelike toegang tot relatiewe laekostesteenkool en 'n bewese olie-uit-steenkooltegnologie was ons in Suid-Afrika besonder gelukkig om so gou na die oliekrisis van 1973 te kon voortgaan met 'n grootskaalse projek vir die omsetting van steenkool in olie. Die omsetting van steenkool in olie vereis ongetwyfeld groot kapitale investering. Dieselfde kan egter ook van konvensionele energie-omsetting gesê word, soos trouens blyk uit die finansieringsprobleme wat met die voorsiening van nuwe elektrisiteitsopwekkingskapasiteit ondervind word.

Daar is tans 'n groter bewustheid van die noodsaaklikheid om ons hoofbron van energie, naamlik steenkool, op die mees voordelige wyse te benut. In hierdie verband is 'n kort vergelyking tussen die Sasol II-tegnologie vir die vervaardiging van olie-uit-steenkool en elektrisiteitsopwekking uit steenkool ter sake. Die hoeveelheid energie in die produkte van Sasol II wat uit een ton steenkool verkry word, is in werklikheid ongeveer 15 persent meer as die energie wat in die vorm van elektrisiteit opgewek word uit dieselfde ton steenkool in die mees gevorderde steenkoolkragsentrale van konvensionele ontwerp.

Die Secunda-bedryf se leierspan is so pas saamgestel. Hulle het reeds begin met die groot taak om die organisasie daar te stel wat verantwoordelik sal wees vir die inbedryfstelling, bestuur en instandhouding van die nuwe fabriek en myn.

Sasol is in die gunstige posisie dat hy oor die jare heen 'n baie sterk span kundige en ervare bedryfspersoneel by die Sasolburg-werke byeengebring het. Die meeste van Secunda se sleutelposte kan gevolglik van binne die Sasol-organisasie gevul word, met al die voordele wat daaruit voortspruit. Verdere personeel sal plaaslik gewerf word. Gedetailleerde programme vir die opleiding van hierdie personeellede word tans opgestel.

Die oorplasing van personeel na Secunda sal heelwat geleentheid skep vir fabriekspersoneel op Sasolburg om groter verantwoordelikhede te aanvaar. Namate personeel na Secunda verskuif, sal bestaande departemente gereorganiseer word ter bevordering van steeds groter mannekrag-doeltreffendheid.

Finansiële resultate

Die wins voor belasting van R78,9 miljoen, waarna ek reeds verwys het, toon 'n styging van R26,5 miljoen vergeleke met die vorige jaar. Hierdie voortgesette styging in wins gee vir ons by Sasol groot bevrediging. Dit is egter slegs billik om aandeelhouers daaraan te herinner dat vanjaar se resultate nie sondermeer vergelyk kan word met dié van die jaar tevore nie. In verlede jaar se rekeninge is verduidelik dat ons oorgeskakel het na die "laaste in – eerste uit"-voorraadwaarderingsmetode. Hierdie verandering in voorraadwaardering en ander eenmalige regstellings het verlede jaar se ge-

gebied van die Sigma-myn is 'n verhoogde totaal van 4,7 miljoen ton steenkool gedurende die jaar geproduseer. Die strookafbou-eenheid het 1,1 miljoen ton hiertoe bygedra. Na ongeveer twee jaar se bedryf is die produksie van die eenheid nog ietwat laer as wat oorspronklik beplan is, maar Sigma se strookafbou word nogtans in die mynbedryf beskou as een van die mees suksesvolle toepassings van hierdie tegniek. Die ondervinding wat ons reeds opgedoen het, het ons in staat gestel om verbeterings aan die mynboutoerusting te beplan wat vroeg in 1978 aangebring sal word. Ons het vertroue dat hierdie wysigings die werkverrigting van ons strookafbou-eenheid aansienlik sal verbeter.

Die aanwending van strookafbou by Sigma lei tot aansienlik verhoogde benutting van ons steenkoolreserwes in die Sasolburg-gebied en ervaring wat ons hier opgedoen het, sal van besondere waarde vir ons Bosjesspruitmyn op Secunda wees.

Op Sasolburg het suiwer gasproduksie uit die bestaande fasiliteite die beraming vir die jaar oorskry. Bestendige en doeltreffende bedryf van die Fischer-Tropsch-sintese-eenhede is gehandhaaf. Een van die drie Synthol-reaktore op Sasolburg is omgebou om die hitte-verwyderingsisteem vir die Sasol II-reaktore op kommersiële skaal te toets. Die bedryfstoetse het bewys dat die verandering in die reaktorontwerp 'n wesenlike vooruitgang in Sasol se Synthol-tegnologie verteenwoordig.

In die vorige voorsittersrede is voorsien dat daar moontlik 'n vertraging in die gasuitbreidingskema as gevolg van vervaardigingsprobleme kan voorkom. Ek is bevrees dat hierdie projek 'n besonder ernstige terugslag ondervind het toe dit geblyk het, na lang vertragings, dat kritiese vergassingstoerusting nie deur die leweransiers voltooi en aan die projek gelewer kon word nie. Om die produksieverlies so laag as moontlik te hou, moes onmiddellik reëlings getref word om toerusting wat vir die Sasol II-vergassingsaanleg bestel is, na Sasolburg te stuur. Volgens beplanning sal die projek nou aan die begin van 1978 voltooi wees, maar aanvullende gas behoort reeds voor die einde van 1977 beskikbaar te wees.

Uitbreidings aan die steenkoolbereidingsaanleg asook die suurstof- en gassuiweringsaanlegte, wat deel uitmaak van die gasuitbreidingskema, is voltooi en suksesvol in bedryf gestel.

Volgehoue aandag word verleen aan verliesbeheer in fabrieksbedryf. Die frekwensie van beserings per miljoen manure is gedurende die jaar verminder tot die laagste vlak wat nog bereik is, naamlik 1,38 vergeleke met 2,53 die vorige jaar.

