

MANUFACTURING — ELECTRICITY

1981 — 1986

... to be under-trained housing

9/2/81  
183  
185  
Evening Post

# New policy of training for electricians is big success

By FRED ROFFEY  
Business Editor

A NEW policy adopted by the electrical construction industry of emphasising practical training is paying handsomely

The industry's compulsory training programme for apprentices of three 40-hour sessions a year has proved to be a success as a result of the practical experience they gain

Mr James Baker, director of the Electrical Contractors' Association (ECA), says some two years ago the Minister of National Education agreed to the apprenticeship period of electricians being reduced from five to four years, on condition that these apprentices every year receive intensive practical training

Under the auspices of the ECA and the South African Electrical Workers' Association — employers and employees in the industry — a practical training programme was devised with the emphasis strongly on

practical experience

These programmes are already in full swing at a number of technical colleges

Mr Baker says "These programmes endeavour to provide the maximum benefit to the apprentices

"The programme is a totally practical one, based on extensive practical experience of the employers and employees in the industry

"These programmes are undertaken in conjunction with the academic training given at the technical colleges

"The reaction of the apprentices is overwhelmingly favourable

"Virtually to a man they state they are looking forward to their next session"

Mr Baker stresses that the reduction in the apprenticeship period does not mean a lowering of standards — it merely means an intensified training period

There is a worldwide tendency to endeavour to re-

duce apprenticeship periods

"The success we are having with our practical training programmes can be attributed to the fact that the programmes are tailor-made to fit the individual needs of the apprentice, plus the excellent training provided by the technical colleges

"As far as possible these practical training sessions take place as close as possible to the apprentice's work situation

"In conjunction with the technical colleges we regularly monitor these programmes to ensure that they fulfil the needs

"These programmes are continuously adapted to keep abreast of technological advances"

The curriculum covers aspects such as safety precautions, the use of instruments such as the various meters, installation testing, motors and starters, conduit and wiring work

The apprentices are tested regularly

# Uniform fee for electricity

## is opposed

**Municipal Reporter**

BOTH Port Elizabeth's Electrical Engineer and the City Treasurer are opposed to charging people who live in outlying areas the same surcharge on electricity as those who live within the 16-kilometre radius of the city centre

Earlier this year, the Electricity Control Board decided to depart from the system of differentiated surcharges for all consumers outside the areas of local authorities

The board asked Port Elizabeth's City Council if it had any objections to a uniform surcharge being applied to consumers inside and outside the 16-kilometre radius

In a report to the city's Utilities Committee the Electrical Engineer, Mr C E Adams, said a uniform surcharge would not be in the city's interests because

● It would have to be fixed at a value between

the surcharge for consumers up to 16 kilometres and the higher surcharge applicable to consumers beyond 16 kilometres, making it lower than the surcharge paid at present by consumers living beyond the limit

● It was likely that in time most new electricity consumers would live beyond the 16-kilometre radius. As the revenue from these "rural consumers", based on the uniform surcharge, would be less than under the present system, electricity would be supplied at a loss

The City Treasurer, Mr A Strydom, said there were 230 accounts subject to a 10% surcharge and 1 024 accounts subject to a 20% surcharge. If the total amount obtained from surcharges last year were apportioned according to the number of accounts, the uniform surcharge would have to be about 18,5% to produce the same amount of revenue

E. Post 1/4/82

185

185

# Municipality cushions hike in Escom rates

EAST LONDON — The municipality will not pass the full six per cent hike in Escom's electricity charges to consumers

The city electrical engineer, Mr K Robson, yesterday said although the municipality would pay the full six per cent to Escom they would increase their own charges by approximately five per cent

The six per cent hike, effective from July 1, will be achieved by reducing the consumers' discount on existing tariffs from 16 to 11 per cent. The discount will only be reflected on the accounts of consumers who bought electricity directly from Escom. They include the municipality and consumers in Beacon Bay and Goube

The increase would be reflected as a five per cent surcharge on consumers' bills in the East London area, Mr Robson said

The municipality was not out to make money and was only interested in recovering additional expenditure as a result of the six per cent Escom hike

"This is why we will raise our charges by five per cent," he added

Explaining how the discount-surcharge system operated, an Escom spokesman, Mr M Opperman said that when yearly tariffs were formulated it was borne in mind that a predetermined amount of revenue had to be acquired to cover operating expenses

The tariffs were, however, designed to bring in more than was needed

In order to bring in only the predetermined amount, consumers were subsequently given a discount. When more revenue was required to cover additional unbudgeted expenses the tariff was not adjusted, the discount was re-

duced, Mr Opperman said

When the discount reached zero, consumers would then pay a surcharge. This could be increased without altering the tariffs which were normally increased in January each year

"When the surcharge is about 25 per cent of the tariff then we apply to increase the tariff

The whole idea of the system was to save time and money

East London consumers will, however, still benefit as a result of the government's regional development concessions and can expect their accounts to drop by up to 22 per cent, Mr Robson said — DDR

12/6/82  
D. Disputch



By LOUIS BECKERLING  
Business Editor

**GOOD** news for local industrialists is that subsidies on electricity tariffs will include electricity supplied by the Port Elizabeth Municipality — and Despatch businessmen will also qualify for the effective 25 to 30% discount

This emerged during a speech in the City Hall today by Mr D de Beer, chairman of the Decentralisation Board.

In his speech, Mr De Beer also revealed that preliminary estimates suggested a figure of R9 million would be spent annually on the subsidy, which is intended to bring tariffs into line with those paid by consumers in the Eastern Transvaal

The precise form in which the subsidy will be paid is still to be negotiated by the board and the municipality. "But we would prefer to see a discount being allowed on the monthly account, thus showing quite

(185)  
**Power**

ε. Post  
**tariff**

aid also  
15/7/82

**on PEM**

**supply**

clearly what the extent of the subsidy is," said Mr De Beer.

Before this definitive statement was made, many businessmen believed the electricity subsidy applied only to power supplied by Escom

Mr De Beer announced no additional concessions to

those already agreed upon for the Port Elizabeth-Uitenhage metropolitan area.

But in reply to a number of questioners who were critical of the concessions, he said the board had a brief to monitor the progress of the decentralisation proposals. If it became necessary to amend and improve concessions applicable to the area, this would be done

The three concessions applicable in the area are:

● A subsidy on electricity tariffs, bringing payments into line with the Eastern Transvaal

● A 20% rebate on finished products "exported" from the area. (In certain cases a comparable subsidy on imported raw materials may be considered).

● The 125% after-tax cash grant on approved training schemes, which is granted in addition to the existing 100% rebate for which such a scheme qualifies.

**RY CANDIDATE MUST** enter in column (1) the number of each question answered (in the order in which it has been answered), leave columns (2) and (3) blank

	Internal	External
1)	(2)	(3)
	40	
	50	
Examiners' Initials		

Degree/Diploma/Certificate for ~~you are registered~~  
you are registered (e.g. B.A., B.Sc.)

Subject **ECONOMICS II**  
(to be copied from the heading on the Examination Paper)

Paper No **1**  
(to be copied from the heading on the Examination Paper)

**NOTE CAREFULLY**

- 1 Enter at the top of each page and in column (1) of the block on this cover the number of the question you are answering
- 2 Blue or black ink must be used for written answers. The use of a ball point pen is acceptable. Red or green ink may be used only for underlining, emphasis or for diagrams, for which pencil may also be used
- 3 Names must be printed on each separate sheet (e.g. graph paper) where sheets additional to examination book (s) are used

**WARNING**

- 1 No books, notes, pieces of paper or other material may be brought into the examination room unless candidates are so instructed
- 2 Candidates are not to communicate with other candidates or with any person except the invigilator
- 3 No part of an answer book is to be torn out
- 4 All answer books must be handed to the commissioner or to an invigilator before leaving the examination

**Any dishonesty will render the candidate liable to disqualification and to possible exclusion from the University**

# Power bills could give PE R4m boost

185  
E. Post 20/7/82

By LOUIS BECKERLING  
Business Editor

AROUND R4 million could be injected into Port Elizabeth's commercial and industrial sector in September by way of backdated discounts on electricity bills.

Following discussions between Mr D de Beer, chairman of the Decentralisation Board, and Town Clerk Mr Philip Botha, it has emerged that the first pay-out of the electricity subsidies, backdated to April this year, will be in September.

During his address to

businessmen last week Mr De Beer revealed also that calculated over a full year the subsidy could amount to some R9 million — hence the elementary calculation for the five-month delay in passing the first payment.

Depending upon the pattern of consumption it is not inconceivable, in fact, that some lucky businessmen may be passed a credit note in their September accounts.

Town Clerk Mr Botha told me yesterday that the council had agreed to a request from the board that the subsidy be passed on by

way of a discount on the monthly electricity bill.

The subsidy has been calculated to reduce tariffs to the rate at which users in the Eastern Transvaal pay for their electricity.

In general terms this will amount to a discount of some 25% to 30% on individual bills.

"We will have to rewrite our computer programme to enable us to change the accounts and this may take a few months," said Mr Botha.

"However, in the interim we will attach notes to the accounts in which the gross account and the precise extent of the discount in rands and cents is clearly demonstrated."

Mr Botha said although the subsidy, announced in terms of the Government's decentralisation effort, was backdated to April, there were certain administrative problems to be ironed out.

He believed, however, that the money would be

available by September. The electricity subsidy is one of three concessions announced for the Port Elizabeth/Uitenhage metropolitan area.

The other two relate to rebates on approved training schemes and a subsidy on rail tariffs paid on incoming goods.

Significantly, however, when pressed by speakers at last week's meeting, Mr De Beer conceded that additional concessions could be introduced.

Among the petitions made by businessmen were

- Subsidies on outgoing traffic.

- A preferential treatment of tenders for State and semi-state projects.

Such matters could be brought to the attention of the regional advisory committee, Mr De Beer said, and their introduction would be considered on their merits while the progress of the decentralisation campaign was being monitored.

# Electricity sales rise in 1981 below that for 1980

*185*  
*E. Post*  
*5/8/82*

## Municipal Reporter

THE increase in the sale of electricity in Port Elizabeth last year was smaller (7%) than the increase for 1980 (11,4%) although it was still above the average increase of 5% recorded during the last 10 years

These facts are contained in the 1981 annual report submitted by the City Electrical Engineer, Mr C E Adams, to the City Council this week

The slowdown in the economy is reflected in the statistics given. Of the greatest significance is the fact that industrial consumption of electricity was up by 8,6% — more than 10% less than the massive increase of 18,7% recorded for the previous year

There was also a fall-off in the demand for electricity by commerce. Whereas the use increased by 8,6% in 1980, the increase last year was 5,9%

The picture on the domestic front was the reverse — use of electricity increased by 4,7% last year, compared with an increase of 2,6% in 1980

Mr Adams said that after a contribution of R5 726 618 to the Rates and General Service Account, the Electricity Service Account showed an operating surplus of R1 450 807 last year

The gas service showed a deficit of R1 363 055, which

was covered by the surplus in the electricity fund, he said

Discussing the Swartkops Power Station, he said that operating staff turnover was 81% last year, but an improvement in this situation was noted towards the end of the year

Absenteeism among black employees was increasing, he said

The year was significant in the number of plant failures experienced. This could be attributed to the age of the station and the fact that major overhauls were not undertaken or planned because of "high standby plant requirements"

Mr Adams said that under the existing mutual standby agreement, Escom was assisted by increasing generation at Swartkops on 31 occasions

The 11 major projects which were worked on by his department during the year included the Bloemendal substation to supply Booyesen Park and other coloured (and possibly) black residential development, the Russell Road substation to augment the network in the Central Business District, and Greenacres substation to supply the developments in that area

● See Pages 3 and 4



## Work or home for strikers

ABOUT 300 hospital and industrial workers were reported to have gone on strike in Johannesburg yesterday in demand of higher pay and better working conditions.

In the latest spate of labour unrest to hit hospitals, 27 security guards were dismissed from Baragwanath after the entire security staff went on strike over pay demands. They were allegedly told they were agitators and had incited others to go on strike.

The superintendent of the hospital, Dr Chris van der Heever, said all the dismissed workers came from the homelands and he confirmed they had complained of low salaries.

He said workers were told they should either go back to work or back to the homelands. The workers apparently preferred to go back to their homes than put up with the meagre salaries.

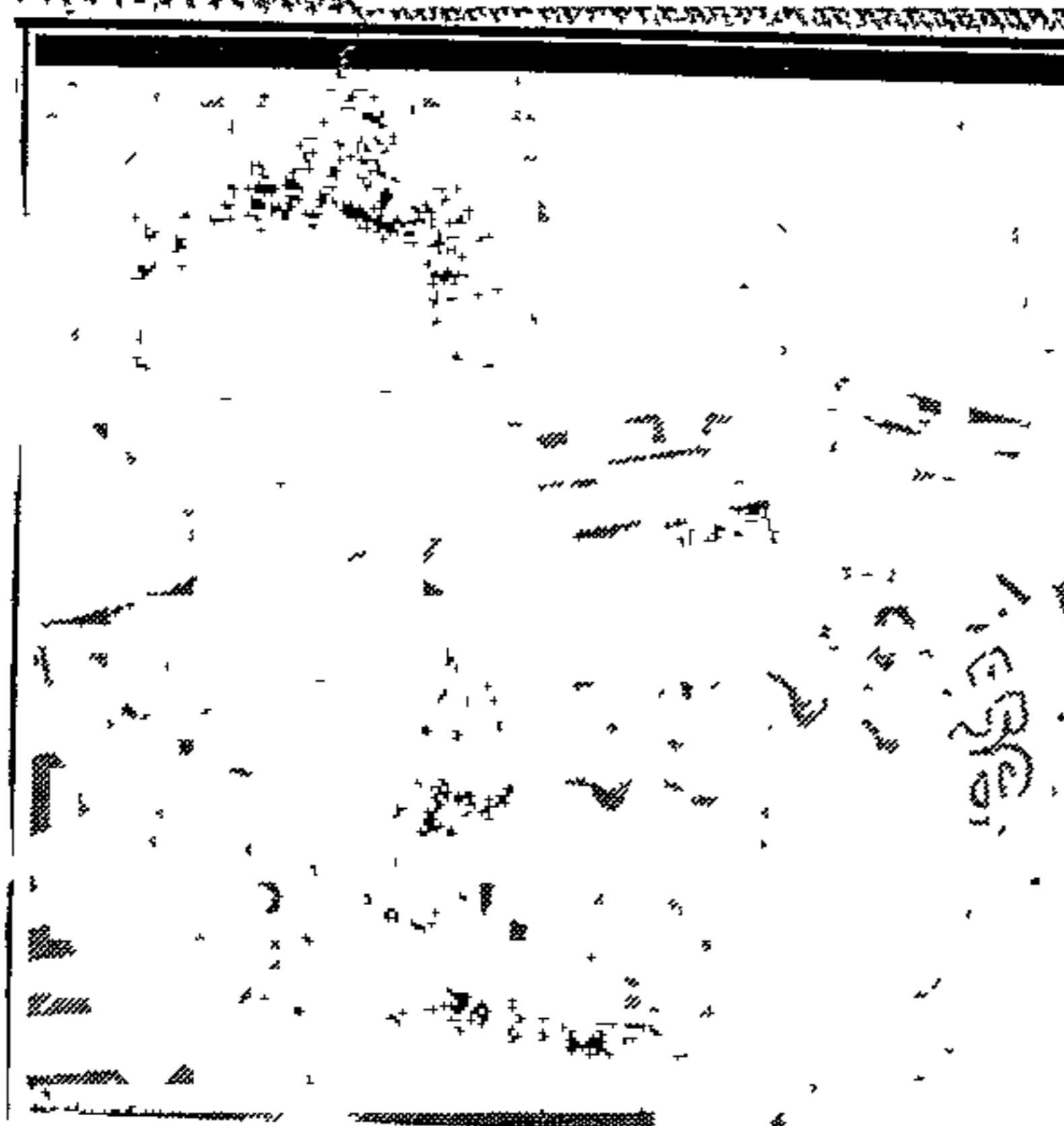
At Teltron Sound-Electrical company 150 workers were told they had dismissed themselves when they ignored an ultimatum to go back to work.

A spokesman for Teltron told The SOWETAN no demands were received from the workers but confirmed Cca wusa's "bringing to our attention grievances regarding service conditions."

Almost the entire black staff at the Johannesburg hospital in Parktown joined the strike for better pay and working conditions, but workers were back at work late yesterday.



Some Fe...



MISS CYNTHIA MAQUTU. Correspondence and inquiries.

# Electrical firm starts advice bureau

185

A NEW advice bureau which will help consumers, particularly black housewives, acquire a knowledge and awareness of electricity and its uses and benefits, has been launched by an electrical appliances company in Johannesburg.

Berda Appliances decided to create the advice bureau because it believes that consumer education will lead to purchases based on value for money and the ability to understand the pros and cons of electricity and a good quality electrical appliance. It will also fulfil a need for the ever increasing number of black consumers requiring information on the many aspects of electricity.

Miss Cynthia Maqutu, public relations officer of the advice bureau, will deal with any inquiries on the subject. She said it was formed because "electricity means many things to many people, but the bureau intends to find out what it means to the black housewife who is about to enter the world of modern technology".

The bureau's address is Van Selm Marketing, 382 Jan Smuts Avenue, Craighall, Johannesburg, and their telephone number is 789-1334/5/6.

How

421 found that jobs being Lab. Bur.  
AN record by Gt. French.

185 COM 16/6/83

# Pressure on Escom now greater than ever

By SIMON WILLSON  
Industrial Editor

ALTHOUGH the generating capacity of the Electricity Supply Commission (Escom) is under threat from the drought, new official figures show that non-Escom electricity generation has been falling

The 1981 annual census of electricity generation by the Central Statistical Services in Pretoria, just published, shows that South Africa's dependence on Escom for electricity has increased sharply over the last decade

At a time when Escom's power output is already being restricted due to shortages of cooling water at its coal-fired power stations, this will be seen as an unwelcome trend

Local authorities, private manufacturers, the mines and South African Transport Services are among the biggest generators of non-Escom electricity in South Africa, but their proportion of the nation's electric power output has been in overall decline for ten years, and has fallen even more markedly since 1980

The power census shows that the proportion of gross national electricity production contributed by local authorities fell from 16,8% in 1970, to 10,2% in 1975, 7,7% in 1980 and 6,6% in 1981

The local authorities' power output also fell in absolute terms from 8 312 megawatt/hours (MWh) in 1970 to 7 421 MWh in 1975, 7 392 MWh in 1980 and 7 344 MWh in 1981

Manufacturing industries contributed 2,5% of gross electricity production in 1970, but this figure fell to 2,1% in 1975, rose to 2,9% in 1980 but fell back again to 2,4% in 1981

In absolute terms, the manufacturing sector's output rose from 1 112 MWh in 1970 to 1 510 MWh in 1975, 2 824 MWh in 1980 and 2 685 MWh in 1981

Electricity generation in the mining sector fell by 81,1% between 1970 and 1980, from 462 939 MWh in 1970 to 404 405 MWh in 1975 and 92 172 MWh in 1980. By 1981 the mines' output was down to 84 511 MWh

In 1981 the mines contributed only 0,08% of gross national electricity production against 1% in 1970 and 0,5% in 1975

Generation by other, smaller non-Escom electricity producers, including South African Transport Services, rose slightly in 1981 after falling steadily from 1974. But the 1981 generation total of 83 882 MWh was still 15,9% lower than the sector's 1970 total, and 20,3% lower than its 1974 output

The census shows that electricity consumption by the mining sector rose by 104% between 1970 and 1981

- Among other miscellaneous statistics, the figures show that the amount of electricity used in South Africa's streetlights fell in 1981 for the first time on record

Streetlight consumption rose by 82,6 between 1970 and 1980, but then fell by 1,3% in 1981 to 539 gigawatt/hours

# Two electrical unions to unite

By Carolyn Dempster,  
Labour Reporter

185

The country's two coloured and black electrical trade unions are to merge to form a new union with a membership of more than 16 000.

The decision was taken at a weekend meeting of the executive committees of the predominantly coloured Electrical and Allied Trades Union of South Africa and the largely black Electrical and Allied Workers' Union of SA.

The white SA Electrical Workers' Association said they would have to refer the matter to their membership for a mandate before opting for amalgamation.

The move comes after three years of deliberation. In 1980 the Federation of Electrical Trade Unions was formed with the ultimate aim of bringing the three electrical trade unions together.

A spokesman for the executive said the two unions had decided to amalgamate although the intention was to draw in the white union in future.

A constitutional committee has already been formed to draw up a new constitution on a democratic, non-racial basis.

The unions have members in the electrical, engineering, metallurgical and building industries. At present they are not affiliated to any union federation but are party to the Industrial Council for the Electrical Contracting Industry and the Confederation of Metal and Building Unions.

# UK giant, Trueform end deals

Own Correspondent

LONDON — The head of the giant Hepworths Group in London and the chairman of Rex Trueform in Cape Town yesterday both denied claims that anti-apartheid sentiment was the reason for the cancellation of a contract allegedly worth R15 million

The Anti-Apartheid Movement (AAM) has claimed that Hepworth's decision to end its deal-

ings with the Rex Trueform group, allegedly worth R15 million a year, was "the writing on the wall" for the South African export business

But Mr George Davies head of the Hepworth Group, last night denied that the anti-apartheid stigma had played a significant role

He was aware of the protests, he said, but they formed a very small influence on his decision which was based on commercial reasons

He said Rex Trueform was the only South African company that Hepworths dealt with

He had visited their premises several times and was impressed with the level of integration

He said the decision was not irrevocable and did not share the AAM opinion that their pressure had achieved a major political victory

And the chairman of Rex Trueform, Mr Stewart Shub, yesterday said "I do not believe that political considerations were the central issue. There are and were other issues involved"

## Joint decision

He added "By mutual and acceptable agreement — a joint decision — we have decided to go our own ways"

"We have acquired other customers and we hope that they have other suppliers."

Asked to comment on the figure of R15-million, he said that it was an annualized figure of turnover with South Africa and not the value of business to Rex Trueform

The AAM has claimed that it was a major success for its campaign to cut-off the sale of South African goods in Britain

Mr Mike Terry, organizing secretary of the AAM, said they would maintain their campaign against other major outlets — like the giant Marks and Spencers group, Selfridges and House of Fraser Group, which owns Harrods

"We are delighted at the Hepworth's decision. We are confident that more High Street shop groups will follow the example and stop profiting from the abuse of black labour in South Africa"

# Union calls for halt to furniture imports

CAPE TOWN— The National Union of Furniture and Allied Workers of S A, with 4 000 of its members unemployed owing to the economic recession, has called for a halt to all unnecessary imports of furniture

The union says it is deeply concerned at the amount of furniture being imported into South Africa. In the first nine months of last year R36-million worth of furniture was brought into the country

The union believes even greater volumes of imports will be dumped on the South African market this year in spite of the low value of the rand

'At the present time some 4 000 of our members are unemployed and, if the volume of imports is translated into local production, it could provide employment for at least 1 500 of our members in about 70 small factories,' the union said

Mr S Redelinghuys, executive director of the Furniture Traders' Association, said his organisation sympathised with employees who were out of work and fully understood the plight of unemployed union members. The unemployment figure for people who had been made redundant in the retail sector of the furniture industry now topped 10 700 — (Sapa)

# No price rise in electricity

*N.M. Mercury*  
Mercury Reporter

THE increase in the price of coal at pitheads will not affect Escom's electricity price to consumers, Escom's public relations manager, Mr Etienne du Plessis, said yesterday.

The 13 percent increase was announced in Pretoria yesterday by the Price Controller, Mr J J Breyl.

According to a Sasol spokesman, Mr A I Kotze, the increase would not affect Sasol, which had its own mines and did not buy any coal on the open market.

Mr du Plessis said the increase would have a

*25/1/85*  
'minimal effect' on Escom and would not affect the price of electricity to consumers at all.

'Most of our coal is burned in the Highveld stations, where we have direct long term contracts with various mines, so the increase in the controlled price of coal will not affect us there.'

'The increase does affect our coastal stations, but they burn only about 1 000 000 tons of coal or even less a year compared with 58 million tons at the Highveld power stations.'

'So the effect is minimal'

*185*

11002

(11002) PR  
PAGE 11  
11 9 11

## Power tariffs may rise again

### Municipal Reporter

DURBAN'S electricity tariffs will probably increase for the second time this year if Escom raises its bulk price next month as predicted

Mr Wilf Stone, senior deputy City Treasurer, says that if the increase is substantial, it probably will be passed on to consumers

'But we will have to wait and see what the increase is and then assess the financial position of Durban's electricity fund. If it can't be absorbed, it will have to be passed on,' he said

Durban's tariffs were increased by 7,5 percent in January to cover the 10 percent Escom price rise

The consumer tariff for electricity covers the bulk price charged by Escom and the Durban Corporation's costs of reticulation throughout the greater city area

Escom raised its bulk tariff by an average of 10 percent in January and said there would be another 'similar' mid-year increase

NM 17/5/85

# Power tariff <sup>20</sup> rise <sup>185</sup> shock

MABOPANE residents are angry about a R2 electricity fee increase which they claim came like a bolt from the blue.

According to them, they only became aware of the increase when they went to pay monthly rents *South*

Some were told to go and get more money from their homes. No explanation was given for the decision, it is claimed *14/10/85*

Residents also complained that the local town council did not tell the community about matters affecting them in advance. Many people were unemployed and could not cope with the ever-rising tariffs, they argued.

"A year ago residents found themselves with increases ranging between R6 and R12 without being consulted. Even council employees at various offices could not explain the escalations. That is why most of us will always be in arrears because there is lack of consideration among people said to be representing us," said an angry Mr Hilda Mokoena.

Residents said they failed to understand the reason for the increase in electricity tariffs while the supply remained poor.

A spokesman for the township manager's office confirmed that residents were not informed when increases were implemented. He would not take the matter further.



## Extra sub-station needed

# Sandton faces a power crisis

By Janine Simon

STAR

Come winter 1986 and some areas in the Sandton central business district could face an electricity supply crisis — if an extra Escom sub-station is not installed in the area.

The potential power pinch was one of many difficulties Escom faced in supplying electricity to individual consumers in the rapidly developing Sandton municipal area, said the central Transvaal distribution area manager, Mr Dennis Ackermann.

Escom, not the Sandton Electricity Department, supplies most of the city's 13 000 individual consumers.

Midrand and Germiston's Wadeville industrial area are in the same position — but nowhere else has development been so intense.

Sandton's municipality has bought 25 percent of the system including Bryanston and some townships. Other areas are under review.

Mr Ackermann said figures showed the supply availability in Sandton's

Escom area to be 99,9 percent but there had been major faults and supply cut-offs affecting parts of the town during the first seven months of the year.

That was due to the history and nature of development in the area.

Sandton was initially peri-urban and individuals received electricity via overhead reticulation lines. Mushrooming development demanded the installation of underground cables.

These were twice as effective and three times the price of overhead reticulation but were made cost-effective by the urban densities.

Sandton's means of electricity supply — through 11 distribution stations supplied by three major input points of the Escom network — had had to be continually extended or reinforced to cope with increased industrial, business and residential demand, Mr Ackermann said.

Factors such as the subdivision of 2 ha stands in suburbs like Kelvin, Buccleugh and Lone Hill had placed a great strain on the system.

The town was now serviced by a series of connecting underground cables and overhead reticulation lines and therefore subject to the faults of both systems.

Parkmore received power through low voltage overhead reticulation and high voltage underground cables. All new townships received high and low voltage supplies by underground cables.

Faults recorded include

● Overhead line faults which occur on all lines such as fatigue on insulators, loose connections or vandalism — which accounted for 61 faults and a supply loss of 149 hours of an average of 2,43 hours each.

● Underground cable faults — 26 on the 6,6 kv lines and 41 on the 11 kv networks. These occur more frequently because of construction in new townships or alterations and road works.

● Prearranged interruptions which affect a minor part of the network. Each consumer is notified of a cut for necessary extensions and reinforcements. Of these, 304 with an average duration of four hours have occurred.

● Of the 1 129 "no lights" calls, 721 were found to be faults on the consumers' network.

Mr Ackermann said Escom was geared and willing to deal with consumer complaints. Its after-hours response time, now about 1,43 hours, would be cut with the introduction of "faultsmen" and a computerised lightning location plotter.

"No lights" calls are dealt with on 10 lines at 825 3030. Other complaints or inquiries should be directed to Mr Marty Senekal of the Wynberg District Office at 786 4746.

## Just who will throw the switch is the question

Power equivalent to keeping one million lightbulbs glowing is needed in the Sandton CBD every hour — that is regardless of whose administrative hands control the switch.

The major supplier, Escom, would like to retreat from meeting burgeoning individual power demands of the fast-growing town to the more streamlined supply of bulk power to the municipality.

But the Sandton municipality is weighing up its finances and an uncertain future — in the light of the scheduled January 1 implementation of the Regional Services Councils — before considering any major takeover of the electricity system.

For both parties expenditure will be unavoidable if it is to meet future demands of the town — Escom has budgeted R25 million for extending and strengthening the network in 1986, including the installation of 70 km of underground cables.

According to the Town Electrical Engineer, Mr Tony Hugo, Sandton's policy is to take over the system in stages.

Bryanston and some surrounding townships have been taken over and the takeover of Parkmore, Riverclub and Willowild is proceeding. The area from Douglasdale to Fourways will probably be the next in line.

### FINANCIAL RETURNS

The council has to lay out the cost of purchase, extension and maintenance of the service and this "regrettably" puts electricity rates in the Sandton-controlled area above Escom's, said Mr Hugo.

It also has to consider financial returns should it purchase the Escom system — which the non-profit organisation has offered to sell at depreciated value.

For example in the central area, where Sandton City — the main consumer — has contracted to buy power from Escom at the same rates as any individual, the council would suffer a loss if it took over supply as it would not be able to increase revenue, said the chairman of the Sandton management committee, Mr Schalk Visser.

Another factor is the pending implementation of the RSCs.

"We are looking carefully at expenditure in the light of the RSCs. I just don't know how the concept of redistribution of wealth will work, if we buy the Escom system. The RSCs might take it over next year," Mr Visser said.

Land for the desperately needed sub-station in the Sandton CBD highlights the current impasse between the council and Escom. The council says Escom must buy or expropriate the land, worth about R2 million.

# 10 p.c. electricity rise is <sup>Mercury</sup> not inflationary

31/8/85

## Mercury Correspondent

JOHANNESBURG—Escom has announced an average increase of 10 percent in electricity charges with effect from tomorrow, September 1

Escom estimates that together with the increase announced in January this year, the price increase for the year will be about 15 percent and, as such, will not further increase the present rate of inflation

Mr John Maree, Escom's new chairman, said the need for a further 10 percent increase in the middle of 1985 had been foreseen when the last rise was announced in January

The projected mid-year increase had been deferred for two months to enable the newly-appointed Electricity Council and Escom's management board to give consideration to the utility's financial needs

The delay in implementing the new price had saved consumers close to R100 million

Mr Maree said that all the main electricity consumer groups were represented on the Electricity Council and were party to the decision

The Electricity Council and the management board were taking a hard look at Escom's capital programme and its financing needs in the context of the rapidly changing financial environment, which is affecting the whole of South Africa at present.

With the risk of more restricted access to overseas capital, and therefore greater pressure for funds in the local market, Escom had to generate higher levels of income to cover its expenses and the cost of servicing its borrowings, and to create a cash source to contribute towards financing its expansion.

# Power hike stalled

THE Soweto City Council is unlikely to raise the monthly electricity levy in the near future, town clerk Mr Nico Malan disclosed yesterday. The controversial levy, due to have been in-

creased from R12 to R17 in July this year, is currently being reviewed by a committee appointed by the three Greater Soweto councils.

The councils have "frozen" further electricity-levy hikes pending a Government decision on the matter. The local authorities have notified the Department of Co-operation and Development of their intention to investigate alternative methods for the repayment of loans financing the complex's electrification scheme.

The whole scheme, which involved the electrification of about 105 000 houses, was financed with loans obtained from the Post Office and a consor-

tium of overseas banks.

In Soweto the levy was to have been raised in phases, from R17 to R23 in July 1985, from R23 to R29 in July 1986. But the repayment programmes was changed after the Soweto Council, persuaded by "the financial climate in the country and the confusion it (levy) created among residents," suspended further hikes.

Mr Malan said yesterday: "We are — among other things — looking at the possibility of asking for the extension of the loan repayment period. We are required to pay one of the loans over a 20-year period, but may consider pressing for a 25-year repayment period."

# Electricity price rise

Mercury Reporter 185

DURBAN'S Management Committee yesterday approved electricity tariff increases of 10 percent on the surcharge as recommended by the City Treasurer and City Engineer. The increases have still to be approved by council before coming into effect. 13/9/85

# Power switch in black areas

Mercury Reporter

DURBAN is to take over the distribution of electricity to individual consumers in the KwaZulu areas of Umlazi, Kwa Mashu, Ntuzuma and Kwa Makuta.

This will add about R2 to the monthly electricity account of consumers in these areas and could lead to a 1 to 2 percent increase in tariffs in the next few years for other consumers served by Durban.

The takeover of the service was approved in principle by the city council yesterday but municipal and KwaZulu officials must still negotiate the details of the takeover.

In the past Durban has supplied bulk power to these areas but KwaZulu has been responsible for its reticulation. However, limited KwaZulu funds mean that prospective consumers have to wait a long time for such a service.

Manco chairman Mrs Sybil Hotz said the efficient supply of electricity was important for these areas as the lack of it inhibited industrial and commercial development.

Electricity was also important for study purposes, she said.

Only 24 percent of the people living in the affected KwaZulu areas have electricity, she said.

The plan has the approval of the people and administration of KwaZulu.

A combined report by the City Treasurer and City Electrical Engineer said although a moderate increase in tariffs was possible it was desirable that all consumers in the electricity supply zone be handled by a single supply authority with the same tariffs.

Adoption of such a system would also result in a more efficient and economical supply system for the zone as a whole, it said.

Gains from a more efficient reticulation system could ultimately offset the short-term disadvantage of a possible small rise in tariffs by taking over responsibility for individual consumers in KwaZulu, it said.



NICO MALAN

# 'Don't pay more for electricity'

MR NICO Malan, Chief Executive Officer of the Soweto City Council, yesterday reiterated earlier advice to Soweto residents that they must insist on paying a monthly average of R50 for electricity consumption.

This comes amidst widespread dissatisfaction over exorbitant electricity bills which many Soweto residents are receiving every month.

Mr. Malan also said yesterday that consumers who are charged more than R20 for water consumption a month, must only pay R20, and query the rest.

He admitted that the council was experiencing problems with the handling of electricity accounts, but promised that this would soon be a thing of the past.

"The problems are not mechanical, but lie in the processing of electricity accounts.

"If residents feel that their electricity and water meters are faulty, they must pay a deposit of R30. If the meter is found to be not functioning well, the deposit will be refunded and a new meter installed,"

Mr Malan said

Meanwhile, an inspection on water and electricity meters, conducted by the council's internal auditors, has been launched. One of the issues that is being investigated is the delay in sending out accounts to new consumers.

Many residents have not yet received their bills since they were connected to the new Greater Soweto electrification project almost two years ago. They feel that they will pay very high bills when the accounts are finally sent out.

185

Sowetan

26/1/85

# Pay rises for <sup>(185)</sup> ~~300~~ 9. Day ~~100~~ clothing workers

27/11/85  
LAWRENCE BEDFORD

NEW weekly pay rises announced by the clothing industry yesterday will lag well behind inflation next year.

In the Cape, grade 'C' employees (the lowest of qualified categories) on a minimum R56,50c a week, are to get an extra R4 from December and another R4 in July, 1986

Sewing machinists earning R67 will receive R5 rises in December and July, while designers and pattern-makers earning R156 will see their pay rise to R176 by mid-year.

Natal machinists' minimum pay increases by R9 from January 1, putting them on R74,50c, and pattern makers by R18, bringing their minimum pay to R160

Transvaal manufacturers were holding pay talks last night.

# Paper won't be 'swallowed up'

*Cape Times 27/11/82*

## Chief Reporter

THE Editor of the Cape Times Mr A H Heard said yesterday he wished to venture a "powerful view" that the Cape Times had no intention of being swallowed up in any rationalization process within the newspaper industry.

Declaring Mr Neal Chapman chief executive of The Southern, as the Cape Times Businessman of the Year Mr Heard said

"With economic pressure on newspapers as never before, it is obviously necessary to pool whatever functions and resources can be pooled, such as production and distribution, so as to allow the essentially competitive aspects of newspapers, for example editorial, advertising and marketing, to continue serving the public under separate and distinct newspaper titles.

"The sensible approach is maximum rationalization which equals maximum newspaper titles.

"Negotiations are moving ahead rapidly

between SAAN (SA Associated Newspapers) and the Argus company, and I can see Argus and Cape Times printed on the same presses and distributed jointly in the not-too-distant future.

## 'Underpin'

"But I should like to venture my powerful view that this permanent fixture this Cape institution, the Cape Times, has no intention of being swallowed up in the process."

Mr Heard said the Cape Times had a role to play in the affairs of Cape Town and of South Africa, "and we stand sturdily in the market. Look at our paging each day. Look at our Finders which underpin our advertising success — particularly in a recession — and look at our currently rising circulation."

"We are a South African institution, and when we turn 110 next year I should like to issue an invitation to those present to return to celebrate with us at the Businessman of the Year occasion."



Escom says  
change won't  
cost jobs

STAR 11/12/85

Escom is planning major changes to make its organisation more businesslike, to decentralise functions and to bring it closer to the consumer — but none of its 68'000 workers will lose their jobs

Mr E H Thal, communications manager, said staff would not lose financially through transfers or changes

Escom's chairman and senior general manager had met 400 senior managers nationwide in the last six months to explain the proposals and give assurances about jobs.

In response to reports that staff in Colenso feared retrenchment and the collapse of the town — it relies on the power station — Mr Thal said change brought insecurity in a company as large as Escom, especially in insecure economic times

Details of changes would be available early next year

WEDNESDAY, 14 MAY 1986

The DEPUTY MINISTER OF INFORMATION

(1) The Bureau for Information was responsible for the compilation and distribution of the mentioned publication

- (a) "Partners in Terror"
(b) 12 pages plus cover
(c) Bureau for Information
(d) Cape and Transvaal Printers, Cape Town, on behalf of the Government Printer, Pretoria
(e) (i) 70 000 English copies were printed
(ii) None

(f) Copies of the publication were sent to Members of Parliament The Bureau for Information's regional offices Department of Foreign Affairs Opinionformers in South Africa

(g) The publication was compiled and distributed as part of the bureau's task to make important policy statements of the Government public

(h) The total printing cost of the publication was R16 800 Cost of distribution is difficult to determine as railway cost incurred to transport copies to regional offices is not available as yet and since regional offices are still distributing copies

(2) No tenders were invited for the printing of this publication Printing was commissioned by the Government Printer in terms of the Government Exemption SDK77

Handwritten notes: Mr L. STOFBERG asked the Minister of Finance +

(1) No All these States are independent and collect their own statistics The responsibility for collecting and processing national accounts statistics does not rest with this department

- (2) Falls away
(a) What amounts were paid out in maintenance allowances for unmarried mothers, (b) how many mothers qualified for these allowances, (c) what total number of children were benefited by these allowances, and (d) what average amount was paid out per unmarried mother, in respect of the White population group in each of the latest specified five years for which figures are available?

Own Affairs: Unmarried mothers: allowances Mr L. STOFBERG asked the Minister of Health Services and Welfare +

The MINISTER OF HEALTH SERVICES AND WELFARE.

- (a) R1 586 940,00
(b) 804,00
(c) 1 157,00
(d) R1 973,80
1983
(a) R1 726 692,00
(b) 780,00
(c) 1 135,00
(d) R2 213,70

FRIDAY, 16 MAY 1986

1984

- (a) R2 144 712,00
(b) 873,00
(c) 1 209,00
(d) R2 456,71
1985
(a) R2 125 692,00
(b) 832,00
(c) 1 126,00
(d) R2 554,91

Statistics available for the last four years only

FRIDAY, 16 MAY 1986

Indicates translated version

892 Mr P G SOAL asked the Minister of Mineral and Energy Affairs

- (1) Whether he or any member of his Department has received any representations regarding daylight-saving time in the Republic, if so, (a) from whom; (b) when and (c) what was the (i) nature of the representations and (ii) response thereto,
(2) whether the Government has considered the usefulness of daylight-saving time in the Republic, if so, (a) when and (b) what decision was reached in this regard?