Raffinering

Die verbeterde resultate van Sasol se ru-olieverwerking in die Natref-raffinadery, waaroor daar verlede jaar verslag gedoen is, is volgehou en verder gekonsolideer. Ten spyte daarvan dat swaarder ru-oliemengsels vanjaar deur Natref verwerk is, is 'n hoogs bevredigende opbrengs van 84,3 persent witprodukte verkry. Hierdie hoë opbrengs van witprodukte, wat hoofsaaklik uit motor- en vliegtuigbrandstof bestaan, vergelyk baie gunstig met die opbrengs van 60 tot 65 persent van die kusraffinaderye. Gevolglik het Natref aansienlik minder ingevoerde ru-olie nodig om dieselfde hoeveelheid produkte as die kusraffinaderye te lewer. Natref se hoër opbrengs kan toegeskryf word aan die voortgesette goeie werkverrigting van die hidrokrakers gedurende die jaar.

Bemarking

Die verkoopsomset van chemikalieë het R121 miljoen oorskry en uitvoere het die rekordwaarde van ongeveer R12,5 miljoen bereik vergeleke met R8,4 miljoen verlede jaar. Die meeste van ons uitvoere was hoë-smeltpunt Fischer-Tropsch-was waarvoor die aanvraag gedurende die jaar vinnig toegeneem het.

Die ekonomiese afplatting het die aanvraag na 'n aantal van ons produkte laat verminder. Dit geld hoofsaaklik etileen en butadieen as grondstowwe vir die plastiek- en rubbernywerhede, asook nywerheidsgas vir verspreiding deur Gaskor. Die verminderde aanvraag sal waarskynlik in die huidige finansiële jaar voortduur. In die geval van Gaskor behoort dit egter teëgewerk te word deur bykomende verkope in die industriële gebied van Olifantsfontein, wat sedert die derde kwartaal van 1977 deur Gaskor bedien word.

Ten spyte van ongunstige toestande in die siviele ingenieurskonstruksiebedryf, het die verkope van bitumen en padtere deur ons filiaal, FTS Binders (Edms) Beperk, toegeneem.

Navorsing en ontwikkeling

Gedurende die jaar het Sasol II se behoeftes weer eens die hoogste prioriteit in ons navorsings- en ontwikkelingsaktiwiteite geniet. Besonder goeie vordering is gemaak met die ontwikkeling van 'n skema vir die behandeling van uitvloeisel vir Sasol II. Hierdie stelsel sal uitvalwater in verkoelingswater omskep.

Verdere navorsing is gedoen in ons Sasolburg-laboratoriums

Die tempo van alle projekbedrywighede [illegible] persent van die ontwerp-ingenieurswerk is teen die einde van die jaar onder beskouing voltooi, en 90 persent van die ingenieurswerk sal teen die einde van 1977 afgehandel wees. Aankope het 'n gevorderde stadium bereik en al die hoofkontrakte sal teen die einde van 1977 geplaas wees. Siviele konstruksiewerk by die Secunda-terrein is in volle gang en meganiese oprigtingswerk het in alle erns begin.

Tot aan die einde van die finansiële jaar is 228 kontrakte aan Suid-Afrikaanse kontrakteurs en konsultante toegeken. Die totale waarde van hierdie kontrakte en plaaslike aankoopbestellings vir toerusting en materiaal het R838 miljoen beloop.

Daar word beraam dat R1 405 miljoen, of 57 persent van die totale kapitaalkoste van die projek, in Suid-Afrika bestee sal word – 'n besondere prestasie vir 'n projek van hierdie omvang en kompleksiteit. Buitelandse aankope en kontrakte het hoofsaaklik te doen met gespesialiseerde toerusting wat nie in die Republiek vervaardig word of normaalweg hier verkrygbaar is nie. Die gunstige verhouding van Suid-Afrikaanse besteding tot die totale kapitaalkoste sou nie bereik kon word sonder 'n doelbewuste beleid van voorkeur aan Suid-Afrikaanse vervaardigers en kontrakteurs waar dit tegnies en ekonomies geregverdig kan word nie. As gevolg hiervan sal die werkwinkelkapasiteit van plaaslike vervaardigers van toerusting en materiaal soos drukvate, hitteruilers, koepelente en pype, ten spyte van die ekonomiese resessie, in 'n baie hoë mate beset wees.

Tot aan die einde van die boekjaar is ongeveer 6 miljoen manure aan konstruksiewerk bestee. Daar is tans ongeveer 10 000 konstruksiewerkers op die terrein. Hierdie getal sal toeneem tot ongeveer 15 000 wanneer die hoogtepunt van konstruksie aan die einde van 1978 bereik word. In ooreenstemming met Sasol se oogmerk om Suid-Afrikaanse arbeid vir konstruksiewerk tot die maksimum te benut, is omvattende opleidingsprogramme deur die besturende kontrakteur in werking gestel om die beskikbare geskoolde en halfgeskoolde werkers wat in die plaaslike arbeidsmark gewerf word, aan te vul.

Buite die fabrieksgrense is die infrastruktuur soos spoor- en padverbinding, drinkwatervoorsiening, huishoudelike rioolsuiwering en tydelike elektrisiteitsvoorsiening reeds voltooi. Die eerste swaar toerusting wat deur Richardsbaai ingevoer en per pad na Secunda geneem is, het gedurende September 1977 op die terrein aangekom.

By die Bosjesspruit-steenkoolmyn het mynafbou by die westelike skagstelsel op 1 Junie 1977 'n aanvang geneem ter voorbereiding van die myn vir volle produksie wanneer die fabriek in bedryf kom. Sewentig persent van die bogrondse fasiliteite is voltooi, ingeslote die westelike skagstelsel.