The MINISTER OF MINERAL AND ENERGY AFFAIRS

- (1) Yes
(a) Trade Union Council of South Africa and a Mr M Stranex
(b) In March 1985 and March 1986, respectively
(c) (i) That the Government consider the introduction of daylight-saving

(ii) That the introduction of daylight-saving from the view point of energy conservation could not be recommended

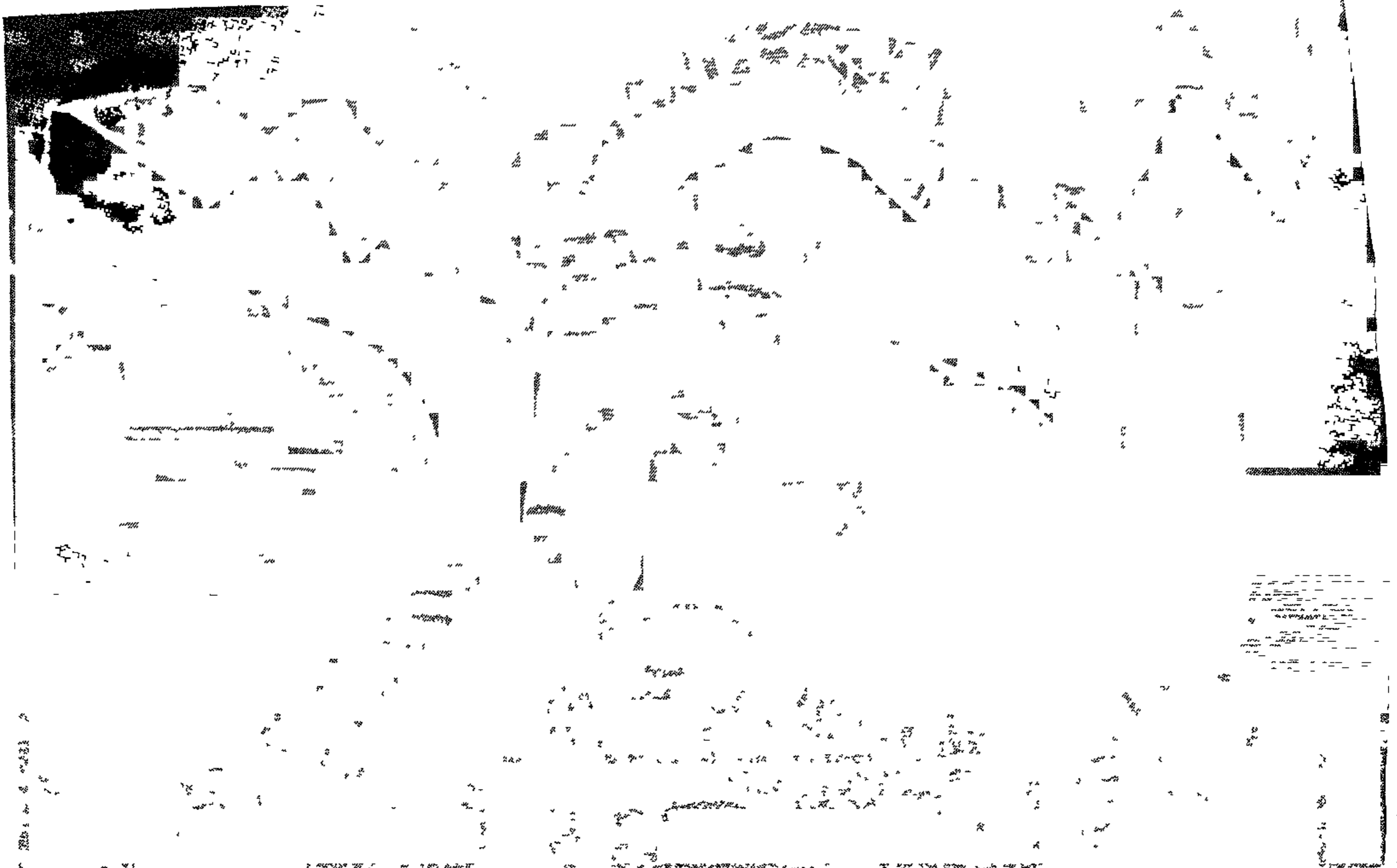
- (2) Yes
(a) 1981
(b) As in (1)(c)(ii) above

894 Mr L. STOFBERG asked the Minister of Trade and Industry +

- (1) According to what price formulae are (a) gold, (b) silver, (c) tin, (d) zinc, (e) copper and (f) diamonds made available to local processors,
(2) whether the principle that local users and processors acquire their raw materials at prices not exceeding net export parity prices, converted to the source of origin in Southern Africa, on a current basis, is applied throughout, if not, why not?

The MINISTER OF TRADE AND INDUSTRY

- (1) and (2) The prices of the commodities are not fixed by the Department of Trade and Industry In general, the position is, however, that in the case of gold, silver, tin, zinc and copper the prices which are paid by domestic users and processors are based on prices achieved on well-developed international markets. The average price achieved on the international market is converted to rand value and the purchaser pays accordingly. However, in the case of South African copper foreign clients pay a premium above international prices because of the high degree of fineness of the local product This premium is not paid by domestic purchasers. The prices of diamonds are fixed by the Diamond Trading Company and diamonds are offered to the registered purchasers at the fixed price Domestic purchasers receive a discount of 7,5 per cent on diamond purchases while foreign purchasers have to pay the fixed price in full. Owing to the decline in the value of the Rand in comparison with international currencies, the domestic



Striking GEC workers wait in the rain outside the company's Parktown offices. About 150 workers have been on strike since May 9. Picture. Reute

WEEKLY MAIL  
6/6/86  
**On strike in the drizzle**

By PAT SIDLEY

MORE than 150 workers who spent most of Wednesday in the wet and freezing cold outside GEC's plush company headquarters in Parktown successfully staged a sit-in late in the day to compel the large British multinational to talk to them.

According to a representative of the Metal and Allied Workers Union (Mawu), the workers, from three East Rand GEC plants, had been trying for about three years to get the company — which is half-owned by Barlow Rand in South Africa — to talk about a variety of grievances and problems.

The company had wanted to bargain with unions at each of the plants, while the union wanted to talk to the head office of the company about problems at each of the plants.

The union representative told Weekly Mail that about 1 300 workers had been on strike since May 19 at three plants, one in Knights, Germiston, one in Springs and one in Benoni.

He said 49 machine operators had been dismissed after a strike and an alleged go-slow (The union contends there was no go-slow). The dismissed workers were replaced with whites.

The union was demanding the reinstatement of the 49. It was also demanding recognition.

On Wednesday workers hired buses and drove to Parktown to put their demands.

They stood for most of the day in the rain until a door was opened to allow somebody out, and according to company secretary AEJ Mackie, the workers gained entry.

Mackie told Weekly Mail "There was a peaceful demonstration here yesterday. Members of management negotiated with workers and shop stewards for a date at which problems could be aired and discussed."

# 22-million people in SA have no access to electricity

19686 SPAL 185

By Sue Leeman, Pretoria Bureau

About 22 million of the 31,4 million people in South Africa in 1984 did not have access to electricity and used wood, paraffin, coal and gas to meet their basic energy requirements

Senior research officer with the Energy Research Institute, Dr A A Eberhard, told an energy conference in Pretoria today it was vital these energy needs be met

He said by the year 2000 South Africa (including TBVC countries) was expected to have a total population of 45 million, of whom 35 million would be black

Rural populations would increase marginally, but communities in urban and peri-urban areas were expected to more than double

Informal settlements in peri-urban areas around metropolitan centres would grow and there would be larger settlements in homelands which bordered on South Africa's densely populated urban areas

Dr Eberhard added "This sector cannot be ignored in national energy planning and investment decisions"

He suggested all housing in and around metropolitan areas and towns could be electrified on less than 8 000 kilowatts a year — 7 percent of the total electricity sent out by Eskom in 1984

## PROVISION OF SERVICES

This was little more than a third the capacity of one of the 3 600 megawatt power stations now being constructed and would provide electricity for about 5,5 million people

However, it appeared provision of such services was still regarded as of secondary importance in planning townships and upgrading peri-urban and informal settlements

He added "The massive housing project at Khayelitsha in the Cape is another example where electrification of houses is ignored. By denying electricity to these areas, communities are further impoverished by having to meet

the higher costs of fuels such as coal, gas, paraffin, candles and batteries and quality of life expectations are frustrated.

"This situation can only exacerbate an already deteriorating social and political climate"

Dr Eberhard said rural areas also still had a great need for energy resources. Reliable, low-cost, decentralised small power supply systems should be installed

There was also a need for fuel wood, which must be provided without further denuding the country's forests

All this would cost money, he said, but "ignoring these problems may, in the long term, incur even higher social, environmental and political costs"

## LATEST TECHNOLOGY

In another address, deputy chairman of Rand Mines, Mr A A Sealey said the coal industry must continue to employ the latest technology and scientific procedures to maintain the progress it has made

He said a number of new steps could be taken, including

- Development of new coal liquefaction processes to produce and sell a wider range of petrochemical products

- Possible construction of natural gas pipelines, which may have export potential

- Further research into combustion technology

- Cleaner stack emissions should be obtained through better scrubbing of coal or improved combustion,

- On-site processing of coal or use of robotics in difficult conditions should be investigated

Mr Sealey also called for improved efficiency and greater capital intensity

And, he said, output must be kept in line with wage demands, or producers would fail to adequately control costs

Mr Sealey added that adequate attention must be given to training

# BUSINESS DAY

96 tax) For other prices, see Back Page  
Office, Eastern Province 806 (710 + 96 tax)

SAVE R3210  
ON A MAZDA 620

Nobody Understells City Motor Group

20 Elton St. JHB 351-0357

**CITY MOTOR GROUP**  
Een stap voor 'n stap ahead

## Board of Trade to get wide-ranging powers

THE Board of Trade and Industries (BTI) is to be given greater powers.

Draft legislation tabled in Parliament yesterday will free the board to undertake its own investigations and activities in addition to requests from the Minister.

The Board of Trade and Industry Bill will also enable the BTI to make greater use of private sector expertise through the creation of part-time board members.

CHRIS CARINCROSS  
and DAVID FURLONGER

The legislation, which heard chairman Lawrence McCrystal expects to become law later this year, is the result of recommendations by the Vander Horst Committee into the BTI.

The Bill is intended to enable the BTI the better to promote economic development in South Africa and the common customs union area.

Its functions will include advising the Minister on development of resources, advising on customs and exchange duties and promoting competitive ability in industry.

McCrystal said yesterday the legislation would have two main effects — freeing the BTI to initiate its own activities and investigations, and allowing it to make fuller use of the private sector.

It will give the board the right to do

investigations at its own initiative instead of on the instruction of the Minister, he said.

That is a far-reaching change that further highlights the independence of the board.

Welcoming the addition of part-time board members, he said: "It will enable us to attract people who can give all their time, particularly from the private sector."



McCrystal

McCrystal

...tion cover from some insurance agent could then purchase these ... Trades Union Congress ... Libraries, Video Clubs ... English Radio and TV from ...

# RESISTANCE DAY

5c tax) For other prices, see Back Page  
vince, Eastern Province 80c (71c + 9c tax)

## Board of Trade to get wide-ranging powers

**THE Board of Trade and Industries (BTI) is to be given greater powers.**

Draft legislation tabled in Parliament yesterday will free the board to undertake its own investigations and activities in addition to requests from the Minister.

The Board of Trade and Industry Bill will also enable the BTI to make greater use of private sector expertise through the creation of part-time board members.

**CHRIS CAIRNCROSS and DAVID FURLONGER.**

The legislation which board chairman Lawrence McCrystal expects to become law later this year, is the result of recommendations by the Vander Horst Committee into the BTI.

The Bill is intended to enable the BTI to better promote economic development in South Africa and the commonwealth union area.

185

BUD DAY 19/6/88

“THE VITAL VIEWPOINT”

Its functions will include advising the Minister on development of resources, advising on customs and excise duties and promoting competitive ability in industry.

McCrystal said yesterday the legislation would have two main effects — freeing the BTI to initiate its own activities and investigations, and allowing it to make fuller use of the private sector.

“It will give the board the right to do

investigations at its own initiative instead of on the instruction of the Minister,” he said.

“That is a far-reaching change that further highlights the independence of the board.”

Welcoming the addition of part-time board members, he said: “It will enable us to attract people who can give all their time particularly from the private sector.”

SAVE R321 ON A MAZDA

20 Eloff St. JHB 2011-0351

**CITY MOTOR GROUP**

Fenstop voor 4-step omdraai

McCrystal ... more of them

22/6/86 185 S. DMS

# Winter cheer for clothing retailers

**WINTER** has brought cheer to clothing retailers and many expect the summer season to be even more rewarding.

In spite of a general decline in consumer spending, most clothing retailers report a turnover increase of as much as 30% above last year.

Winter clothing deliveries from manufacturers started in January and Mike Getz, president of the National Clothing Federation, says prices were "not too good"

## Wool soars

"There is a direct relationship between inflation and volume and as prices moved up even marginally so volumes declined"

Winter is a gamble, he says, but the cold snaps have resulted in an im-

By Don Robertson

provement in turnover. It is expected there will be some shortages of garments at retail level.

However, manufacturers have been hard hit by rising raw material prices. SA wool costs are based on international prices and rose by about 50% at the last sale.

As a result, SA demand for wool fell from about 15% of the clip to about 8%. The price of men's suits has soared and they are now too expensive for many people, says Mr Getz.

The winter selling season is almost over and retailers are running sales to clear stocks for the summer range.

The large chains have made bigger inroads into the market this year.

Vic Hammond, managing director of Edgars, says he is happy with winter sales. The cold weather pushed up

sales by about 60% on last year.

"Sales in June are 30% up on 1985 and in April and May we had a double-digit sales increase."

However, he concedes the market is tough and it has been necessary to trim margins, maintain promotions and be aggressive.

"In terms of summer sales, we are going for market share and have placed orders which should produce values above the inflation rate."

Stephen Jaff, managing director of women's clothing manufacturer Delswa, says unit sales are up by about 10% and turnover has risen by about 20%. Orders for the summer season are also healthy.

OK Bazaars has had "quite a good winter", says Carlo Pullini, director for clothing. "Orders we have placed for the summer season are about 10% up on last year."

## Surprise turnaround

**Activities** Manufactures men's shirts and leisure wear, ladies' knitted overwear and children's fashion wear

**Control:** Directors control 66%

**Chairman:** P Kawitzky

**Capital structure:** 600 000 ords of 50c  
Market capitalisation R1m

**Share market:** Price 130c 3,5% on earnings, PE ratio, 28,9 12-month high, 200c, low, 130c

**Financial.** Year to December 31

	'82	'83	'84	'85
<b>Debt</b>				
Short-term (R000)	2 584	1 361	2 243	1 828
Long-term (R000)	526	337	774	1 850
Debt equity ratio	2,2	1,1	1,2	1,4
Shareholders' interest	0,24	0,36	0,39	0,37
Int & leasing cover	3,1	2,1	—	1,1
Debt cover	0,17	0,15	—	0,04
<b>Performance.</b>				
	'82	'83	'84	'85
Return on cap (%)	13,5	8,4	—	8,3
Turnover Index*	204	169	171	138
Pre-int profit (R000)	784	348	(267)	580
Taxed profit (R000)	310	150	(409)	33
Earnings/(Loss) (c)	50,6	23,9	(69,1)	4 5
Dividends (c)	15,0	10,0	2,5	—
Net worth (c)	217	230	412	417

\* 1978=100

In previous years Burlington's high level of debt has dragged down its profits, but last year the group turned its 1985 loss into a profit — despite increased borrowings, a R237 736 (or 77%) rise in interest paid and a fall in turnover. Chairman Philip Kawitzky says stringent control was the reason for the recovery. Debtors have been reduced by 24%, and finance and leasing charges are 47% lower, but an anomaly is the 24% rise in stocks, especially of finished goods.

According to director Anthony Kawitzky, a large portion of the higher stock resulted from the extension of delivery periods for winter stock at the request of customers. Inflation pushed up selling prices and stricter control of credit led to deliveries to some customers being held back.

Philip Kawitzky says the export programme is being maintained and management hopes to increase export turnover. This

food) domestic expenditure of 7,8% — the first such decrease in a decade.

A compensating boost was derived from the important snack subsidiary, Simba, which advanced both turnover and profits, and showed the strongest growth of all the group's major divisions. On the strength of aggressive product promotion, Simba is said to have gained market share. It now turns over some R120m and if market rumblings are true, this subsidiary could eventually acquire its own listing.

Not that Fedfood needs funds right now. Since raising R40m in a rights issue towards the end of its financial year, gearing has fallen to a healthy looking 0,37 (0,59). The cash came in too late to reduce last year's finance costs, although the interest bill nevertheless, fell last year to R30,6m (R34,4m). Interest payments should drop substantially in the current year with benefits for the bottom-line.

Fedfood has finally thrown in the towel on

direct selling, a concept it failed to come to grips with in the Riviera division, which it bought a few years ago. Riviera, estimated to have cost Fedfood around R12m, was completely restructured last year. It was absorbed into Fedbisco Holdings, and its products will henceforth be sold through usual retail channels.

Fedbisco managed to increase market share, despite tough competition from Bakers and others, but its profit margins were eroded. Last year it tried unsuccessfully to launch the French imported LU biscuit range. Unfavourable exchange rates forced Fedbisco to drop the line, at a cost of over R1,3m.

Frozen food subsidiary, Table Top, increased turnover by 18%, while lifting profits by 15%. With local competition intense in this market, Table Top has held its own with a stream of new product launches, and a highly successful drive in export markets. MD Johan Louw says export volumes dou-

bled last year.

With debt reduced, and the Riviera problem resolved, Fedfood seems well placed to lift earnings further this year. There is, however, one concern that looms over the group, and the entire milling and baking industry. This concerns the Davin Commission's recent recommendation that the bread subsidy scheme be phased out. It is unclear how Fedfood and its competitors would be affected if this proposal is implemented.

Since Fedfood released creditable results in late May, the share has shown curious weakness, falling from 695c to 635c. At this price, the share is well below the 12-month high of 730c. With a dividend yield of 5%, the stock is among the poorest-rated in the food sector, whose average yield is 3,7%. It seems a somewhat harsh rating, considering that Fedfood has managed to recover sharply against tough odds, and that the counter trades at a hefty discount to net worth.

Neville Glaser



00  
95  
95  
95  
95  
ons

# BP silent over R200m soda ash project

BP Southern Africa has declined to comment on speculation that it is going ahead with its proposed R200m soda ash project in Botswana

A BP spokesman confirmed in Cape Town yesterday that an appli-

**Industrial Staff**  
... had been lodged for an extension of the existing prospecting licence over 2 000km<sup>2</sup> of the resource area in the Makga-Dikgadi depression

... study on a 1 000km<sup>2</sup> area in the north-east of the depression

Soda ash is used in glass-making, the paper and pulp industry, the steel industry and in the manufacture of certain detergents and chemicals

BP has already completed a fea-

## 45 PABX FOR SALE

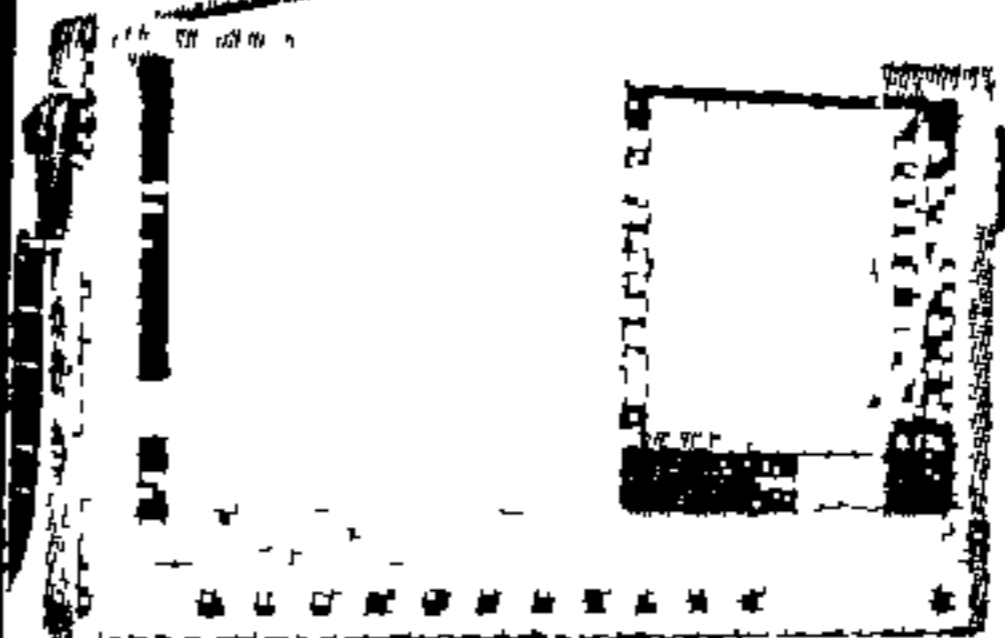
### Units ranging from

- 4 to 40 G.P.O lines and from
- 8 to 800 extensions
- Prices from R80 per month
- Trunk barring control on all systems
- Intercom facilities on all units
- Free installation within South Africa
- Full maintenance and guarantee

**PABX EXCHANGE (PTY) LTD**  
**JHB (011) 339-2272/3/4. TELEX 422478**

## SHORTWAVE RADIO RECEIVER

### LISTEN TO THE WORLD BROADCAST STATIONS WITH THE KENWOOD MODEL R-11 PORTABLE RADIO



- ★ SIMPLE TO OPERATE
- ★ EXCELLENT PERFORMANCE
- ★ CLEAR SIGNALS
- ★ HEAR BBC, VOICE OF AMERICA, ETC
- ★ NEWS • SPORT • MUSIC
- ★ COVERS 11 BANDS INCL FM/AM/SW

**10% CASH DISCOUNT**

**JILIEBERMAN**  
ELECTRONICS (PTY) LTD

1 FL 108 PRESIDENT ST  
COR VON WIELLICH JHB  
PO BOX 8628, JHB 2000  
TEL (011) 29-8354

# PRODUCING GETTING

# SIX O

# More E Cape hives of industries planned

27/8/86 EWG P08 185

## Post Reporter

A HIVE of industries is to open in Stutterheim next week.

And similar projects would be launched in Uitenhage and East London shortly, the Small Business Development Corporation's (SBDC) special projects manager in the Eastern Cape, Mr Willie Fouché, said today.

Mr Fouché said the Stutterheim project, consisting of 19 units and creating about 80 jobs, would open next week.

It would be housed in a large timber building

which has had to be extensively renovated.

There was adequate room for expansion and other industries had shown an interest in part of the 10 000-square-metre building following the SBDC's show of confidence in the area.

Mr Fouché said the corporation's managing director, Dr Ben Vosloo, would address a meeting of major industries in Uitenhage on September 10 with a view to getting them involved in the hive.

A building to house the hive, which would consist

of 22 units and provide about 100 jobs, had already been secured.

There was a "substantial" demand for the units which would be in three groups: clothing, mechanical and carpentry.

He said Dr Vosloo would be seeking input from the industrialists, as well as trying to get them involved in the project financially.

The hive was programmed to become operational in November. All it required was subdivision, which would take a month.

# Tax cuts | Crawl | more

*W.F. Hart*  
*11/19/78*

## Industry

# to Ciskei



A broad spectrum of industries — from sophisticated electronics to manufacturing fishing rods — has been established in Ciskei.

Electrically operated sliding

SLASHING taxes to attract new industry is cheaper and more effective than offering incentives.

That was the clear message from the Ciskei People's Development Bank as it celebrated its 10th anniversary this week.

Managing director Mr Cecil Vanda said the bank — which operates as a development agency — had succeeded in attracting 40 new companies to the independent state in the last year.

This had been accompanied by an investment of R53.9 million and had created 3 000 new jobs.

A further 19 factories had expanded operations, representing additional investment of R14.8 million and creating 2 671 jobs.

While conceding that providing wide-ranging and highly competitive incentives had played the key role in establishing the Ciskei's Dimbaza and Fort Jackson as industrial centres for South African and international interests to set up new operations, Mr Vanda said the tax concessions were now taking over as the main motivating force.

Ciskei became Africa's new "tax haven" last year when it abolished company taxes and slashed personal taxes to a low rate of 15%, with the first R8 000 being tax exempt. Other changes provided a more widespread package.

"We have benefited greatly from the tax-free haven, not only in terms of attracting new industry but also in the type of operations and longer-term commitment we are attract-



MR CECIL VANDA

ing," said Mr Vanda. Industrialists who had initially been attracted to Ciskei to "cash in" on the incentives were no longer coming, and were being replaced by those seeking the tax benefits and looking for long-term viability.

"The new concept is showing signs of success as 90% of new businesses are being attracted by the tax-free benefits."

Mr David Hart, the bank's general manager, development, said that while concessions were still available they were an expensive method of attracting new businesses. He said many companies

left concession areas within seven years — after deriving maximum benefits from incentives.

They would then set up in another concession area under another guise.

But the tax concept offered longer-term attractions.

"I am surprised that South Africa has not grabbed at this opportunity as it is less expensive than providing incentives," added Mr Hart.

Mr Vanda said that several of the new companies established last year had come from overseas, including France, Italy, the US, Israel, Hong Kong, Taiwan and Argentina.

This was indicative of the confidence that investors worldwide placed in Ciskei's "bold new tax reform policies".

"Despite an initial hesitance on the part of investors, these policies have resulted in a number of inquiries being received."

"Such is the quantity of these that during the last few months of the last financial year, the bank was establishing an average of one new project each



By Bob

**Kernohan**  
Business Editor

week," said Mr Vanda. The bank had built 100 factories in Dimbaza — the 100th was officially commissioned this week — 29 in Fort Jackson and 12 elsewhere in Ciskei, representing R107 million worth of building.

A further R13.3 million had been ploughed into providing an infrastructure.

"The bank feels that Ciskei has every reason to look to the future with confidence, despite the current economic and political situation in Southern Africa."

MANUFACTURING.  
ELECTRICITY

JAN. - JULY 77.

MAY - JULY 78.

# Escom raises pay: unions unhappy

STAR 29/7/75

**Labour Reporter**  
The Electricity Supply Commission will pay most of its workers at least R25 extra from this month. But Mr J. E. Faure, secretary of the Escom unions' joint committee, said. "These increases do not

fully offset the rise in the cost of living for all employees." The increases, which vary for different occupations and pay notches amount to at least R30 a month extra for artisans. The previous Escom pay adjustments were effective from last January Administrative staff are

not included in the new deal. "Reaction is generally unfavourable and I doubt whether employees will be satisfied for long," commented Mr Ken du Preez of the Engine Drivers', Firemen's and Operators' Association whose monthly publication announced the new pay rates today.

# Koeberg N-plant safest in world,

## says Escom

By BOB MOLLOY

*Cape Times 3/1/77*

KOEBERG — The Republic's first nuclear power station now under construction near Melkbosstrand in the Western Cape — will be the safest of its kind in the world, with a total radiation level lower than the natural level of the country's inland areas.

This was disclosed in Johannesburg last week by Escom's chief nuclear engineer, Mr J R Colley, in the first direct reply to mounting criticism of the project by Western Cape environmentalists

In a courageous "warts and all" account of the advantages and problems associated with nuclear power — including a horror scenario of what could happen to the Western Cape should the hundred-million-tonne chance of a major accident occur — Mr Colley said the new station would not only conserve dwindling water and coal reserves but would also relieve the Cape of its dependence on the Transvaal for electrical power

"Escom studied the pros and cons of nuclear power for eight years before finally deciding to proceed with the Koeberg programme. A nuclear station in the Western Cape was proved to be more economic than the cheapest alternative means of supply, namely generation in the Transvaal and transmission to the Cape," Mr Colley said.

### Coal saving



Mr Colley

would be contained in the spent fuel. This would be shipped out in shielded containers to an overseas fuel reprocessing plant.

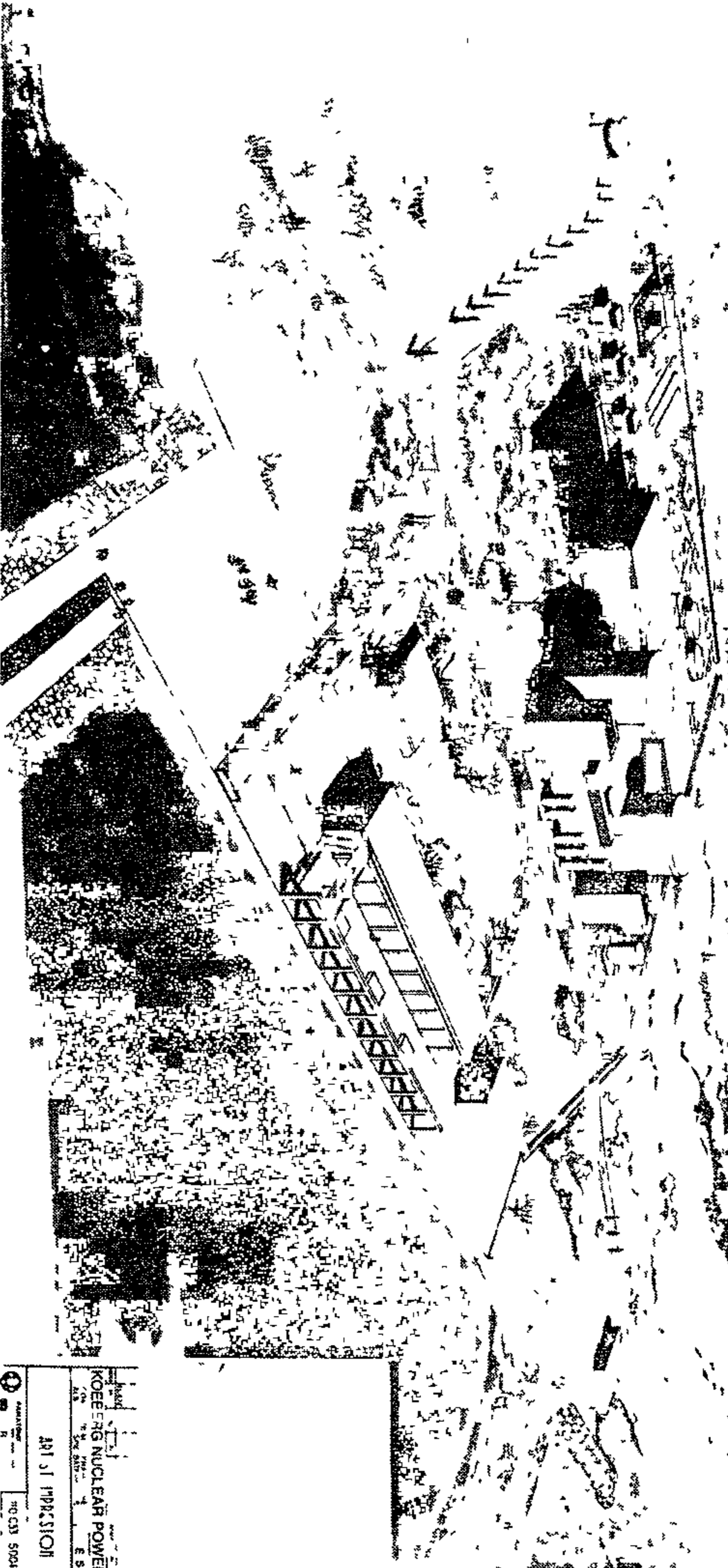
The effect of all this would be to slightly increase the naturally occurring background radioactivity of the area. At present this was 100 millirem a year. Koeberg, at the height of operation, would not be allowed to emit more than 10 millirem a year, an increase of only 10 percent in the natural level. In comparison, Johannesburgers

by University of Cape Town experts over the past few years. The effect would be to create a "warm water species" pocket for a few kilometres around the station outlet only, Mr Colley said.

### Accidents

The likelihood of serious accidents and their consequences had also been carefully studied. The approach towards the safety of nuclear plants was to ensure that the chance of a major accident in any one year was less than one in a million. As far as Koeberg was concerned, the risk to Capetonians was about one in a hundred million — about the same level of risk "as that of being struck by a meteorite".

Escom had selected a type of nuclear plant which had been thoroughly proven over the past 20 years. More than 60 stations of this type were already in operation and more than 200 were in construction throughout the world. The safety of this type of plant had been accepted by 20 licensing authorities in the leading countries of the Western world.



KOEBERG NUCLEAR POWER STATION  
APR 31 1977  
NO. 53 5104

An artist's impression of the Republic's first nuclear power station to be built near Melkbosstrand. Escom, the operating authority, has given an assurance that the station will be more attractive in appearance than most industrial complexes and that special attention is to be given to preservation of the natural fauna and flora. The important archaeological finds on the site will not be affected by the project.

nuclear fuel to melt, said Mr Colley.

"This would liberate radioactive material into the reactor containment building.

If this containment building were in turn to fail, much of this material would reach the

ties are inhaled, may eventually cause thyroid cancer 15 to 30 years later.

In the event of an extreme disaster, occurring during adverse weather when the wind is blowing towards Cape five cloud towards Cape

power had risen steeply but background level of 130 coal-fired plant costs had also risen, as had the price of coal. Should this steep rise continue, nuclear stations would be far cheaper to operate and maintain than new coal-fired plants.

In comparison with 2 000MW coal-fired stations using cooling towers, Koeberg would save about 100 million litres of fresh water and 16 000 tonnes of coal a day. This meant that the station would conserve about 200 million tonnes of coal over its operating lifetime.

**Environment**

Escom had spent over R1m in the past five years on investigating the environmental impact of the new station on the area. Leading experts from South Africa and abroad had been employed on aspects such as seismology, oceanography, hydrology, meteorology, marine biology, geology, and ecology, he said.

They reported that atmospheric pollution would be negligible and would have no effect on the environment. The small quantities of radioactivity released into the sea would pose no threat either to marine life or to persons eating fish or shellfish from this area.

The large volume of seawater used to cool the plant would be heated to 12 deg C before being returned to the sea. This was investigated

Koeberg was sited on a larger and more remote area than most American and European stations, lending a larger degree of assurance of safety to the public in the vicinity. Its safety was assessed by the licensing branch of the Atomic Energy Board.

This group was completely independent of Escom and not involved in the project in any way other than safety assessment. Under the Nuclear Installations Act (Licensing and Security) the AEB could prevent Escom from operating the station at any time if it suspected that the safety of the plant was inadequate.

"I could go on to describe the multiplicity of safety systems built into Koeberg but these details are meaningful only to the nuclear engineer and scientist. Suffice it to say that the safety assessment does allow for human error in both construction and operation," said Mr Colley.

**Cancer**

"In common with all other matters affecting nuclear safety, this programme will have to meet the requirements of the AEB. The power station is designed so that the building and control room can be evacuated and the whole plant shut down from a separate control room away from the disaster area."

People living in the path of the cloud would inhale radioactive material, the principal isotope of concern here being iodine-131. This material is absorbed by the thyroid and, if sufficient quan-

6 000 deaths over a period of some 30 years.

**Milk**

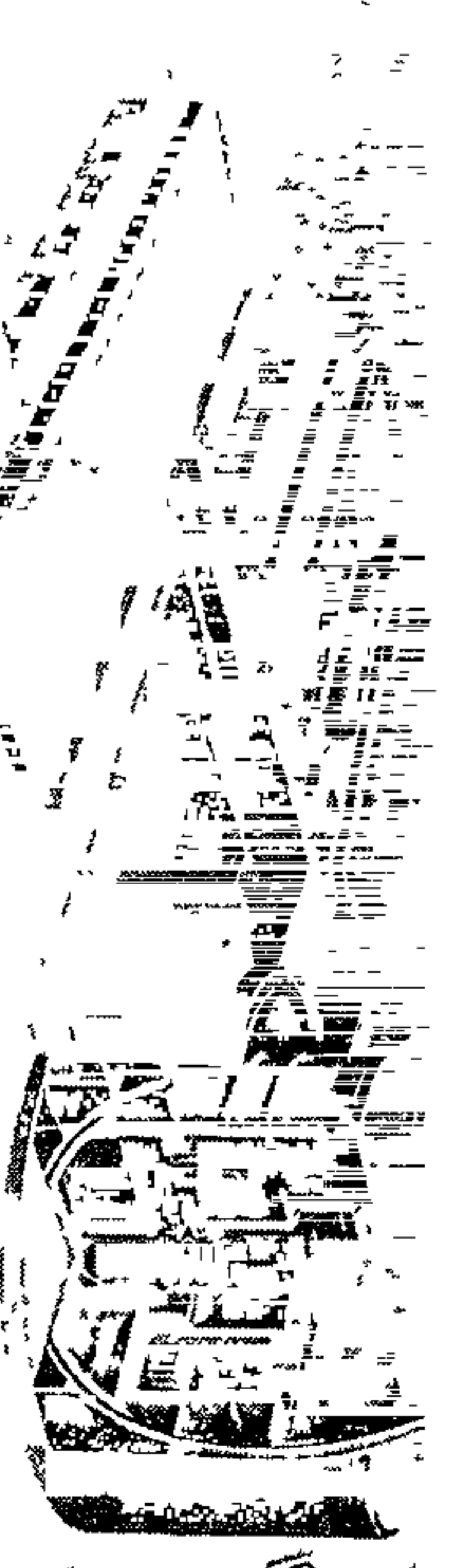
"This figure is an absolute maximum. If at the time of the accident the wind is blowing in any direction other than towards Cape Town the casualties will be far less. The wind blows down the coast to Cape Town only about 10 percent of the time and there should be no casualties if the wind is blowing out to sea," said Mr Colley.

It was customary for nuclear power stations to keep stocks of iodine tablets for use by the population in an emergency. These tablets, which are harmless, would greatly lessen the impact of the radioactive iodine.

**Decades**

If the "fall-out" of iodine-131 occurred on grass it would be ingested by cows and contaminate their milk. In the event of a major nuclear accident this milk would have to be destroyed.

According to the calculations of the AEB, land between 100 and 200 km downwind would be subject to an unacceptable level of con-



This diagram shows a typical nuclear power station layout. The reactor core — the atomic heart of the plant — lies in the upright cylindrical object at the centre of the dome. This generates intense heat to power the steam turbines seen in the cutaway section to the left of the dome. The turbines then turn the station's giant alternators to produce electrical energy in the normal way.

But as iodine-131 has a half-life of only eight days (the isotope halves its radioactive strength every eight days and hence dies away relatively quickly) milk from an exposed area would have to be destroyed for a maximum of a few weeks only.

**Worst possible**

Mr Colley warned that this was an assessment of the worst possible reactor accident — the one in a million — Caesium-137 which has a half-life of 30.2 years. In this case land up to 15 km downwind would be subject to such levels of fall-out that unless the top 30cm of soil were scraped off or ploughed in it would be necessary to evacuate the area for several decades.

"The residents of the Western Cape may rest assured that every effort will be made to ensure that Koeberg nuclear power station achieves the same high safety standards that characterize the world's nuclear industry," Mr Colley said.

%	(S000)	%	(S000)	%	(S000)	%	(S000)
2	196T	1	196T	1	196T	1	196T

Geographical Sources of African Mines Employed by S.A. Chamber of Mines (1) (2) 476T-906T

185  
THE ARGUS, WEDNESDAY FEBRUARY 23 1977

# Nuclear power station with a view



TABLE MOUNTAIN forms a distant backdrop to the construction site of the new R1 000-million nuclear power station at Koeberg near Melkbosstrand. The contract was approved towards the end of last year. Construction is expected to be finished within two years.



# Soweto lighting: training vital

Sta 19/2/7

## Labour Reporter

South Africa's leading electrical trade union has called for a massive multi-racial worker training programme as soon as Soweto's electrification gets the go ahead.

The General Secretary of the SA Electrical Workers Association, Mr B Nicholson, said the electrification

project would provide job opportunities for thousands of people who might otherwise be unemployed.

It would also provide employers with an incentive for proper training. Something which had been lacking in the past.

Several hundred black people registered in terms of the Whitemen's Registra-

tion Act and entitled to work in Soweto, are probably unemployed at the moment.

If this scheme gets off the ground we shall need many more skilled men of all races. Despite the unemployment situation in other industries, we have insufficient electricians in South Africa."

Mr Nicholson said a massive training effort was essential if Soweto was to be electrified in the envisaged time of three years or so.

Qualified men would have to be imported if they were not available in South Africa, he said.

We must guard against training people who will have no work when the project is completed.

## DOLDRUMS

Mr Nicholson said the electric appliances industry was in the doldrums and manufacturers of street lighting equipment had been without orders for months as a result of municipal cutbacks.

The proposed electrification would stop retrenchments in these industries.

It would also

- Reduce unemployment on a wide front by revitalising various industries hit by the economic slump apart from creating work in Soweto itself.

- Reduce Soweto's notorious crime rate as a result of street lighting.

- Eliminate the serious pollution problem in the black township.

- Give impetus to training of skilled workers.

- Stimulate the building industry.

- Encourage the clothing industry.

- Encourage the printing industry.

- Encourage the food processing industry.

- Encourage the leather goods industry.

- Encourage the metal goods industry.

- Encourage the wood goods industry.

- Encourage the paper goods industry.

- Encourage the textile goods industry.

- Encourage the footwear industry.

J. A. VERHAEGE, „Deftige en Gemeensame vorme in die sityverbaard van ou Kaapse taal", Tydskrif vir geleesverwenerskap, jg. 5, nr. 3, 1965, pp. 307-323.