Daar word beraam dat met die aanwending van gekombineerde strookafbou- en meganiese delwermetodes dit moontlik sal wees om ongeveer 60 persent van die ontginbare steenkoolreserwes by Bosjesspruit te benut, teenoor 'n gemiddelde van ongeveer 30 persent in die geval van die konvensionele pilaarafboumetode wat in Suid-Afrika gebruik word. Sporadiese dolerietindringings in die Bosjesspruit-steenkoolveld kan mynboubedrywighede moontlik bemoeilik. Gevolglik word tegnieke ontwikkel om die teenwoordigheid van sulke indringings vroegtydig vas te stel.

Aan die einde van die jaar onder beskouing was 585 behuisingseenhede in die Secunda-dorpsgebied voltooi, en die bevolking het op 2 800 te staan gekom. Die proklamering van die dorp het op 22 Junie 1977 plaasgevind.

Slot

'n Projek van die grootte en omvang van Sasol II sou nie aangedurf kon word sonder die toegewyde manne en vroue van Sasol nie; hulle wat direk gemoeid is met die projek, hulle wat behulpsaam is op gespesialiseerde terreine, en in die besonder die groep wat na ons bestaande bedryf omsien en wat deur hulle inspanning die deurlopende kontantvloei sal verseker wat so noodsaaklik is vir die sukses van ons nuwe onderneming.

Die goeie vordering wat met Sasol II gemaak word, sou onmoontlik gewees het sonder die goeie gesindheid en uitstekende samewerking van die onderskeie owerhede betrokke by die beplanning en uitvoering van die projek. Ons wil ons opregte waardering betuig vir die hulp verleen deur die verskillende staatsdepartemente, die Transvaalse Provinsiale Administrasie, die Reserwebank van Suid-Afrika, die Spoorweë- en Hawensadministrasie, die Pos- en Telekommunikasie-owerhede, Evkom, die Randwaterraad, en die Suid-Transvaalse Bantoe-administrasieraad.

Ek wil graag my kollegas in die Raad vir hulle lojale ondersteuning en aktiewe medewerking bedank. Dan verwelkom ek mnr G A Macmillan en mnr J A Stegmann wat gedurende die jaar tot die Raad toegetree het, en ek wil ook my waardering betuig teenoor mnr E Carter en mnr M T de Waal, wat as direkteure afgetree het, vir die waardevolle bydraes wat hulle gedurende hul dienstermyne gelewer het.

C.T. 31/10/77 /55

Afric Cables Forecast

VEREENIGING. – African Cables expects a continuation of present reduced demand during the current year which again commenced with a low order book, chairman, Mr W N Randell said in the annual report.

He said 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 taxed profit of R4,4m in year ended July 31, on sales of R39,9.

Projects such as Sasol 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. – Reuter

;e 4 for practical assistance)

:ourses.

and C) of courses listed on pages 6 to 7 ourse, preferably two, from column C n B to make a total of at least FOUR s 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).

55

'Nobody will stop nuclear development'

Star 3/11/77

Own Correspondent

CAPE TOWN — Nobody would stop South Africa in its endeavour 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 Dien Donne Farm, he said South Africa would continue with this endeavour 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 has resisted what was "a flagrant violation of the statute."

Dr Roux said when the Soviet news agency Tass recently alleged that South Afica 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 Arica 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.

Star 3/11/77.

Iran trades oil for nuclear power

(55)

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 Fouracade, the 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 Valery 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 eases the selling of important projects," he said.

However, Mr Poniatowski excluded the possibility of bartering arms for oil. Iran has bought rapier 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 over another Iranian-French deal worth R2 800-million.

Under the Thai deal France will supply Iran with two 900-megawatt nuclear reactors and 10 Franco-German airbus planes.

Mr Poniatowski's visit saw the deal through, apparently facilitated by a R1 500-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 90 percent of them. French exports to Iran were worth about R530-million last year.

Trade has boomed since 1971 when French imports from Iran were valued at about R141-million and exports to Iran were worth about R100-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 share of Iran's nuclear programme.

West Germany was the first Western country to win a contract to supply two reactors and informed sources 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 Citroen 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.

Sunday Times 6/11/77 (55)

The new dark age

THE world's energy outlook has become so bleak that some experts are talking of the emergence of a new dark age. In this article, Professor W. C. J. van Rensburg, director of the Institute of Energy Studies of the Rand Afrikaans University, explains the crisis.

SA power 'time bomb' has only a 15-year fuse

By MARTIN CREAMER

SOUTH Africa is on the road to an energy crisis.

The start of a world oil shortage is expected in 10 years.

Five years later, the growth rate of coal in South Africa will begin declining — and neither nuclear, solar, wind nor hydro power will be ready to fill the gap.

These grim forecasts are made by Prof Van 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 loss of this vital commodity, through wasteful mining methods and exports of high-grade coal, is continuing at an alarming rate.

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 Petrick Commission said the same two years ago.

Now 1990 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 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 so 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 an average grade South African coal then 20-million tons a year would not be excessive.

"But we are selling the high-quality coal. Clearer specifications are needed on the grades of coal that can be exported.

"Otherwise what will remain will be lower and lower in quality.

'We may soon be faced with a situation were we have to get people used to using coal of a very much lower grade than at present."

Won't nuclear energy form a coal substitute by 1990?

"South Africa is said to have 20 per cent of the world's uranium reserves but in terms of conventional reactors their energy content is equivalent to less than 20 per cent of our coal reserves.

"Nuclear energy would help but it would not be a complete substitute for coal."

PROFESSOR VAN RENSBURG
A bleak outlook.

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 e.T.

a|11|77

Two Arab states agree on oil price

(55)

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 co-ordination 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

12/11/77

(55)

Fears of rise in oil price

Mercury Correspondent

PRETORIA — Fears of another hike in the price of fuel early next year are mounting as the Opec countries prepare for their bi-annual 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 a 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.

(55)

SUNDAY TIMES, November 13, 1977.

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 ripcste 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 500-million 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.

Bid to hit back at UN embargo on arms to SA

"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 coaster 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 half-way 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 pre-empting 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 on 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

Dale-Rapport 13/11/77

(55)

WEENS die geweldige belangstelling wat gevolg het op Rondalia se beroep op die daarstelling van 'n jaarlikse energieprys 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 Vervoertrust wat as katalisator kan dien om alle idees oor energie en die vervoerwese te ondersoek.

Volgens mnr. C. M. Smith, ontwikkelingsbestuurder van Rondalia, het hierdie idee sy ontstaan te danke aan die geweldige reaksie wat Rondalia ontvang het sedert hy die instelling van 'n energieprys bepleit het.

Hierdie belangstelling het van die owerheid- sowel as die private sektor gekom en Rondalia ontvang steeds byna daagliks reaksie daarop.

Einsteins

Rondalia se voorstel vir die energieprys spruit uit 'n pleidooi om alternatiewe energiebronne te ontwikkel wat deur die uittredende Sekretaris van Handel, mnr. Joep Steyn, vroeër vandeesmaand by 'n simposium van die Instituut vir Meganiese Ingenieurs in Oos-Londen gelewer het.

Rondalia het toe voorgestel dat daar jaarliks 'n spesiale prys toegeken word aan die beste voorstelle en ontwikkelinge op die energie-gebied.

'n Aksie moet geloods word wat navorsers, ontwerpers, tegnici en alle belangstellendes tot innovasie-voorstelle op dié 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 Einsteins 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 deur te bied vir enige idee. Mnr. Smith sê dat daar 'n sterk behoefte vir iets in die land is wat 'n simpatieke oor vir alle voorstelle en idees moet hê. Daar sal uit die aard van die saak baie voorstelle kom wat aanvanklik onsinnig, onuitvoerbaar en mal kan voorkom. Maar dan moet 'n mens dit altyd in gedagte hou dat talle groot nuwe ontdekkings 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 aanslae van buite teen die land uiters ryp vir nuwe idees. 'n Man dink die beste met sy rug teen die muur en mnr. Smith glo dat ons werklik nou groot ontwikkelinge kan verwag.

Staatsteun

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 se nommer gedruk moet word. Behalwe staatsteun, kan ook nog verder gegaan word en vir elke motorryer gevra word om by die petrolpomp 'n paar sent by te dra elke keer wanneer hy sy tenk vul. As alternatief kan daar ook na die sterk fondse van die Strategiese Oliefonds gekyk word.

Hierdie fondse sal die trust nodig hê om in verdienstelike gevalle toekennings 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 ingespan word om te help en kan die trust ook aan hulle aanvullende toekennings maak.

Cape Times 24/11/77

Wits expert gives advice on SA oil

55

SOUTH AFRICA could build a new Sasol oil-from-coal plant every three years with the money it now spends on crude oil imports, according to the head of the Department of Business Economics at the University of the Witwatersrand, Professor Arndt Spandau.

Addressing the South African-German Chamber of Trade and Industry in Cape Town yesterday he said it was estimated that current stockpiles of oil in the Republic would last for four-and-a-half years with rationing.

Demand for oil in South Africa was now about 320 000 barrels per day, and this could be reduced to 205 000 barrels per day with rationing. Production by Sasols I and II could reach 134 000 barrels per day by 1981, 312 000 per day by 1987, and 500 000 barrels per day by the turn of the century.

The country's annual crude oil bill was about R1 300m, compared with the R4 000m cost of a Sasol plant.

Talks he had with chemists and engineers convinced Professor Spandau that the plants could be manufactured without imports. Petrol obtained from the Sasol process was superior to that from crude oil.

```
>115 READ(8,1)A
>*RESEQUENCE
>*LIST
100          DIMENSIØN A(5)
110          C=0.0
120          READ(8,1)A
130          DØ  1010 J=1,5
140          C=C+A*A
150  1010    CØNTINUE
160          WRITE (5,2) A,C
170  1       FØRMAT (5F5.0)
180  2       FØRMAT(1H ,'ANSWERS = ',6F10.
190          STØP
200          END
END ØF FILE
>

*SAVE TEST
DØ YØU WANT A GLØBAL SCAN?  NØ
>*RUN
DØ YØU WANT A GLØBAL SCAN?  NØ
CØMPILING...
12.0013.0014.0015.0016.00
 ANSWERS =    12.00    13.00    14.00    15.0
NØRMAL EXIT.  EXECUTIØN TIME:        16
*DIAGNØSTIC SCAN?  NØ
```

Yslike gasbron in see oopgeboor

OLIE: HOOP

Na 'n jaar weer so!

Rapport 11/12/77

55

Van DAVID MEADES en EDDIE BOTHA

DIE olie-hoop vlam weer hoog in Suid-Afrika. 'n Groot gasbron is die afgelope twee weke deur Soekor naby Mosselbaai oopgeboor.

Dit kom byna presies 'n jaar ná die belowendste tekens van ru-olie tot dusver in die see naby Mosselbaai gevind is.

Daar word gesê dat dit die grootste gasontdekking is wat nog aan die Suid-Afrikaanse kus gemaak is — en dat dit nat gas, 'n voorloper van olie — is wat ontdek is.

Amptenare van Soekor het egter dadelik gemaan dat Suid-Afrikaners nie op loop moet sit met die gasvonds nie. Dit is nog te vroeg om te bepaal wat die werklike waarde daarvan is.