J. A. VERHAEGE, „Die herkoms van die verbinding as woordeboek na 'n kompartiefen sy verbreding in Afrikaans", Tydskrif vir geleesverwenerskap, jg. 7, nr. 1, 1967, pp. 328-342.

hier, soos die Nederlandse volkspedagogie, I. L. P. van der Merwe, met 'n oorgetelde verskynsel te make

ins 200 jaar was nodig om die Afrikaanse kiel in die ontwikkelingsproses het te c op die gebied van die woordeboek, die struktuur, en die verspreiding bygedra. Wanneer estudeer, sien ons dat nie die een of ander spesifieke faktor vir die vorming van Afrikaans nie, wat die Afrikaanse taal die produk van 'n 17de-eeuse Nederlandse, soos in die oorsiglike van Afrikaans voortsittings van die tendense in 'n dialek wat in Nederland self ontwikkelde of verdwyn het. Daarnaas het die verhouding aan die Kaap 'n rol gespeel. Ook hier is 'n belangrike faktor die isolering en vir die taalvorm verantwoordelik hou. Ons kan byvoorbeeld die Franse of Duitse immigrasie die Afrikaanse taal, of die Duitse of die vereenvoudiging saak het nie

in van Afrikaans

Vreer is daar wat aan die een of ander beshissende taalinvloed gedink. Dit was die geval voornamlik in taanlik groot hoewelheid direkte ge-

kwis van die Kaapse taal in die Argie in Kaapstad gevind is. Kort na die stigting van die GRA het die belangstelling in die herkoms en ontstaan van Afrikaans by taalgeleerdes begin posvat en aanleiding gegee tot die ponering van verskillende teorieë oor die ontstaan van Afrikaans. Th. Hahn se *Heimvolks-teorie* van 1882 was die eerste poging tot 'n verklarung van die karakter van Afrikaans. Hoewel hy vasgestel het Afrikaans "phoretically teutonic" is, d.w.s. sy Germaanse struktuur betoel, is dit volgens hom "psychologically an essential Hottentot idiom". Maar hierdie vae stelling kan hy nie bewys nie. Kort ná hom kry ons die belangstelling van Nederlandse geleerdes soos

die *Frans-teorie* voorgestel. Volgens

die invloed van die Franse Hugenote het die teorie in 1897 al werke. In blywende Duitse geleerde en kenner van die Franse faktor wat by die vorming van Afrikaans 'n belangrike rol gespeel het. Dit is die teorie van die Franse geleerde J. A. Verhaege, wat in 1901, op grond van 'n studie van die Kaapse taal, die teorie van die Franse faktor wat by die vorming van Afrikaans 'n belangrike rol gespeel het, voorgestel het. Volgens Verhaege is die Kaapse taal 'n mengsel van die Franse en die Nederlandse taal, met 'n groot aantal Franse woorde wat gebruik is deur die Kaapse volk. Verhaege se teorie is baie invloedryk geword, en dit is die teorie wat die meeste aanvaar is. Dit is die teorie wat die meeste gebruik is in die literatuur en in die wetenskap. Dit is die teorie wat die meeste gebruik is in die wetenskap. Dit is die teorie wat die meeste gebruik is in die wetenskap.

Die teorie van die Franse faktor wat by die vorming van Afrikaans 'n belangrike rol gespeel het, is die teorie van die Franse geleerde J. A. Verhaege. Volgens Verhaege is die Kaapse taal 'n mengsel van die Franse en die Nederlandse taal, met 'n groot aantal Franse woorde wat gebruik is deur die Kaapse volk. Verhaege se teorie is baie invloedryk geword, en dit is die teorie wat die meeste aanvaar is. Dit is die teorie wat die meeste gebruik is in die literatuur en in die wetenskap. Dit is die teorie wat die meeste gebruik is in die wetenskap.

het om 'n Kreoolse taal te word

Ongelukkig het Hesseling destyds nie oor die nodige direkte taalgegewens beskik nie, hy kon sy teorie feitlik net op sosio-historiese gegewens baseer wat byvoorbeeld die volledig en kortel was. Daarom was ook sy teorie omtrentlik en eensydig. Dit het 'n hipotese gebly wat hy nie kon bewys nie.

Michael Chester, Financial Editor

The big banks today pledged a R50-million package in short-term loans to push ahead with the massive scheme to provide a complete electric power scheme for Soweto.

The finance package now only awaits pledges of Government guarantees to allow a final go-ahead.

Banks ready to contribute to the capital needed to start the project include Nedbank, Barclays Standard and Volkskas. They regard the Government guarantees they have asked for as little more than a formality.

It has been the shortage of capital—especially in recession time and during big cutbacks in Government spending—that has delayed a launch of the electrification scheme.

But the bankers now insist on a start as soon as possible with three main aims:

- 1. To improve living conditions in the black township, to cool down simmering social unrest.
- 2. To bite into unemployment by creating an entirely new work force to tackle the vast project.
- 3. To give new impetus to demand for a wide range of goods—ables of industries out of the recession.

Spending on the ripple effects of the electrification would run into tens of millions of rands—all the more so if the project generates the extra jobs to increase spending power in Soweto.

The Government guarantee will mark the start of one of the biggest social advances the black township has known.

It is estimated that barely 25 percent of Soweto homes now have electricity—and even then not all with a complete power service.

It is understood that Barclays National Bank was the "pack-leader" in arranging the loans and that the scheme has the full backing of the Anglo American Corporation. Details of Anglo's involvement are expected later.

The news gave Soweto its second big moment of optimism today.

Farmer, Senator Horwood, Minister of Finance, announced that the Government is considering proposals to curb unemployment in the black townships.

### Housing

Senator Horwood divulged no specific details.

The Bureau for Economic Research at Stellenbosch University has already hinted that the Government is ready to increase its spending on black housing—not only to provide homes to ease the shortage, but also to provide more jobs in a bigger building programme.

Unemployment fund plan — Page 2; Electricity news delights Soweto — Page 3

# R50

# float

# lights

## A UWCER promised last year

The Star's Insight Team

The West Rand Administration Board first promised electric power to Soweto in July last year. Its chairman, Mr Mante Mulder, then said he expected to have all problems ironed-out by August.

His timetable may have been a little optimistic and his estimate of financial cost, from R15-million to R55-million, may turn out to be too low.

The board needs to provide new electrical installation for about 25,000 homes plus improving the often low voltage installation in the about 25,000 homes that already have power.

In addition, it will be necessary to install power in all new homes built (an upsurge in home-building is expected this year) and to launch a major programme to provide street lighting.

Mr Mulder has promised that Soweto power will not be on the lines of "austere schemes" proposed in the past. It will be a full supply capable of running a complete range of electrical appliances—including tele-



NATAL MERCURY 6/7/77

135

WP C

To a  
appr  
is a  
and

QUES

Name

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T

**JOHANNESBURG** —  
The electrification of Soweto will initially create jobs for about 2 000 Blacks, and improve the quality of life, Mr. S. R. Whiting, deputy managing director of LTA, said here yesterday.

He delivered a paper prepared by Powercon, a consortium of Roberts Construction, LTA and Siemens, and Marplan at the tenth annual economic congress of the International Association of Commerce and Economics Students.

"Perhaps the most significant changes that will occur in Soweto are sociological changes. The lack of lighting creates a feeling of insecurity."

Electrification, he said, would have the greatest impact on the income of the Soweto population. Through the medium of study they would increase their effectiveness and conse-

# ELECTRIC POWER'S BOOST TO SOWETO

quently their quality of life.

The project involves 80 000 houses, 2 500km of trenching, 3 000m of electrical cables and 15 000km of house-wiring.

The project will cost R60 million over three to four years. The average monthly employment during construction will be 100 skilled artisans (probably all White), 500 semi-skilled artisans

(Blacks trained or who could be trained) and 1 500 unskilled Blacks. It is possible that more semi-skilled Blacks will be used.

Once the project was completed, Mr. Whiting said, it had to be operated and maintained. At present there were few qualified Black wiremen. The number would need to be increased to service 80 000 houses.

"The long-term benefits of Blacks becoming fully trained artisans are well known — a higher number of skilled men available, higher income earned, and better style of life," Mr. Whiting said.

"We are looking at a situation in which we are talking about income generated and employment opportunities after the project work is complete."

Soweto would become the potential market for 80 000 stoves, fridges, kettles, hi-fi sets, TV sets, heaters, irons and washing machines. The likely sale of appliances over five years indicated 58 000 stoves, 54 000 fridges, 67 000 irons, 38 000 heaters and 13 000 washing machines.

Most of these appliances have almost 100 percent local content. —(Sapa.)

tly  
E  
7  
E.

Answer

Market capitalisation R15m.

**Financial:** Year to February 25 1978. Borrowings. Net short term, R4,3m. Debt.equity ratio 30,8. Current ratio 1,8. Net cash flow: R3,1m. Capital commitments R1,9m

**Share market:** Price. 170c (1977-78 high, 175c; low, 108c; trading volume last quarter, 71 000 shares) Yields: 24,3% on earnings, 7,1% on dividend Cover: 3,4. PE ratio 4,1.

	'75	'76	'77	'78
Return on cap %	26,4	27,2	32,2	27,2
Pre-tax profit (Rm)	3,8	4,3	6,2	6,3
Earnings (c)	26,1	29,7	41,4	41,3
Dividends (c)	8,5	11,5	11,5	12
Net asset value (c)	126	146	177	208

**Directors say** volume in the local dry battery market was static, and increased costs reduced margins "While offtake at consumer level has been much as expected," they say, "wholesale and retail outlets have tended to hold down inventories and this has resulted in a low growth period . . . in real terms." Export market growth boosted last year's profits and helped maintain production levels. Without exports, profits might have declined.

The balance sheet looks reasonably healthy with the current ratio up to 1,8 (1,7), and although short-term liabilities have risen 23% to R5,6m (R4,6m), the debt equity ratio is 31% (29%). Cash flow of R3,1m is equivalent to 55% of short-term liabilities, and the group is free of long-term debt. Interest charges have fallen 30% to R221 000 (R314 000).

Capital expenditure has increased to R1,9m (R189 000) the bulk being for funding the extension of the Port Elizabeth factory at a cost of about R1,5m. "The current year has started reasonably well," say the directors, but give no profit forecast. Exports may again compensate for static growth in the local market. The shares, close to their high, could move ahead.

Marguerite Christie

**EVEREADY** FM 7/7/78  
**Improving prospects** (185)

**Activities:** Manufactures portable battery systems, flashlights, bulbs and electrical equipment. Ever Ready (UK) holds about 65% of the equity

**Chairman and managing director:** R G Allin.

**Capital structure:** 8,8m ordinaries of 50c

In conclusion, as a result of our perhaps necessarily sketchy and impressionistic survey, we feel that we have canvassed the opinion of a sufficient proportion of South African industry to provide reasonably reliable, though not comprehensive, information to serve as a guide for those courses which should be included initially in the curriculum of the proposed Technical College.

Dr. Basil le Cordeur from the History Department is working on the history of a separatist movement in the Eastern Cape which started in the 1820s with the arrival of the settlers, continued to the 1880s and seems to have played a role in the groups which were pursued their separatist movement for the history he is working with Dr. Department, editing a book of the Axe of 1847. He says that the information is already known about the military aspects of the War. This analysis of the dynamics of each of the analysis.

Mr. Rick de Satge is at SAVS, by SHAWCO, and by SHAWCO, he is essential for such as market gardening but actual aspects of examining the feasibility of habitable structure but and which can be extended and in fact the people. For SAVS, he says the his projects is that for help. SAVS is looking at interest Professor Marais, at the compost lavatory system. At the same time they are trying to find areas of application for a water ram pump built from fairly cheap materials at a much lower cost than that at which the ram pump is available in the shops. For ENVIRAC Mr. de Satge is linked with the Economic Development Agency in Johannesburg, providing a communication system and providing relevant material for rural development.

Dr. Frances Ames is a neuro-psychiatrist. She points out the important fact that in South Africa there is only one Coloured psychiatrist and no African psychiatrists. She is working on many topics, including

## Bigger role seen for electricity

JOHANNESBURG — Electricity would provide about 40 percent—double the present figure—of South Africa's net energy consumption by the end of the century, Mr. Jan H. Smith, Escom's general manager, said in a lecture to the local branch of the S.A. Akademie vir Wetenskap en Kuns here yesterday. At present the major constituents of the energy consumption pattern in South Africa were oil (33 percent), coal (30 percent), electricity (20 percent) and coke and gas (17 percent).

If an historical economic growth rate of 5 percent a year was to be maintained during the next quarter century, the number of units of electricity sold will increase at the significantly higher rate of 6,8 percent.

The maintenance of the growth rate of 6,8 percent would mean that Escom would have to increase its electricity production at an annual rate of 7,3 percent a year.

Cheap energy in the world and to a certain extent in South Africa belonged to the past, he said. —(Sapa)

is really trying to identify the reasons why they sm, and the significance of Lony as a whole. In addition, also from the History ts on the history of the War itial look it does not seem light on what historians there is a lot of information s along which trade took place s to start understanding the rather than having just a global

by three organisations: by intermediate technologist. For help and self reliance projects small things, he says, en, in the longer term he is veneer housing which can be a ly by squatters on the site re are problems of restrictions extend structures, for example.

ll of his research and in all b requests from communities

31/8/77

# ELECTRICITY NO SHOCKS COUNCIL

Mercury Reporter

N. Mercury

185

**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.





# Guarantees now under critical consumer eye

Finance Reporter

185

A SPECIAL survey into guarantees issued by retailers of electrical appliances is being undertaken by the Consumer Council of South Africa. The council are concerned that eventual electrification of Soweto might lead to the less informed members of the public being fleeced by crafty retailers.

Mike Hawkins, chief information officer of the Consumer Council, which acts as a watchdog for more than two million consumers explains: "The council does not run a complaint service, but we are prepared to investigate obnoxious cases of the public getting caught. Unfortunately we are now getting more complaints than we can handle"

Cruz of the problem is that retailers have discovered that the "guarantee" can be twisted to protect them more than it protects the buyer. Under South African common law the

## WATCH THAT WARRANTY

TONY Factor is under attack for selling cars... (The warranty of the guarantee is under the same) We specifically exclude your right to cancel the guarantee...

### Flashback: The Tribune warning of June this year

buyer has all kinds of rights and privileges which vary according to what is being bought, but basically the buyer has the right to return goods which are defective or which do not fulfil the purpose for which they are advertised.

However, by getting the buyer to sign a "guarantee" his or her rights are drastically reduced.

According to Hawkins, car dealers are the worst offenders closely following by contract carpet specialists.

Several instances are

being investigated by the council. In one case a contract given to the purchaser stated that the onus was on the contractor to decide how many lengths of carpet must be used to complete a job..

The final result was a hallway of a house completed in lengths of two metres, plus two lengths of 5cms each

The council would like to see the public reach a state of awareness where they demand a "retailers" guarantee with every item they purchase.

Die I...  
FLAVIAN...  
"Sater...  
Jos., B...  
them p...  
viciously co...  
Dio lxv...  
Jupiter...  
toms.  
Duet., D...  
qui ue...  
genti...  
a procurat...  
an circums...  
"Ken...  
Coin of Ne...  
Dio lxv...  
charged...  
ned.  
Dio lxv...  
of mai...  
REVOLT OF Ger...  
Eus., Hist...  
were flour...

43  
ern  
ali,  
?  
s,  
s,  
lies,  
ns.

the Jews...  
eighteenth year of the reign of the Emperor...  
broke...  
and in the...  
seized by some...  
against...  
in the following...  
Egypt...  
fled to Alexandria...  
thus losing the help of the townsmen...  
the country...  
Luevas...  
forces including...  
battles for a considerable time...  
those of Cyrene...  
king. The Emperor...  
the inhabitants...  
He organized...  
for this...  
Gotties...  
photographs...  
DUM...  
1959...  
Philadelphia & London...  
pp. 546...



135 2/4/78 RDM

# Farmer blew a fuse over power pylon

Chief Court Reporter  
ERECTION work on a key power line came to an abrupt halt when a tough farmer nicknamed "Dif" for difficult threatened to shoot Escom workers who went into his mielie fields.

In the Rand Supreme Court yesterday, Mr Acting Justice Cohen issued an order after an urgent application by Escom, restraining the farmer, Mr Andries Lubbe, from hindering, assaulting or threatening the workers engaged along a servitude across his farm Holfontein, near Randfontein.

Mr P J T Oosthuizen, administrative manager of Escom, told the court the delay could be costly to Escom. Work on the line, between Marikana and Muto, had to be completed

by the end of May. It would supply power to mines and industries in the Rustenburg area.

He said Mr Lubbe had consented to a servitude across his farm in 1975.

An Escom supervisor, Mr A H Little, said Mr Lubbe was of large physique and erratic behaviour.

On April 19, Mr Lubbe approached the foreman of Transdeco, the Escom contractors doing the work, and told him that anyone going into his mielie fields would be shot, Mr Little said.

The next day Mr Lubbe was in a "very aggressive mood". He demanded payment of damages before construction workers started "trampling on his mielies".

Mr Little said he later called back a team of workers preparing to enter the fields, and told them to leave the farm.

Mr Lubbe apologised a few days later but said there was "something wrong with his head". Then he said work could continue, but if another pylon was erected, he would shoot them all and then himself, Mr Little said.

Mr Lubbe had introduced himself as "Dif". Mr Little said "I understand from the neighbours that this is an abbreviation for the word 'difficult'".

In an affidavit Mr Lubbe said he would not oppose proceedings. He did not intend to interfere with or assault anyone.

185

MS  
185  
187

# AHI condemns steel, power, rail increases

DURBAN — Delegates to the annual congress of the Afrikaanse Handelsinstituut here have twice condemned recent rises in steel and electricity prices and rail tariffs, and in particular the way in which they were introduced

Industrial members of the institute were told by Mr C J. Human, managing director of the Federale Group, that the increases in these so-called administered prices were perhaps the worst problem facing industry in the 1970s and he appealed to Iscor, Escom and the Railways to take the private sector more into their confidence

While he hoped the severity of the increases

would subside, he thought the private sector had learned its lesson and ought never be caught so unprepared again.

At the main conference yesterday, Mr J L van den Berg pointed out that from January 1971 to February 1978, steel and electricity prices rose by 218,4 per cent and rail tariffs by 18,3 per cent, as against an increase of 112 per cent in the Department of Statistics' deflator

index (the deflator index is a yardstick for measuring the effect of inflation on the economy)

Steel's biggest price rises had come since 1973 and electricity's since 1975, he said

Apart from the effects of these rises on the internal economy, these increased costs seriously affected export, and he gave figures for the production of base minerals for export.

Uncertainty as to future

costs inhibited both contracts for the export of minerals and capital investment needed to produce them, he said.

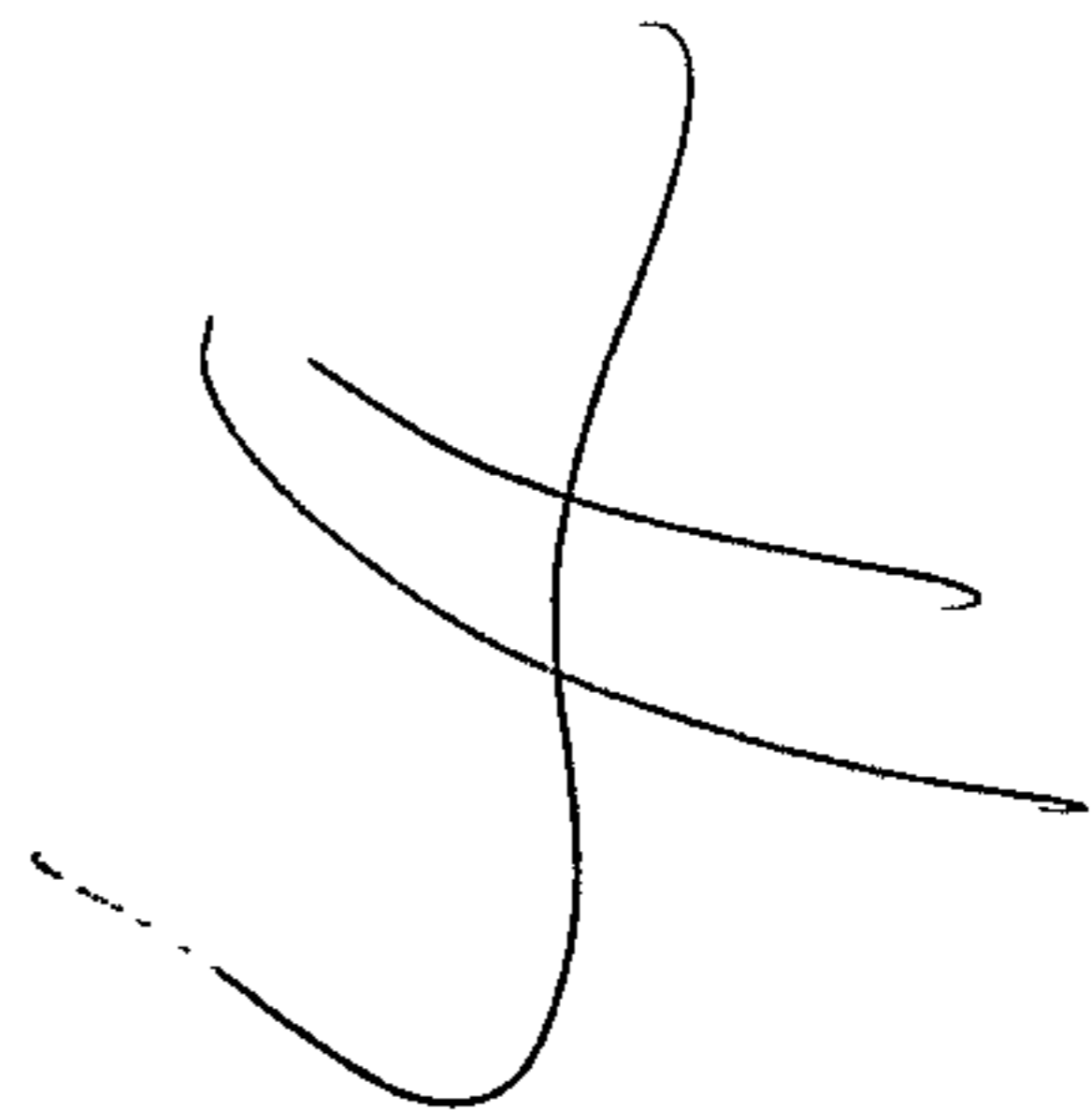
Mr Van den Berg urged the introduction by Iscor, Escom and the Railways of long-term contracts for their very large customers as happened overseas.

This would give a stronger commercial character to the use of the services and build up confidence, he said — SAPA.

MANUF. - Electricity

9-3-79 - 18-11-79

185



185  
RM 9/3/79

**Activities:** Manufactures transformers, high voltage isolators, surge arrestors, protection and control equipment and a wide range of electric cables Asea Reunert (Pty) is a wholly-owned subsidiary Asea, of Sweden, owns 45% of the equity.

**Chairman:** D L Keyes, Managing director. R L Linnarsson.

**Capital structure:** 5,4m ordinaries of R1 each Market capitalisation: R18,9m

**Financial:** Year to December 31 1978. Borrowings, long and medium term, R5,2m; net short term, R280 000. Debt:equity ratio. 28,7%. Current ratio: 1,65 Net cash flow: R5,8m. Capital commitments. R7,9m.

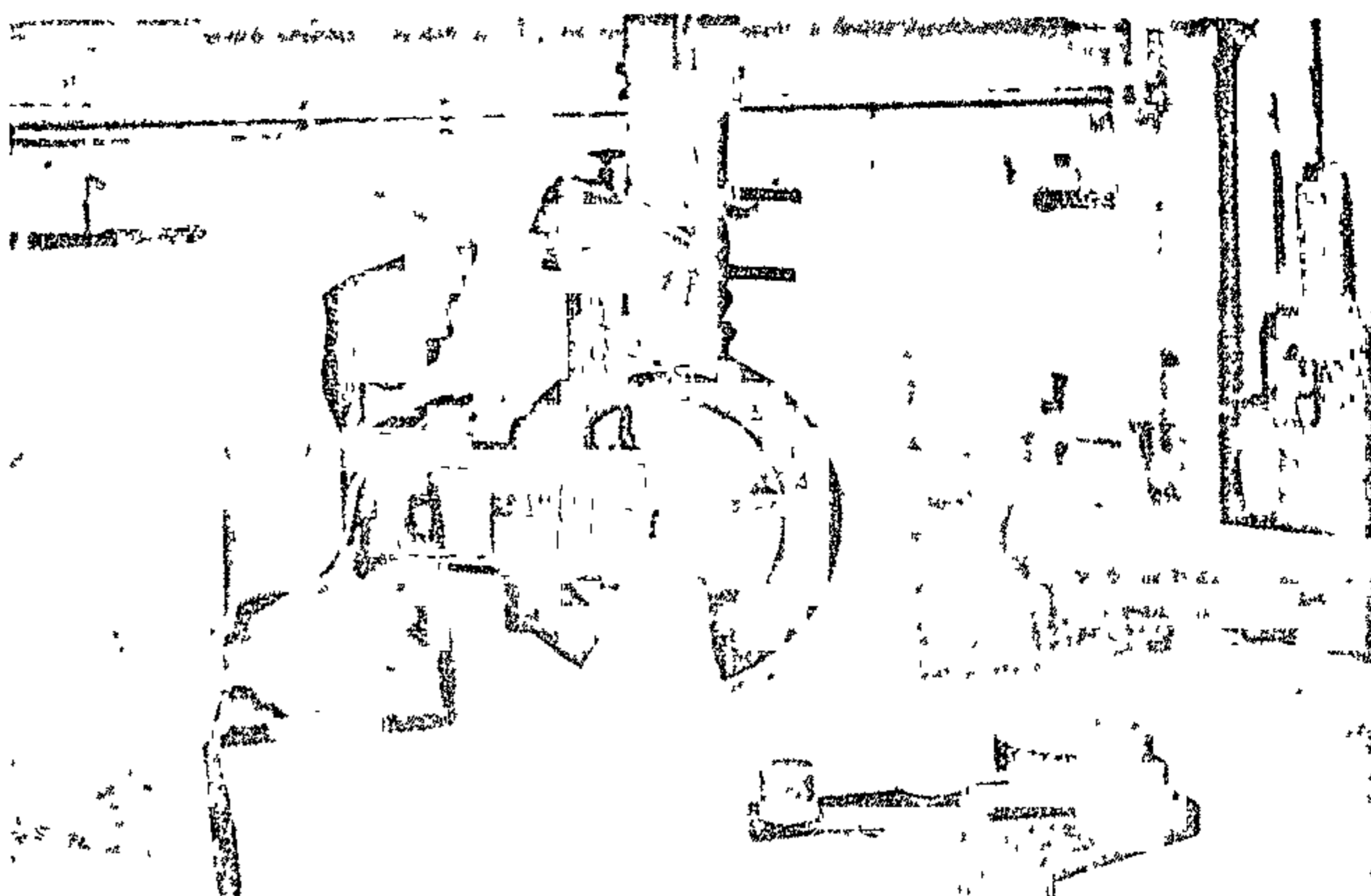
**Share market:** Price: 350c (1978-79. high, 365c; low, 190c, trading volume last quarter, 102 000 shares). Yields 24,2% on earnings, 6,3% on dividend. Cover. 3,9 PE ratio 4,1

	'75	'76	'77	'78
Return on cap %	28,4	28,2	23,7	32,3
Turnover (Rm)	40,5	50,2	52,4	58,9
Pre-tax profit (Rm)	4,6	6,1	6,2	8,7
Gross margin %	13,0	13,4	13,3	16,5
Earnings (c)	61,9*	64,2	71,3	84,8
Dividends (c)	15	17	17	22
Net asset value (c)	282	326	375	439

\* Weighted average of 3,6m shares

**On the surface,** Asea appears to have prospered last year. In fact, the group is already experiencing a slowing down and the results are as good as they are

803



Building transformers . how long before it is transformed into earnings?

primarily as a consequence of Asea's policy of bringing contracts to account only on completion. Last year, profits were struck on the rump of large orders placed almost a decade ago, and the effects of adjusting to lower rates of economic growth will finally come home to roost in the next two years.

This, and continued expansion, are the reasons why the dividend policy has been so conservative for so long. But the corollary is that, even given a profit decline in the next few years, the dividend should remain intact.

Over the year, turnover rose 12% to R58,9m, taxed earnings were up 19% to 84,8c, and the dividend increased by 29% to a four times covered 22c through a 17c final. With the contract completions, return on capital employed is a flattening 32,3% — the best in four years. Stocks have begun to creep upwards, rising from R11,2m to R14,4m, mainly due to acquisitions of subsidiaries with similar lines and to higher year end figures for raw materials and finished goods.

Interest payments also rose from R784 000 to R1m, although debt temporarily dropped from R9,7m to R6,7m. As a result, the debt:equity ratio improved from 49,2% to a very comfortable 28,7%. Borrowings are, however, due to rise by R4,5m in the next two years, with long term debt eventually rising to more than R35m before stabilising.

In line with past experience, Asea has again made provision for rectification and guarantee costs on some of its more esoteric equipment, boosting the provision from R3,3m to R4m.

In the power division, orders taken matched those in 1977, while a sustained upswing in demand for cable began in the second quarter of 1978. Long term contracts, unfortunately, are not so prevalent.

Overall, new chairman Derek Keys feels that the bottom has been reached

for most of Asea's products and some improvement is expected in the current year. But, due to the extended nature of the production cycles, and the striking of profits only on completion, little impact is forecast this year.

Asea's most significant investment decision last year was to instigate local manufacture of high voltage capacitors and a new generation of distribution transformers. Both developments are being tackled under the banner of Asea-tac, in which the IDC will have a 40% interest.

With the acquisition of the remaining 80% of Asea Reunert (Pty) last year, Asea has begun building a single marketing organisation for all its local products and services (imports make up roughly 20% of sales volume). Although no material benefits flowed from Reunert, future prospects are expected to be bright once full rationalisation is achieved.

Interestingly, Asea has arranged medium term finance for purchasers of heavy equipment and should now be able to effectively compete with imports whose only benefit is said to be that of "source-country export finance".

Keys sees many profitable avenues ahead — and the capex commitment of R7,9m (R4,9m) suggests that the group is pressing ahead to take advantage of them. But in building for the future, short-term profitability is bound to suffer. The dividend, however, looks secure and the share should prove rewarding in the medium term.

John White

## SCOTTISH CABLES <sup>(14/5)</sup> Electric potential <sup>CM 13/7/74</sup>

Scottish Cables more than doubled profits in the year to end-December, but this was off a relatively low base and the company is still short of the heights scaled in 1975 and 1976

Pre-tax profits soared 128% to R4,1m (R1,8m) and taxed profits 138% to R2,4m (R1m). The dividend was raised to 13,5c (7,5c). In its heyday in 1975, Scottish Cables made R5,7m before tax. Profits in 1976 were lower but the dividend hit a high of 15c before being chopped last year to 7,5c.

Managing director Harold Dixon attributes the turnaround to "development of

the cable range, tight management of working capital, control of expenses and improved productivity." R5,5m has been spent on new equipment to expand the cable range from 1974 to 1976 and only now is this bearing fruit. Dixon describes order books as better than last year, but still low compared with 1976.

The oil crisis bodes well for all electrical companies. With the SAR electrifying as fast as it can and Soweto and other black townships ready to follow suit, the cable companies are well placed. The raised dividend puts Scottish Cables on an 8,7% yield, against the average of 6,9% for the three listed cable companies and 6,4% for the industrial market as a whole. With cable prospects so bright and BICC (SA) now in the fold, Scottish is attractive relative to other industrials.

David Carte

**QUINTON HAZELL** <sup>16/3/78</sup>  
**Dividend hope** <sup>(95)</sup>

**Activities:** Manufactures and distributes automotive components, electrical cables and accessories and safety products. Gaydon Southern Holdings owns 56,0% and Burmah Oil (SA) 29,7% of the equity

**Chairman:** H W Joynt, managing director M W Kirby

**Capital structure:** 6,9m ordinaries of 50c, 1,8m 9,5% red cum prefs of R1, 200 000 5,5% red cum prefs of R1 Market capitalisation R3,7m

**Financial:** Year to December 31 1978 Borrowings long and medium term R2,3m, net short term, R2,2m Debt equity ratio 73,0% Current ratio 1,8 Net cash flow R767 000 Capital commitments R238 000

**Share market:** Price 53c (1978-79 high, 62c, low, 14c, trading volume last quarter, 64 000 shares) Yield 8,5% on earnings PE ratio 11,8

	'75	'76	'77	'78
Return on cap %	10.5	—	—	9.8
Turnover (Rm)	23.8	26.1	24.7	28.4
Prc-tax profit (R 000)	550	(277)	(1 176)	526
Gross margin %	1.5	—	—	3.8
Earnings (c)	0.4	—	—	4.5
Dividends (c)	—	—	—	—
Net asset value (c)	89	84	67	71

**Investors might be put off by QHS's** plan to commence dividends only within the next two years. However, MD Maurice Kirby tells the *FM* he hopes to recommend a pay out for the current year, if earnings warrant it. Indications are that they could be high enough, with a strong improvement in the offing.

Last year's R234 000 attributable profit was not a true reflection of the group's performance due to a stock write down of R231 000. But for this write-down, earnings would have been 9,4c rather than 4,8c (20,0c loss) per share.

The group's financial objectives are encouraging. The most important is the target of a 14% taxed return on capital employed (This differs from the *FM*'s definition of return on capital, which includes tax and interest. QHS's definition excludes tax, but includes interest). Last year the return, which does not take the write down into account, amounted to 10,3% against a negative 4,1% return the previous year. So, the group has not far to go to achieve its target.

Deducting last year's R564 000 (R658 000) interest payment would have left the group with 14,4c earnings, had this objective been met last year. It is a fair bet that the new management team will substantially exceed this target this year. Chairman Harry Joynt points out that during the year

- o Overheads were reduced by nearly R700 000,
- o Interest payments on short-term debt

were reduced by R136 000 owing to improved control over working capital, and,

o A number of unprofitable branches were closed down. These actions, together with the stock write-down should help this year's earnings.

The sales increase to R28,4m (R24,7m) came from the electrical and safety divisions, which added 61% and 59%, respectively, to their turnover, more than offsetting the decline in the wholesale division. For the safety division, already supplying 80% of SA's in a reel safety belts and diversifying into industrial safety products, profitability is forecast to be maintained on higher sales.

The electrical division, which produces cables and electrical harnesses for the motor and domestic appliance industry, created additional facilities to cope with higher sales, particularly in harnesses for the motor industry. This year the division plans to consolidate its position in the motor industry and hopes to improve its penetration of the domestic appliance field.

The automotive division, which weighed in with 26% of group sales on unchanged turnover, could benefit from buoyant market conditions this year. Joynt considers it realistic to expect vehicle sales to be much the same as last year.

The wholesale division, which also supplies the automotive sector, experienced a sales decline owing to the closure of branches. The profitability of this division is apparently not what it should be and is being improved.

QHS could well benefit from future acquisitions, which will be confined to the safety and electrical sectors, as management intends diversifying out of the volatile motor industry. But it is being selective. The return on any new acquisition should be at least 17% on its own contribution.

Annual earnings in excess of 10c appear possible and a 5c dividend could be paid, even though the group would like to build up its equity base further following two loss-making years. The share is on a 9,4% prospective yield. Even though it has climbed from 14c to 53c in a year, not all of 1978's price rise have been discounted and there could be further appreciation.

With no prefs to service, only Gaydon Southern Holdings' achievement of earnings of 4,5c per share should be a better buy at 20c a share. But, for the year, 63,9% of the R400 000 QHS's profit went to shareholders. QHS's profit of 4,5c per share is 176% of the 2,5c per share of the group. Normally Gaydon should be a discount to QHS. The discount is currently 27%. On a long-term basis, I would prefer Gaydon as an investment.



# FINTEC Bushed

195  
16/3/79

**Activities:** *Manufacturer and distributor of electrical accessories and appliances Busch-Jaeger Elektro GmbH of West Germany, a member of the Brown Boveri group, holds 50% of the equity*

**Chairman:** *A B G Trollip, group managing director. G A M Ophey*

**Capital structure:** *4,1m ordinaries of 50c. Market capitalisation R2,7 million*

**Financial:** *18 months to December 31 1978. Borrowings long and medium term, R432 000, net short term, R1,4m. Debt:equity ratio: 55,8% Current ratio: 1,3. Net cash flow: R877 000 Capital commitments R764 000*

**Share market:** *Price 65c (1978-79. high 80c; low, 45c; trading volume last quarter, 18 000 shares) Yields\*: 16,8% on earnings; 5,0% on dividend Cover 3,0 PE ratio\*. 6,0*

	1'75	1'76	1'77	'78
Return on cap %	20,3	22,1	21,1	28,7
Turnover (Index)	79,4	91,9	92,7	138,1
Pre-tax profit (R 000)	657	887	802	*740
Earnings (c)	11,5	12,9	11,7	*10,9
Dividends (c)	3	4	4	*3,3
Net asset value (c)	54	62	70	80

†12 months to June 30

\*Annualised

**The arrival** of Busch-Jaeger on the scene has as yet done little to enhance Fintec's performance. Although an improvement in earnings from 11,7c a share to 16,9c looks impressive enough, when adjusted for the 18-month period to December 31, the net result is a 1,2c reduction to 10,9c. The annualised total dividend of 5c is equivalent to 3,3c (4c)

The major event of the period was the decision of Busch-Jaeger Elektro of West Germany to exercise its option to acquire a further 25% of Fintec, following the death of chairman and founder, Rolph Goslar. This purchase of an extra 1m shares brought BJE's stake in Fintec to 50%

Speculation prior to the deal pushed the share to 80c. BJE paid 85c a share for its additional holding, and has since seen the price drift down to a low of 45c. However, together with the original purchase of 25% of the equity at 35c a share, the average price was 5c below the current price of 65c

Being closely linked with the building trade, Fintec suffered in common with most during the 18-month period. Profit from the manufacturing and wholesale section, which accounts for the larger portion of income, declined 9% on an annualised basis. However, a 19% increase was produced by the property division. Land and buildings occupied by the group were written down by R77 000 to estimated net realisable values. In the opinion of directors, other group proper-

ties exceed their book values. During the period the unprofitable wire plant and related stock were sold.

There is little investment appeal in the share at present and very little information in the annual report. The yield is well below the sectoral average of 7,2% and, following the recent price upswing, the share is best left alone.

Jean Moon

# Steenbras hydro-electric plant will save R30m yearly

Own Correspondent

CAPE TOWN — The second stage of the R65m Steenbras pumped storage hydro-electric scheme will come on stream this month and by the end of the year Cape Town will have saved more than R6m on the cost of providing electricity.

The scheme consists of a new reservoir upstream from Steenbras, in the Hottentots Holland Mountain above Gordon's Bay, and a lower reservoir between the town and Sir Lowry's Pass on the lower slopes of the mountain.

A tunnel through the mountain connects the two reservoirs. At night, when demand is low and electricity relatively cheaper, water is pumped from the lower to the upper reservoir.

During the day peak periods when electricity becomes much more ex-

pensive, water is released from the upper to the lower reservoir. It passes through turbines just above the lower reservoir and generates electricity.

There are four turbine generators, which are reversible machines acting to pump the water uphill at night. The first was brought into commercial operation in mid-January and the second will be working by the end of the month.

By July all four will be in use.

At present Escom supplies Cape Town with more than 50 percent of its electricity and in off-peak periods can do so more cheaply than the city's Table Bay and Athlone power stations.

But peak period demand increases the overall cost of Escom electricity.

The scheme serves to reduce dependency on Escom at peak periods and so cut costs.

Within 10 years the scheme should have paid for itself and thereafter "its profit all the way," according to Mr D C Palsler, Cape Town City Electrical Engineer.

## BENEFIT

By 2000, the schemes should be saving about R30m a year. After 40 years, its estimated minimum lifespan, the scheme should save up to R70m a year.

An additional benefit of the scheme, the first in South Africa, is that power failures from other electricity sources could be overcome within minutes by releasing water from the upper reservoir for up to two hours while repairs are done.

# Escom's STAR 5/4/79 high tariff slammed <sup>185</sup>~~260~~

The chairman of Johannesburg City Council's management committee, Mr J F Oberholzer, today hit out at Escom's steep tariff increase and suggested it was time the commission examined its fiscal policy

He was commenting on findings by the Board of Trade and Industries that Escom made too much profit and seriously lacked effective planning and control structures in its management.

The findings were disclosed by the Minister of Economic Affairs, Mr Heunis, yesterday

"Electricity tariffs in Johannesburg have increased 134 percent in the past five years and only 19 percent of this is a city council increase," Mr Oberholzer said

It was ironical that Johannesburg, which distributed 35 percent of Escom's power supply, should get the backlash of criticism about high tariffs

The big tariff rises also weighed heavily on homeowners in adjoining municipalities, he added

In Cape Town, Dr Zac de Beer, Opposition spokesman on economic affairs, said a reduction in electricity tariffs or at least an assurance that there would be no further increases for a substantial time was to be hoped for

# Escom reduces its fuel use by 15 percent

~~26%~~  
195

Star 24/4/77

Escom has cut its petrol and diesel consumption by at least 15 percent.

At the same time steps have been taken to reduce the use of imported coal at coal fired power stations by 25 percent and more.

The fuel saving measures come at a time when the commission has been slammed for making too much profit and for seriously lacking effective planning and control structures in its management.

The Board of Trade recently found that a major

factor contributing to rising electricity tariffs had been Escom's policy of greater financing of its capital investments and the subsequent creation of a capital development fund.

## SPECIALISTS

An article in MegaWatt, Escom's journal, disclosed that the commission's management had appointed a group of specialists from the competition to coordinate and accelerate boiler fuel saving measures.

The experts were investigating alternative sources of energy for the train and stabilising of boiler furnaces.

The article said a mixture of 10 percent diesel oil and 30 percent heavy fuel oil — a by product of crude oil refining — was already being used at one of Escom's power stations.

With the completion in a year of a large mixing plant at Sisul the mixture could be used at five other power stations and it will soon be used at two new power stations at Kriel and Middelburg.

These fuel saving measures could result in a saving of 30 percent in Escom's diesel oil consumption.

MegaWatt said that for years, Escom had adopted fuel saving measures.