In hierdie stadium kan net gesê word dat dit belowend is. In die volgende paar weke sal nog baie toetse gedoen word.

Maar op Mosselbaai en by die olieboor Sedco K is die opgewondenheid groot.

Daar word vertel dat die druk van die gas ná dit raakgeboor was, in een stadium so sterk was dat Sedco K self in gevaar was.

werknemers van Soekor en tegnici van Sedco K, wat na Port Elizabeth sou verhuis, is aangesê om hul reëlings te kanselleer.

Mnr. David de Villiers, voorsitter van Soekor, het gister op sy 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, en of dit ekonomies ontginbaar sal wees.

Dr. Piet van Zyl, bestuurende direkteur van Soekor, het gister op Hartenbos gesê dit is so dat op gas afgekom is, maar dat mense nie te gou optimisties moet raak nie.

Baie diep

Die jongste gasvonds is deur die olieboorplatform Sedco K sowat 70 seemyl suid van Mosselbaai raak geboor, blykbaar op Dinsdag, 29 November. Hierdie gat word naby die rand van die Agulhasbank geboor.

Dit is nie bekend op watter diepte die gas gevind is nie. Dit moet egter baie diep wees, want die gat was vroeg van-

* VERVOLG OP BL. 4 *

Hoop vlam op vir olie

* VERVOLG VAN BL. EEN *

jaar al meer as 900 meter diep.

Die gat is in dieselfde omgewing geboor waar Sedco K verlede Desember belowende tekens van ru-olie in die boorgat E-C/1 gevind het. Hierdie gat se olieversadiging was tot 55 persent, maar die rots om die boorgat is van so 'n aard dat die olie nie ontginbaar is nie.

Gevaarlik

Soekor, wat sedert 1965 reeds meer as R90 miljoen in die soektog na olie bestee het, sal waarskynlik nou nog sterker op die Agulhasbank aan die Kaapse Suidkus konsentreer.

Na verneem word, was die druk van die gas wat nou raak geboor is, so sterk dat die situasie in een stadium as gevaarlik beskou was. Die gat is intussen verseël met 'n modder wat daarin gepomp is.

'n Deskundige op die gebied, mnr. Rod McDonald, 'n Kanadees wat op Sedco K werk, is dadelik na die boor ontbied. Vir die volgende drie weke sal monsters geneem word en seismografiese ondersoeke in die omgewing gedoen word.

Weinig nut

In 1969 is die eerste gas op die Suid-Afrikaanse vastelandse plat naby Plettenbergbaai deur die Amerikaanse Superior-groep gevind. Hier is 'n baie groot gasreserwe bewys. Daar is egter toe gesê dat hierdie gas weens die geweldige koste om dit na die land te bring, net ekonomies ontgin sou kon word as nog een of twee gasvondse in dieselfde omgewing gedoen word.

As die jongste gasvonds dus aan die verwagtinge voldoen, raak die kans al hoe groter dat in Oos-Kaapland 'n groot energiebron ontdek kan word.

Die gas op sigself het egter geen onmiddellike voordeel vir die land nie. Gas is van weinig nut vir die vervoersektor en net 'n ru-olievonds kan hier help.

Baie duur

Gas kan oor die lang termyn wel aangewend word om ons steenkoolbronne aan te vul. Selfs dan sal dit steeds baie duur wees. Die jongste gasvonds is ook heelwat verder van die land af gevind as dié van die Superior-gat in 1969.

Oor die gerugte dat die jongste gasvonds so sterk is dat die gas by die olieboor se platform uitspuit, het mnr. De Villiers gesê dat dit heel normaal is. Gas wat onder druk onder die aardkors is, sal altyd na boontoe beur as dit raak geboor word. Daar kan dus geen besondere waarde hieraan geheg word nie.

Die meeste en ook die minste wat 'n mens in hierdie stadium oor die jongste vonds kan sê, is dat dit bemoedigend is en 'n beloning vir die toegewydheid van die Soekor-mense is, het mnr. De Villiers gesê.

Die boorgat waarin die gas gevind is, het nou die diepte bereik waar hy van 'n voering voorsien sal word. Dit sal waarskynlik nou eers gedoen word voordat verder geboor word.

Dit kan dan nog van ses weke tot twee maande duur voor die boorgat voltooi word. By elke boorgat word ná die seismiese navorsing tot 'n sekere diepte besluit en word die gat dan tot daardie diepte geboor.

En eers wanneer dit voltooi is, sal 'n behoorlike evaluering gemaak kan word. Aan die ander kant is olieboorwerk geweldig onvoorspelbaar. Dit kan ook gebeur dat 'n groot vonds baie gouer bepaal kan word, en net so kan daar ook heelwat goue... bepaal word of die g... „droog" is.

New Files can be catalogued while in CTS. The command to use is

*CREATE filename

Information needed to catalogue the file will be solicited from you.
e.g.

CTS has a super-editor which is active throughout progra... creation. This makes it very easy to correct errors whil... a program.

CTS editing is very similar to using the ED processor bu... added advantages. An example is the FIND command:

Standard form:

*FIND S [L][(i)][R][K]

where

S = character string to be searched for.