2/0  
185

# Delights in investors

Since 1977, when  
for self-sufficiency  
in earnest, it  
by 345% — from  
to R809 million.  
has been boosted  
by larger transfers  
but also because  
interest on these  
though they were

## Profits may lead to real electricity tariff cuts

bankers are bound  
with Escom's  
the term of  
borrowing abroad  
from two years  
years at present.  
profits of R437 mil-  
a 7.5% return on  
which is double the  
e, and consumed  
tal revenue against  
profits consist of  
contribution to the  
development fund  
in 1977 and R54-  
1976), plus interest

added of R70-million (R33-mil-  
lion and R15-million) plus the  
surplus of R67-million (R33-  
million and R59-million).  
Of course if this degree of  
internal financing were to  
continue for any length of time,  
the Board of Trade would have  
a justifiable objection.

"But", says Escom's chair-  
man, Dr Reinhard Strasacker,  
capital need dictated what we  
were forced to do. We could do  
nothing about the magnitude of  
the requirements."

He insists that the need for  
internal financing at current  
levels will continue for only a  
few more years, mainly  
because of the rapid growth  
inherent in the capital develop-  
ment fund.

### Drastic

Certainly, there will be no  
need for drastic increases in  
tariffs in future because of  
capital expenditure.

Future increases will only be  
to meet rising working costs  
and will, he believes, be below  
the prevailing rate of inflation.

The mining industry, to  
which electricity prices are  
crucial, can still regard elec-  
tricity as a cheap energy

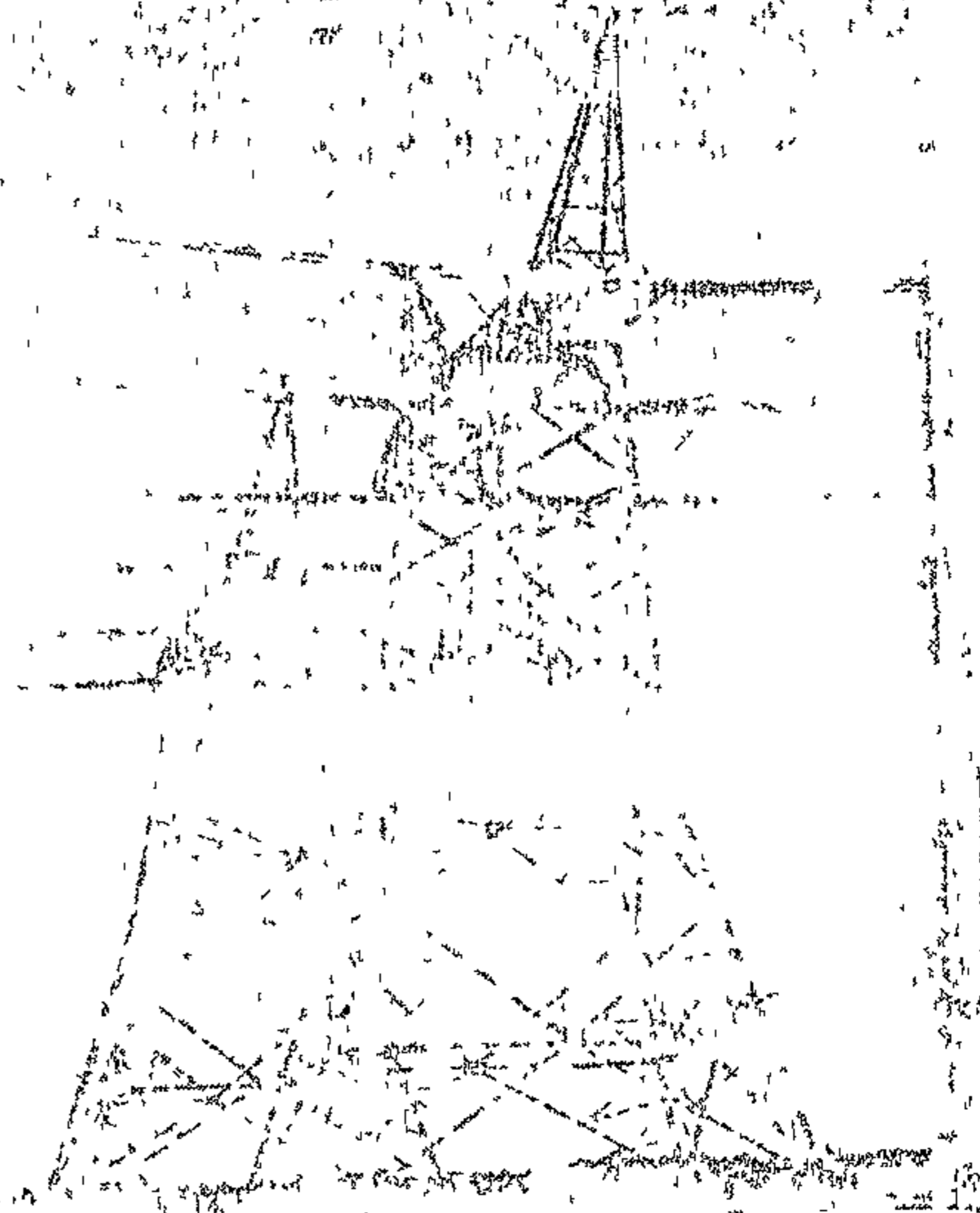
source, he maintains.  
He points out, too, that in  
spite the price of electricity  
having almost doubled over the  
past five years, it is still  
slightly longer than in other  
countries. Increases in the cost of elec-  
tricity in other areas have  
been less than in some other  
developed economies.

### Cheapest

"The price of electricity per  
unit sold is still very cheap  
here compared with other  
countries. In most cases we are  
the cheapest, except where  
large amounts of hydro-power  
is available," he said.

Dr Strasacker emphasised,  
moreover, that the future  
demand for electricity does not  
appear to have been materially  
curtailed by the doubling of the  
price in 1978, and Escom's  
demand for capital would,  
therefore, continue to be very  
strong.

Over the last 10 years it grew  
at an annual average rate of  
9.3%, falling in 1977 to 5.9%,  
but recovered unexpectedly  
strongly to 8.4% last year. This  
year it looks, he believes, as if  
demand will surpass the  
planned 7.5 to 8% growth.



Power... the price is likely to remain... Escom's  
capital development needs.

Dr Strasacker said that the  
annual demand for electricity  
is usually 4 or 5% higher than  
the annual growth in the G.D.P.  
domestic Product. Experience  
shows, for example, that annual  
growth in demand for elec-  
tricity is only 1% in an 18-  
month period in Escom's  
mining is pure profit.

Moreover, Escom's total  
cash requirements each year  
can be a good deal higher than  
development capital needs, as  
short term loans need to be  
repaid and some replacement  
is necessary.

In 1978, for instance, total  
capital needs were R18 billion,  
which was about R1000-million  
more than the development  
capital requirements, he said.

### Borrowing

An indication that Escom's  
ability to borrow abroad had  
improved materially was given  
by general manager, Mr Jan  
Smith, who said "Because of  
the higher availability of for-  
eign finance, Escom was able  
to place a lesser demand on  
local sources of finance during  
1978."

But he sees no further im-  
provement this year, he said.

Dr Reinhard Strasacker

Mr Jan Smith



# PROFITS OF R400-M BRINGS DEMAND FOR REFUND TO ALL

# Give back the plunder, Eskom told

185 (circled) 260 (circled)

By DEREK TAYLOR

ESCOM'S massive increases in the price of electricity — totalling 123% in five years — were proved to be needless dips into the pockets of consumers by this week's disclosures that Eskom has a huge, R400-million trading profit

Now Councillor Max Neppe, the man who led the fight against Eskom for cheaper city electricity, is demanding, "give the money back to the plundered consumers through tariff cuts"

"It is just not good enough for the retiring Eskom chairman, Dr R. Straszacker, to boast of low annual price rises in the future — he must start returning the massive amounts he has taken unnecessarily from the consumer," he said

An uproar of angry protests has followed Eskom's revelation that over R300-million has been taken by compulsion from electricity consumers in one year and put into a capital fund.

Minister of Economics Chris Heunis has pledged a special watchdog committee to monitor future Eskom demands for tariff increases

Eskom disclosed to Parliament this week that it

- Made a net profit of R67,6-million.
- Scooped in a trading profit of over R400-million.
- Transferred more than R300-million out of just one year of consumers' money into its capital development fund
- Wiped out its accumulated deficit

"After socking the consumer for capital which belongs with generations to come, on the excuse that Eskom could not raise loans abroad or at home, now comes this literally shocking announcement of a R67,6-million profit — now let them start giving something back!" said Councillor Neppe.

In Johannesburg, Dr Straszacker disclosed that 31% of Eskom's capital had been taken from the consumer by inflated electricity prices.



● Councillor Neppe ... shocking



● Dr Straszacker ... no comment

The South African consumer had paid as much, through its electricity bills, for capital development as had been raised by foreign loans, with local capital loans providing another 38%.

"Johannesburg's city borrowing has proved that the local money lending market is not only able to oversubscribe municipal and utility borrowings, but the interest rates have dropped drastically," said Mr Neppe

"Now let Eskom borrow its capital in the normal way, from investors, and cut its tariffs to repay the capital it has forced consumers to add to the cost of their electricity, together with Eskom's devastating contribution to inflation and the increased cost of living," he added.

"Eskom has no excuses left for its high-handed and officially condemned policy of hitting householders,

farmers and businesses for the capital it said it could not find on the normal money markets," said Mr Neppe

"Give it back!" Johannesburg's City Treasurer, Mr Johan De Villiers, confirmed to the Sunday Express that interest rates had dropped heavily on plentiful local money available for capital borrowing

"We are most pleased by the drop," he said. "About 18 months ago we had to pay around 13% interest on long-term borrowing — now it has declined to 9.1% for the city's latest loan," he said.

"Most important is the fact that local money is available in large quantities — public issues are being oversubscribed," he said

Requests for Eskom's Dr Straszacker to elaborate on his admission — in a speech to the Belgian-South African Chamber of Commerce this week — that forced borrowing of capital from consumers had made local capitalisation "relatively high" were unsuccessful.

Dr Straszacker was not willing to comment on his remark that reproaches for Eskom's policy of forcing consumers to add capital contributions to their bills "has not always been well informed"

Last month, the Board of Trade criticised Eskom for its high profits — and its lack of planning and control ability.

This week, local government renewed its claim that Eskom could greatly reduce its costs and the high-living expenses of its staff and administrative luxuries.

"The consumer has suspected all along that Eskom has taken full advantage of its virtual monopoly of electricity generation," said Mr Neppe.

"Unless these policies are checked, one dreads to think what will happen when Eskom takes over the last sources of cheap electricity — the cities — and controls 91% of all power at the end of the century?"

prompted

it

in the cold

After all, the is a good r the couple

# ESCOM hails load-shedding at Botswana electricity

ESCOM has sharply rebutted the Board of Trade's criticism of its "excessive profits" and the extent of its capital needs as well as the recommendation that it be subject to greater financial supervision from Pretoria.

Nor does there appear to be much likelihood of radical change to ESCOM's financing policies, at least over the next year, as a result of this criticism.

I gathered this during an interview this week from veteran chairman Dr Reinhard Straszacker, who declined to comment on questions put to him specifically on the BOT report.

He explained that he would rather not do so as ESCOM had already responded directly to Economics Minister Chris Heunis on the question of the report.

Nevertheless, in reply to other more general questions on ESCOM's financial statements, he left me in no doubt where he stood regarding the BOT barbs.

For instance, asked whether he would favour ESCOM being financed in part from a Parliamentary appropriation, he said:

"It is important for ESCOM to be independent from controls that have nothing to do with power demand.

"ESCOM is so much a pillar of economic development that it must not be diverted from its main purpose.

"If the demand for electricity grows well, the economy creates what is necessary to produce that growth.

"There is a circular effect if you start curbing the supply of

electricity, not only do you create unemployment but you make it difficult for the economy to get going again because of the lack of power.

"As long as demand is there, power must be made available," he said.

Dr Straszacker's point is important, especially if looked at in relation to ESCOM's own pricing policy in the several years prior to the 1976 upsurge in tariffs.

Experience has shown that if the prices of electricity had then kept pace with inflation, instead of having been artificially suppressed by political pressuring, ESCOM would have been able to meet the challenge of reduced foreign loan availability in a financially much more robust condition.

What happened was that the financial strength of a public undertaking was sacrificed to what can now be seen to have been a mistaken idea of a broader public good.

Yet the BOT, by wanting ESCOM's "profits", tariffs and capital investment plans approved by the Departments of Industries and Finance, seems to be inviting this sort of approach all over again.

The BOT argues that a public undertaking as large as ESCOM should not be left unfettered to pursue its main purpose, the

provision of electricity, and that capital ought instead be rationed to it and other concerns by some officials specially qualified to see the national good in broad perspective.

This is justified, the BOT explains, as excessive capital spending greater than domestic savings, even if financed by foreign loans, will result in inflation, reduced growth and a deterioration in the current account of the balance of payments.

What a contrast that sort of reasoning is to the tenor of the De Kock Commission report on a far more complicated subject only a few months ago.

Questioned about alternative methods of financing ESCOM's capital requirements, Dr Straszacker said that whether ESCOM used fund accounting methods or depreciation funding — by writing up assets to current values and depreciating them at those values — made little difference to the totals.

"They are merely different ways of generating the same amount of capital and I personally have an open mind about which method to use," he said.

However, his commission felt that depreciation accounting had not yet crystallised into general use in industry and it did not favour going to new extremes too quickly.

Dr Straszacker explains in his annual statement why electricity tariffs were increased as they have been, expresses the view that the current high level of ESCOM's internal financing is unlikely to continue for long and foresees a decline in real terms in electricity prices soon.

For report see Page 3

268

# Reef power costs hit record high

Electricity charges to large industrial and commercial undertakings have leapt by 22 percent on the Reef in the past 15 months — the highest figure in an international survey.

The survey released today by National Utility Services shows that Cape Town had an increase of 7.9 percent during this period, Pretoria had no increase and the Reef had a rise of 22 percent.

Mr Ivan Camps, managing director of the firm, attributed the Reef increase to the fact that municipalities made surpluses on electricity sales to bolster rates and also passed on the Escom increases.

Cape Town also made a surplus, but Pretoria appears to have absorbed the Escom increases, he said.

A spokesman for the Johannesburg municipal Department of Electricity said municipal consumers in the city would have had increases less than 11 percent during this period.

He said the 22 percent figure might apply to other Reef consumers for the three cities was 8.7 percent against an average of 20.7 percent for Canada and 2.4 percent for West Germany.

185

17/5/79

Johannesburg municipal tariff increases are roughly a third of Escom's as the city generates two thirds of its power.

The average increase for the three cities was 8.7 percent against an average of 20.7 percent for Canada and 2.4 percent for West Germany.



ALTECH

185 232

pm 25/5/79

# Flush with success

**Activities.** Electronics and electrical manufacturer formed in 1977 through the merger of STC (SA), Allied Electric and MSN Products Owns 75% of Powertech Directors own 51,3% of the equity and STC 36%

**Chairman** L Wildman, chief executive W P Venter

**Capital structure:** 8,7m ordinaries of R1, 3,4m 11% cum red prefs of R1 Market capitalisation, R60m

**Financial:** Year to February 28 1979 Borrowings long and medium term, R1,5m Net cash R11,8m Debt equity ratio 6,3% Current ratio 1,6 Net cash flow R4,6m Capital commitments R706 000

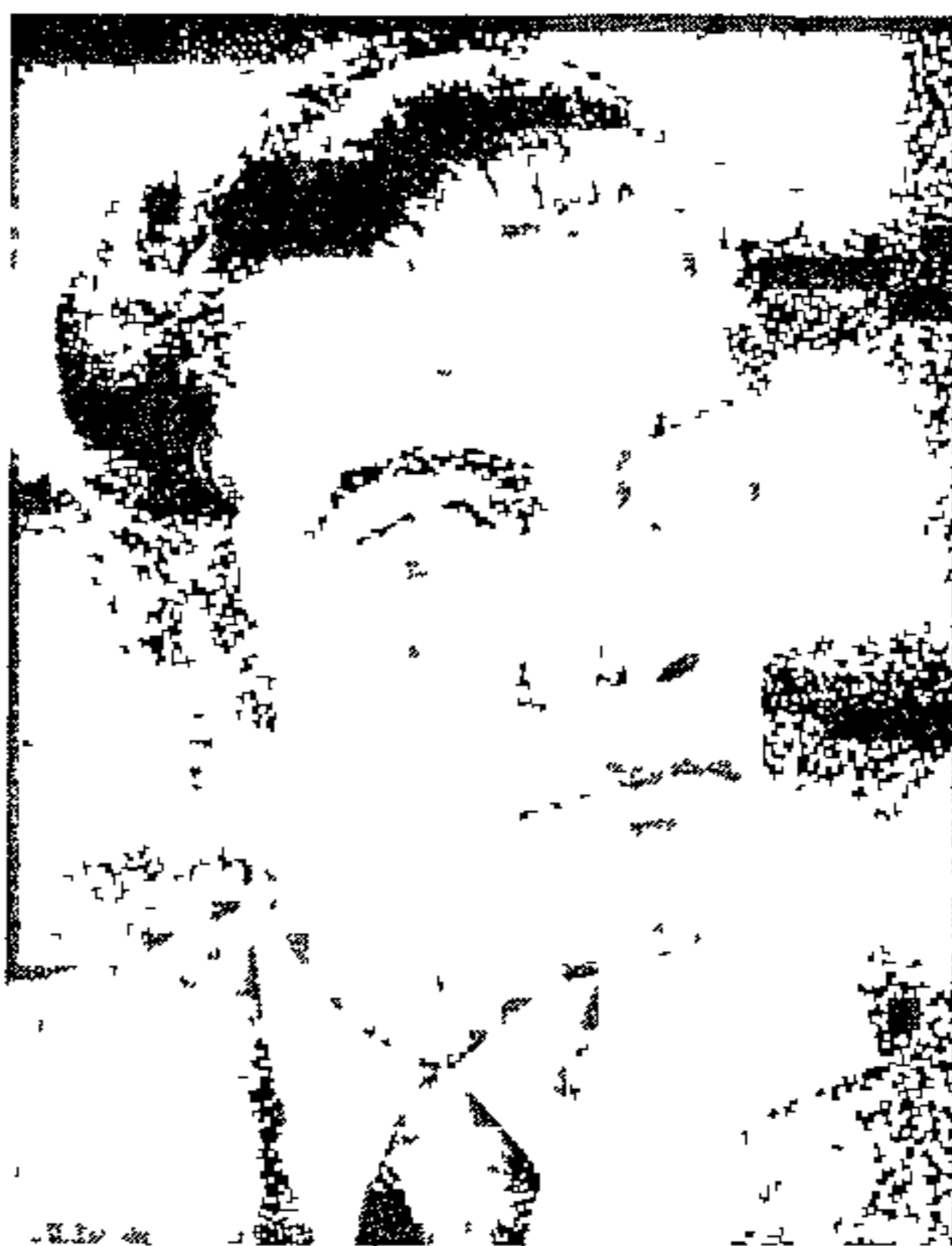
**Share market:** 690c (1978-79, high, 700c, low, 275c, trading volume last quarter, 187 000 shares) Yields 10,0% on earnings, 4,1% on dividend Cover 2,5 PE ratio 10,0

	'77	'78	'79
Return on cap %	30,9	34,7	41,8
Turnover (Rm)	3,1	53,8	58,0
Pre-tax profit (Rm)	0,6	7,4	10,6
Gross margin %	21,3	14,5	18,8
Earnings (c)	20,9	50,8	68,7
Dividends (c)	8	20	28
Net asset value (c)	114	192	224

With no further acquisitions, Altech spent 1978 rationalising and consolidating its operations, says chief executive Bill Venter. The result was that the group ended the year highly liquid, with cash balances making a total of R11,8m and representing 25,3% of total assets.

A 43,2% hike in pre-tax profit allowed Altech to approach its longer-term objectives, which are spelt out in the annual report. Borrowings, which totalled R1,5m at end-February, amounted to only 5,9% of fixed capital against a self-imposed ceiling of 50%. The gross return on capital employed was 43,4%, beating a budget of 40%. The only ratios which failed to match house targets were the current ratio, which slipped from 1,8 to 1,6, and the taxed return on fixed capital, which was 28,4% compared with the 30% objective. However, the 28c dividend was 40% of earnings and was in line with group policy.

Chairman Lou Wildman says the electronics industry should be one of the fastest growing sectors of the economy over the next five years as local content of manufactured components is stepped up. And, with the Post Office moving onto electronic switching, there should be plenty of scope for increased turnover this year. Overall, Wildman expects the indus-



Altech's Venter... going shopping soon?

try to at least maintain its growth rate in 1979

Venter says Altech has been successful in broadening its customer base, and the effect was to boost year-end orders from

R41m to R63m, which augurs well for profits this year.

Growth this year will probably also be aided by acquisitions. The group has sufficient cash on hand and borrowing facilities of R4,9m, besides its own paper, to go on a shopping spree. The scope to increase borrowings is reflected in the low 6,5% debt equity ratio.