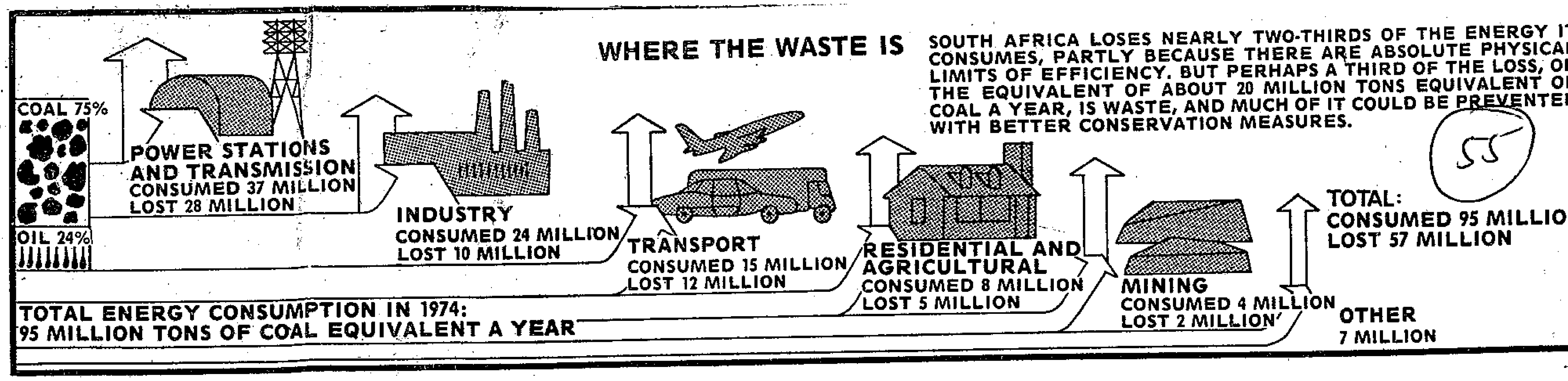
L = line limits between which search should tak... the form m,n or ALL.

(i) = column limits within which the search shoul... the form (i,j).

R = repeat option

K = modifies the match condition and can be any

Wasting away!



ENERGY CRISIS

Martin Creamer reports

SOUTH Africans are wasting vast quantities of costly energy — energy that is in increasingly short supply.

The equivalent of 20-million tons of coal goes up in smoke each year — with nothing to show for it.

The equivalent of another 37-million tons is lost because of the present technological limits on energy conversion, which would be prohibitively expensive to overcome.

It is lost along electricity transmission lines, in the form of heat up power station chimneys, in inefficient internal combustion engines, in homes, factories and offices, down mines and in stop-go traffic.

The waste represents more than 20 per cent of South Africa's energy supply a year, based on 1974 statistics — the latest available — and would be sufficient to keep the wheels of industry turning for nearly a year.

These startling facts emerged in a Sunday Times inquiry this week.

Coal, the country's only indigenous modern fuel, supplies 75 per cent of South Africa's power needs, imported oil 24 per cent, with tiny contributions from hydro power, wood and other fuels.

Priority

Because of coal's massive role, energy experts say as much of it as possible should be saved as an immediate priority.

Department of Planning data shows that energy equivalent to about 95-million tons of coal is pumped annually into the country's energy networks — 57-million tons of which does no actual work.

Only about a third of the power consumed is "useful" enegery — energy that actually does work.

Nobody seems to know precisely how much waste could be prevented or exactly how it is wasted. What is certain is that more energy emerges as "rejected" than as "useful" power, according to Planning Department figures.

President Carter is battling to get a tough and controversial energy-saving policy off the ground.

In South Africa, however, which is facing international hostility and threats of an oil embargo, there is still no comprehensive energy policy.

Package

To prod the nation to save power, Professor W C J van Rensburg, Director of Energy Studies at the Rand Afrikaans University, has proposed an energy package containing a mixture of carrots and sticks.

He said power losses in the transport sector were the worst. Four-fifths of the energy consumed did no actual work.

He believed a penalty tax should be applied to cars with excessive fuel consumption. More efficient cars should benefit from tax rebates.

Manufacturers should be induced to improve average fuel consumptions of their cars and there should be incentives to improve the efficiency of the internal combustion engine.

The taxman should take a closer look at company cars, which were perhaps not adequately taxed.

Lifts

"People with company cars have told me they don't even know the price of petrol because they never pay for it," he said. The prestige cars provided as company perks were often heavy on petrol.

All cars should be made to have a fuel consumption of not less than 10 km a litre as a start. A petrol company survey recently found the present average in economy runs to be about 8 km a litre.

Lift clubs, synchronised robots, staggered working hours and adherence to speed limits could further cut consumption.

Industry and commerce should do energy audits to find out whether they are using power in the most efficient way.

Recycled

Metals and plastics should be recycled wherever possible. "Producing a ton of recycled copper requires considerably less energy than producing a new ton of copper," said Professor Van Rensburg.

In the home, more than half the energy consumed is lost. In the United States it has been found that a hot-water geyser uses more energy than a refrigerator, colour TV, a freezer and air conditioner combined.

Solar water heating or dropping geyser temperatures several degrees, particularly in summer, could cut electricity bills and conserve power.

Americans have found that, by adjusting geyser temperatures from 65 to 50 degrees, electricity bills were cut by 9 per cent.

Washing dishes by hand is said to use more electricity than dishwashers because so much hot water goes down the drain when rinsing.

Frost-free fridges are said to use three times more electricity than ordinary ones.

The cost of heating in winter and air-conditioning in summer can be sharply reduced by having a well insulated loft.

On coal, Prof Van Rensburg emphasised that the biggest saving could be achieved by improved mining methods to step up the percentage extraction.

Expensive

Of South Africa's 91-billion tons of coal in the ground, only 25-billion can be extracted using conventional, wasteful mining methods.

"It's going to cost a hell of a lot and requi[re] enormous efforts by a[ll] sorts of people to al[le]viate the energy pro[b]lem, let alone solve it," he said.

"But four years aft[er] the Middle East oil cris[is] South Africans have fa[il]ed to get the messa[ge] that the era of cheap a[nd] seemingly limitle[ss] energy is over."

The public attitu[de] was reflected in spe[ed] limits. "After the 19[73] oil crisis, if you did mo[re] than 80 km an hour [on] the freeways, you we[re] regarded as a traitor.

"Today, if you don't [do] more than 90 you are [re]garded as a road ho[g]."

Plan could be on way

THE chairman of the Planning Department's energy policy committee, Mr Piet Pretorius, said he could not comment on energy-policy developments at this stage.

It is understood, however, that the department is working on a comprehensive energy policy for South Africa.

Many Western countries are moving towards policies of energy independence, according to a recent Planning Department report.

South Africa seems poised [to] move in the same direction.

The Minister of Mines, Mr Fan[ie] Botha, spoke this week of the po[s]sibility of a third Sasol, placing eve[n] more importance of coal. He al[so] criticised present wasteful metho[ds] of coal mining.

Experts say the threat of an [oil] embargo will focus greater attenti[on] on reducing waste energy and co[n]serving it for the country's futu[re].

WHERE SAVINGS COULD BE MAD[E]

SAVINGS ● = 20 000 Tons of coal equivalent a year

If electricity generation and transmission was 1% more efficient
●●●●●●●●●●●●●● 280 000 tons

If the transport sector became 1% more efficient
●●●●●● 120 000 tons

If householders and farmers could cut their energy losses by 2%
●●●●● 100 000 tons

If the mines cut energy losses by 2%
●● 34 000 tons

Plettenberg Bay gas strike 'is small'

Star 12/12/77

(55)

Soekor'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 seabed 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 Plettenburg Bay strike in 1969, only 20 km from the latest strike, and a high-pressure field near the Orange River mouth.

According to Soekor's public relations official, Mr Mike Leibbrandt, the latest gas find is disappointing for several reasons.

Early indications are that the reservoir is quite small and uneconomic.

It produced so-called "dry 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.

"Altogether 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.

STAR 13/12/77

55

Stored gas may boost city electricity

MR WESSEL BARNARD

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 1 500 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.
- The water would fall into the caverns, pushing the air and gas into a gas turbine on the ground. This turbine could generate 300Mw — as much as Orlando power station.

Mr Wessel Barnard, the city electrical engineer, said the effect of this scheme would be to store energy not needed at night for use at peak periods. The burning of gas in the turbine would add to this stored power.

Another scheme to be investigated is a smaller project costing about R3-million or R4-million, which would store water to generate peak-hour electricity, in a dam in the Klipriviersberg near Mondeor.

At night, electricity would be used to pump water from a low level dam to the high level dam. When electricity was needed, the water would be allowed to fall back to the lower dam, generating about 50 Mw.

One suggestion to cut the city's peak hour electricity demand is to inject high-frequency signals into the network, to cut off domestic water heaters during peak hours.

This is already done in

To Page 3, Col 2

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 1 500 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.

Escom's charges have increased by 171 percent since 1972, and will go up a further 19 percent in January. These huge increases prompted the call for a new power station.

Among Mr Barnard's reasons for opposing the move are the huge capital cost of R900-million, at high interest rates and the view that it is better to build power stations at coalfields, and carry power by transmission lines.

Power to cost 26 pc more in New Year

RDM 14/12/77

(55)

By CHRIS FREIMOND

GERMISTON residents can expect increases of around 26% in their electricity bills from January 1.

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 65% to 97,5%.

For example, at the current rates, 1 000 units of electricity costs R4,75 plus 65%, 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.

F.M. MAIL 16/12/77

55

Petrol: we're exporting it!

Considerations other than the well-being of SA's hotels and tourism may force Economic Affairs Minister Chris Heunis 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 anxious not to be identified.

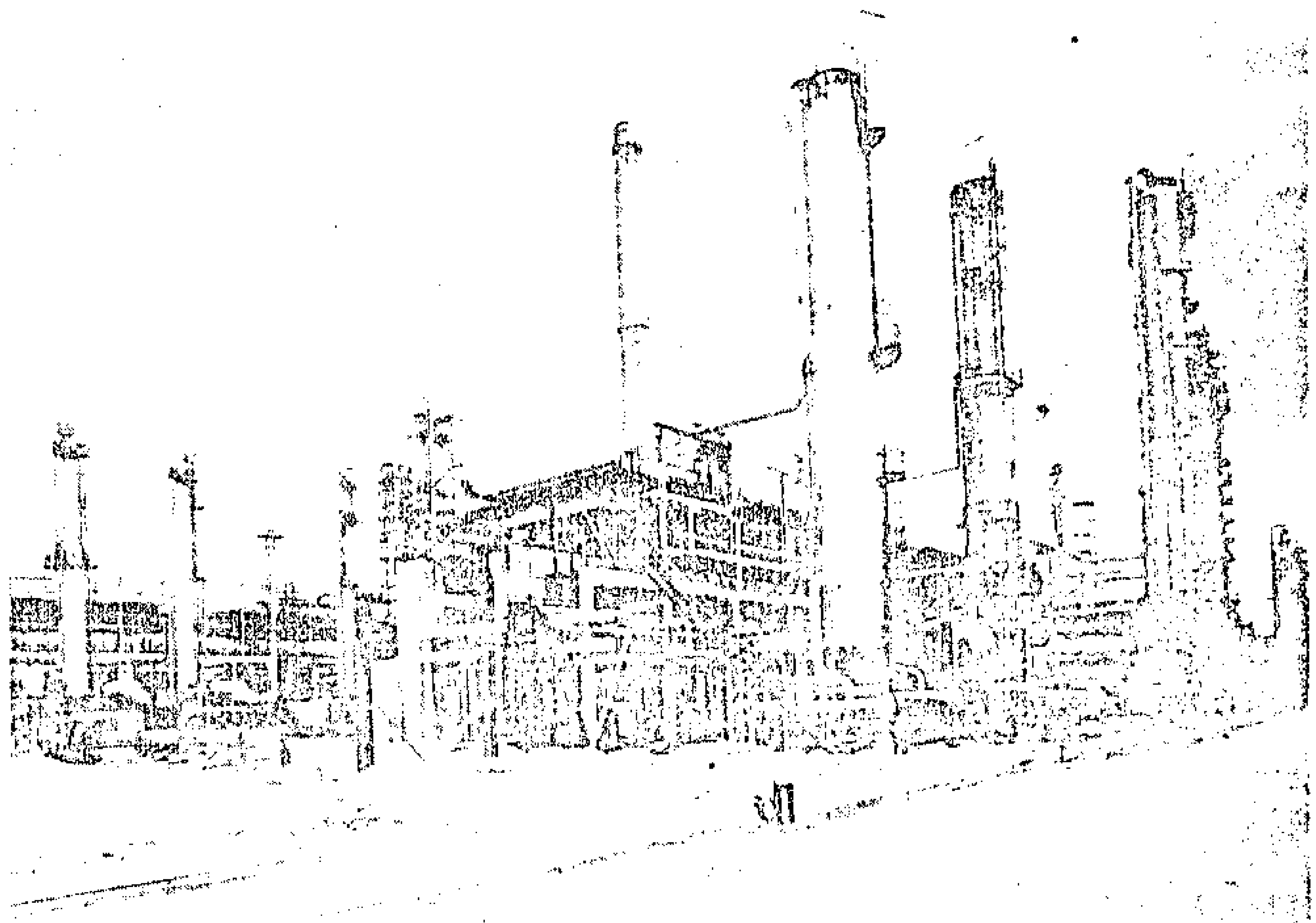
Acting Secretary for Commerce Tjaart van der Walt confirms the exports, and comments: "The position has now been reached where demand for diesel means that small surpluses of petrol occur from time to time. This has been exacerbated by demand by Railways (harvest time) and road transport."

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, foreshadowed 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 the Christmas holidays, but they say the downtrend will resume as soon as motorists' leave and money runs out.

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.



Refineries . . . a matter of getting the fractions right

And while the short-term position may be uncomfortable, the long term one will be untenable if Heunis 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 plant 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 bunkers 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 Heunis 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 fulfilling effect of killing the market.

ENERGY FOR PARTIES

Covenanters beware! Friday December 16 sees no let up on restrictive petrol trading hours, when garages are closing at noon.

But belted up wassailers will find more relief over Christmas and New Year holidays. Both holiday Fridays (23 and 30) will find pumps playing Father Christmas from 06h00 to 18h00. The same goes for the Saturdays of December 24 and 31, and weekday holidays of December 26 and 27 and January 2.

SA's got petrol — and for export

RDM 16/12/77

(55)

Own Correspondent

SOUTH AFRICA is 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 barrell of crude oil and they cannot vary the rations 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."

NM 16/12/77

Surplus petrol exported

(55)

Mercury Correspondent

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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.

DD 16/12/77 (55)

SA exports surplus petrol

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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. — DDC.

DD 20/12/77

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 R5 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 exaet 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. — DDC.

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SUNDAY TIMES, Business Times, December 25, 1977.

Fall in demand may cut Escom's growth

By GEOFFREY BERRIDGE

ESCOM's R1 000-million a year capital expansion programme could be cut substantially or parts of it deferred, if the declining demand for electricity continues. But there is little chance of tariffs being reduced.

The Commission says that while it projected an 8 per cent growth for this year, actual growth was only 6 per cent.

Growth reduction is threatening Escom's capacity to generate revenue for capital investment within existing tariffs, although the average 15 per cent rise on January 1 should provide adequate short-term compensation.

The question now being faced is whether Escom will need all its planned capacity if demand falls to appreciably lower levels.

The 6 per cent growth includes 4,3 per cent of imports from the Cabora Bassa hydro-electric scheme in Mozambique, indicating that Escom actually generated only 1,7 per cent more electricity this year.

The plain fact is, that if Escom decides to go ahead in full with the projected R1 000-million expansion programme, it cannot afford to allow anticipated tariff income to fall.

On the other hand, if capital expansion is cut back in accordance with the expected lower growth in demand there will be less fear of further tariff increases in the years ahead.

A final decision on capital spending will not be made until March next year.

If deferment is decided upon, it could well be in the final capacity of stations such as Matla and Duvha, both scheduled for 3 600 megawatts with six sets of 600 megawatt capacity. These are being built now, and Escom might consider cutting the number of sets from six to five.

Further capacity to be commissioned before next winter includes a 500 megawatt set at Kriel and a 200 megawatt set at Grootvlei. Later in the year there will be development at Matla, Duvha and the completion of Kriel.

For the rest of its demand growth, Escom will be contractually dependent on imports.

Outlining some of the difficulties in cutting capital spending, finance manager Len te Groen, says: "We can cut back on any transmission development that becomes unnecessary due to less vigorous growth in demand, but the civil engineering side has long lead times which we cannot change. These take eight years to complete and sometimes longer.

"Demand was expanding at more than 13 per cent a year in 1974, but the economy was undoubtedly overheated at that time.

"We are now trying to plan long-term supplies at a time when we have tight supply margins and falling growth. The situation is very complex.

"Exchange rates are also creating difficulties. The bulk of our capital imports are from countries with strong economies. Do we buy now and pay dearly, or is it better to defer until some future date when we might find that we are even worse off?"

If Escom takes the view that longer-term electricity needs should be given priority (there could be strategic reasons for this) and that, in consequence, capital projects cannot be deferred, it may well mean tarriff rises.

Yet another possibility is that a stimulatory national budget next April could arrest declining demand and restore Escom's income from tariffs.

In any event, declining demand does illustrate how price-elastic electricity really is and suggests that major distortions in the allocation of important energy sources can most likely be avoided, if price is dictated in future by supply and demand and is not held at artificially low levels by government.