The market has ascribed a blue-chip rating to Altech. Since March the share has risen 130c to the present 690c ex-dividend price, where it yields 4,1%. There is quite some evidence of increasing institutional interest in the share, which, although expensive, should in the longer term, prove rewarding.

Des Kilaeva

Mr H W. Middelmann  
Mr M T.L. Moletsane  
Professor A D Muller  
Mrk A. Najaar  
Mr Victor Norton  
Professor N J J Olivier  
Mr L. Phillips

**ALTECH**  
all systems go?

Friends (Quakers) en van die American Friends Service Committee deurgebring. Hy het 'n aantal konferensies in verskillende dele van die land bygewoon, bare vergaderings toegesprek en senior beamptes van die Carnegie Corporation, van Community Relations Services van die Departement van Justisie van die Amerikaanse regering, van die American Friends Service Committee en kollegas verbonde aan verskeie universiteite besoek.

# Fuel from coal more economical — expert

185 RDM. 30/2/79

Own Correspondent

POTCHEFSTROOM — "Yes" for fuel from coal and "no" to ethanol, says Potchefstroom fuel expert Professor Gerrit Dekker

"The energy crisis has become a slogan. There is no energy crisis," Prof Dekker said as he called for the erection of the South African Coal Hydrocracker to make South

Africa independent of Opec countries

Prof Dekker was speaking at a one-day energy conference on Saturday

The hydrocracking process, used by Germany in the Second World War to produce 4,5-million tons of fuel, does not replace the Sasol process but is complementary to it, Prof Dekker said

## Ethanol production urged

Own Correspondent

POTCHEFSTROOM — The private sector should take the initiative in the production of ethanol as the Government is obviously not "extremely eager" to take any chances in this respect, ecologist Professor J J P van Wyk of Potchefstroom said at the weekend.

Prof Van Wyk discussed ethanol as an alternative to fuel at the conference on energy at the University of Potchefstroom on Saturday. The conference was organised by the Afrikaanse Studentebond (ASB)

"Surely there is enough knowledge available to produce ethanol economically. We only need 10% of the money spent on coal research," Prof Van Wyk said

A test conducted at the Potchefstroom University with cresote heated under pressure with a catalyst resulted in 38% petrol and 56% diesel

By changing the temperature and pressure, the output ratio of diesel to petrol can be altered

The estimated production cost is 25c to a litre, 10 to 11c less than the estimated cost of producing ethanol

Prof Dekker said certain types of plastics were easily broken down to fuel by the same process

Experiments in this regard were being carried out at the university, Prof Dekker said

He disclaimed a breakthrough and called it a "technological development"

Prof Dekker said the lack of correct decisions at the correct times were mainly responsible for fuel shortages

"It is hardly thinkable that the internal combustion engine, fired by petrol and diesel, could

be successfully replaced by battery or hydrogen-driven cars within the next 40 to 50 years," Prof Dekker said

Coal, especially in refined form, will systematically take over from oil and earthgas. It will also become a source for chemicals, especially in the textile industry, Prof Dekker said

South Africa has 100 000 million tons of coal in reserve, of which an estimated 61 000 million is recoverable

He said the country was in the favourable position of being able to depend on imported oil for only 20% of its energy requirements

The Government made the correct decisions in launching Sasol II and III, but waited for technology to develop under the hydrocracking process, he said

The time was now ripe for the erection of the SA coal hydrocracker as both processes were economically justifiable, Prof Dekker said

navorsings-fellows het aansienlik tot die Sentrum se program bygedra dr Sheila T. van der Horst, afgetrede mede-professor van Ekonomie, U.K., en professor J.L. Boshoff, gewese Rektor van die Universiteit van die Noorde.

### LIDMAATSKAP

Soos voorheen gemeld, is die Sentrum vir Intergroepstudies geregistreer as 'n maatskappy. In die Memorandum en Statute van Vennootskap word voorsiening gemaak vir die benoeming van eenhonderd lede. Tans is daar 57 lede en hulle sluit die volgende in:

a) Drie stigterslede:

- Mnr J.G. Benfield
- Mnr H.L. Kennedy
- Mnr P.G.T. Watson

b) Sewentien persone wat gedurende die afgelope 10 jaar lede van die Beheerraad was (\* dui stigterslede aan).

- Professor E.V. Axelson
- Professor J.F. Beekman
- Professor J.F. Brock
- Mnr C.S. Corder\*
- Professor W.H.B. Dean
- Dr J.P. Durniny\*
- Professor G.F.R. Ellis
- Biskop A.W. Habelgaarn
- Mnr E.V.E. Howes\*
- Professor M.F. Kaplan
- Ds. W.A. Landman
- Mnr G.K. Lindsay
- Sir Richard Luyt
- Professor S.J. Saunders
- Professor H.W. van der Merwe
- Mede-professor D.J. Welsh
- Professor Monica Wilson

# and cold

cessions to them," he said

Mrs Nel, a spry 77, was sitting on her bed with a blanket thrown over her legs when I interviewed her

"My room never gets any sun," she said, apologizing for the blanket

"I get a government pension of R88 of which R58 is paid to the home, leaving me R30 a month. If I paid R15 for a heater I would only have R15 over

"One likes to be able to buy a present for a friend and perhaps a little luxury item I stopped buying clothes long ago, but must still buy underwear and toiletries

"I cannot sit idle all day so

I knit and crochet Wool and cotton are very expensive these days," Mrs Nel said

The social worker, Mrs Hendrika Louw, said many pensioners had never had electricity because they could not afford the basic tariff of R8,60

She also had a case of a young woman whose sole income for her and her child was R130

After the increase in electricity the woman asked Mrs Louw if she could recommend cheaper lodgings

"Her rent is R45 and her electricity account R35, leaving her R50 to live on She does not incur debt and tries to live within her income," Mrs Louw said



Checking the facts and figures of the electricity price increases, the town clerk of Calvinia, Mr Mathys Boonzaaier

## Old

By ETHENE ZINN

PENSIONERS and people in the lower income groups have been hardest hit by the shock increase in the price of electricity on the platteland

It is estimated that the cost of keeping a one-bar electric heater burning for 10 hours a day in Calvinia is R48 a month

"I gave away my heater when they increased the price from R5 to R15 for keeping a heater in my room," Mrs Grieta (Nellas) Nel, 77, said

The old-age home in Calvinia used to charge residents

using heaters R5, but had to increase this to R15 The home carried the additional cost but even so, not many pensioners could afford the luxury of heater in the winter months

Hardest-hit of the pensioners are those in sub-economy houses which cost between R8 and R11 a month They have to pay the full tariff for electricity

This also applied to the few coloured people who had electricity in their homes, the town clerk, Mr Mathys Boonzaaier said

"We cannot make any co

Mrs Lenie Burger 84 uses only candles to light her home in Calvinia She has never been able to afford electricity and now after the price increase, many more residents are reverting to candle light

### Pictures: Isobel van der Spuy



The manager of a Calvinia bank, Mr Mike Coetzee, who ordered an anthracite stove after paying R144 for electricity last month. Two pensioners

# Electricity a luxury of the past for many plattelanders

By **ETHENE ZINN**,  
who visited the stricken towns

**PLATTELANDERS** are giving up electricity and reverting to gas, anthracite and even candle-power in a shock reaction to the sharp increase in the price of electricity.

Municipalities in Namaqualand, which generate their own electricity with diesel have drastically increased the price of electricity to consumers following the increase in the price of diesel.

Some home-owners have faced bills of up to R150 for electricity while the average home received bills for between R70 and R80.

The Cape Times visited the area this week and found the plight of some Namaqualand families so great that even television is a luxury many cannot afford.

## Affected towns

The towns affected are Calvinia, Loxton, Brandvlei, Nieuwoudtville, Loeriestontem, Williston, Fraserburg and Carnarvon in the north western Cape.

Calvinia's 600 consumers are charged a basic fee of R8.60 and 16 cents a unit for electricity. At Loxton the unit price of electricity increased from 15 cents to 50 cents.

Nieuwoudtville municipality, which supplies 85 homes with electricity, charges a basic fee of R3.50 a room excluding the bathroom and kitchen and then 12 cents a unit for electricity.

A householder with three bedrooms, a lounge and a dining-room has to pay a R17.50 basic fee and 12 cents a unit.

At Vanrhynsdorp, 42km away and supplied by Escom, the basic fee is R5 and 5 cents a unit.

At Nieuwoudtville three families have had their electricity cut off and have revert-

ed to candles and lamps for lighting and anthracite and gas for heating and cooking. Other residents have threatened to have their electricity cut off.

I have considered having the electricity cut off, but what would happen to the TV? The children would miss it, as there is so little to do in such a small town,' Mrs Petronella Louw, the post office clerk at Nieuwoudtville said.

A Calvinia bank manager Mr Mike Coetzee has ordered an anthracite stove in a bid to cut his electricity bill which was R144 last month.

'People born in these towns won't leave but people like me will and they will find it difficult to get teachers, doctors and other professional people to fill vacancies in platteland towns,' he said.

## Seeking transfer

I will be very pleased to be transferred somewhere else. Nothing is cheaper in these areas except maybe housing. Some things like medical services, are more expensive,' Mr Coetzee said.

The hospital in Calvinia paid an electricity bill of R3,300 last month — an increase of nearly R1,000. The old-age home's electricity bill increased to R600, a rise of nearly R150.

## Over-all scheme

Earlier negotiations with Escom to supply the towns with electricity fell through when the local authorities decided it would cost too much. The assistant manager for the Cape Western region of Escom, Mr George Hellstrom said.

Negotiations were re-opened with all these towns and Escom was working on an over-all scheme to supply them, he said.

There would however, be a delay of at least two years before they could be supplied with electricity except for Nieuwoudtville which could be supplied from Vanrhynsdorp.

## Trebled

If the plans were approved within six months it would take at least another one-and-a-half to two years for the construction of power lines to these towns.

The town clerk of Calvinia, Mr Mathys Boonzaaier explained why electricity had nearly trebled in price in little more than a month.

The price of diesel to the municipality had increased from 15.55 cents a litre in October 1978 to 23.30 cents in December 1978, an increase of 66 percent.

At this stage the municipality increased the consumer price of electricity from five to six cents a unit. In June the price was increased to 9.1 cents a unit.

Almost immediately afterwards the price of diesel was increased by 62 percent, pushing the price up to 37.7 cents a litre. This increased the price of electricity to 16

the Calvinia old-age home, Mrs Maria van Zyl, 73, left, and Mrs Nellas Nel, 77, share a blanket now that they can no longer afford a heater.

65+
45-65
25-44
5-24
1-4
0-1

XV

NO.
ATL
65+
45-64
25-44
5-24
1-4
0-1

XIV

# CALAN Shipshape again

7/9/79 (155) (196) PM 7/9/79

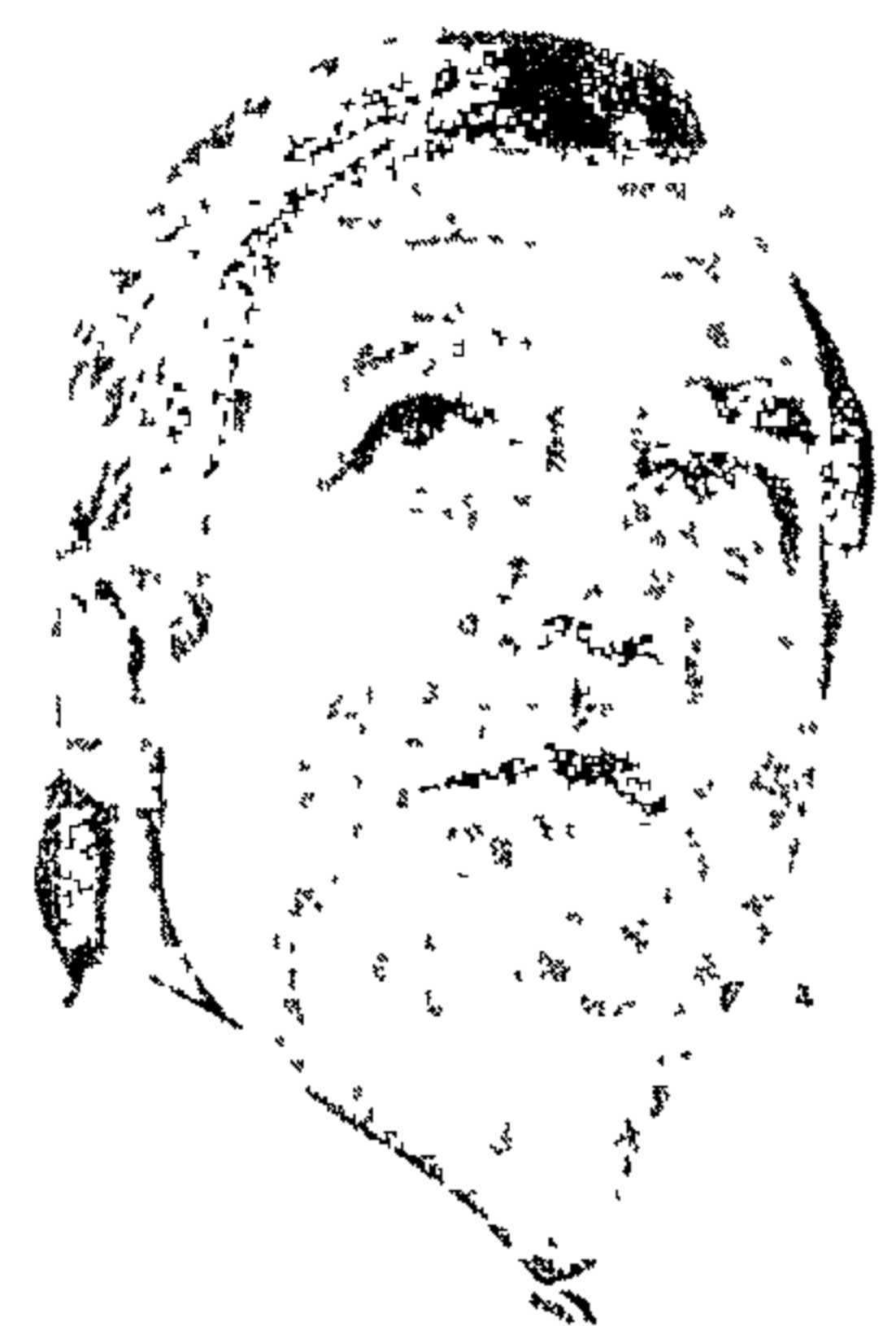
**Activities:** Manufacturing group with interests mainly in plastics, rubber lighting and electrical equipment. Directors hold 6,4% of the equity. Chairman: P Grobbelaar.

**Capital structure:** 7,4m ordinaries of 20c.

**Market capitalisation:** R23,7m.

**Financial Year to June 30 1979:** Borrowings long and medium term, R13,3m, net short-term, R15,3m. Debt equity ratio 87%. Current ratio 1,7. Net cash flow R5,2m. Capital commitments R2,9m.

**Share market:** Price 320c (1978-79 high, 375c low, 240c, trading volume last quarter 202 000 shares). Yields 24% on earnings, 10,3% on dividend (over 2,3 PE ratio 4,2).



**Peter Grobbelaar . pulling it all together**

	'76	'77	'78	'79
Return on cap %	19,6	20,1	15,1	17,0
Turnover (Rm)	107,3	120,6	131,9	147,5
Pre-tax profit (Rm)	8,2	8,7	6,9	7,4
Gross margin %	9,9	9,6	7,5	7,3
Earnings (c)	7,3	88,6	69,4	76,9
Dividends (c)	30	32	32	33
Net asset value (c)	375	424	433	439

Chairman Peter Grobbelaar's forecast last year of earnings of 77c was spot on and suggests that management now has a tight rein on its broad spread of investments. It also indicates that the group is well over the setback experienced in 1978 — but it still has a long way to go before matching those record earnings of 88,6c achieved in 1977.

At the interim stage, pre-tax profit was 1c ahead at R3,5m and trading conditions were then said to be difficult particularly for those companies operating in the plastics field. The situation appears to have improved in the second half. Turnover for the year was 12% up at R147,5m. But

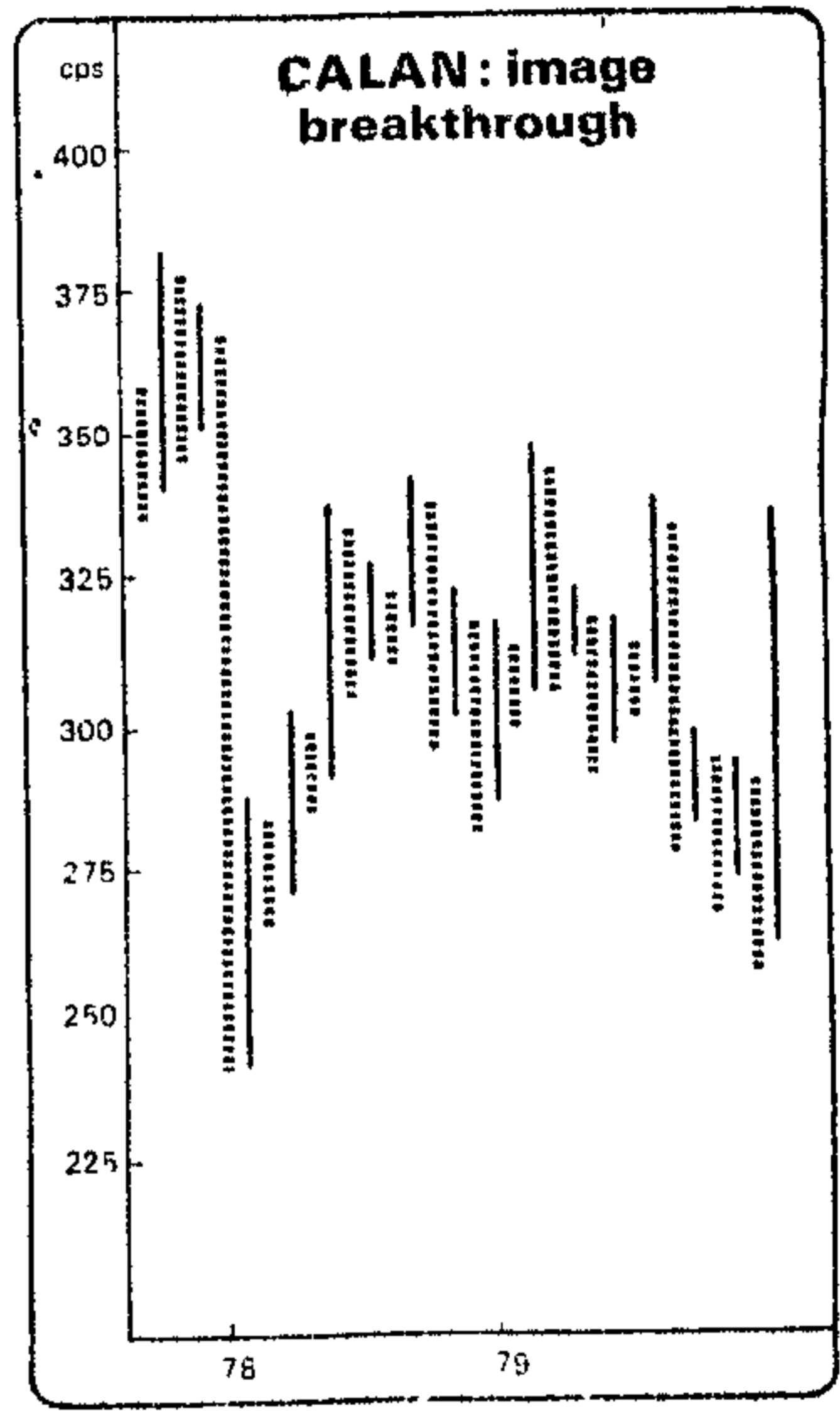
because of a slightly lower gross margin of 7,3%, pre-tax profit rose by only 7%.

Nevertheless, there was the opportunity to strengthen the balance sheet. Total borrowings were reduced from R32,4m to R28,6m, particularly in the short-end. Consequently the debt equity ratio improved from 100,6% to a more comfortable 87%. Interest paid, however, was higher at R3,4m (R3,0m), leaving the leasing and interest charges covered an unchanged 2,4 times by gross profit.

The rationalisation that led to the formation of Laseon Lighting is nearly complete and, with a sound order book, profitability is expected to improve further this year.

In the previous year Omega-Barfel — which caters mainly for the soft drink, liquor, dairy and fishing industries — only ran at 40% of capacity as orders for large injection mouldings rapidly fell off. Omega-Barfel is once again trading profitably, although Grobbelaar warns that, while there is a precarious balance between the cost of plastics and competing products, any further escalation in the cost of oil-based raw materials could lead to substitution by, say, pulp and paper products.

The imposition of speed limits, the abolition of resale price maintenance and the increase in fuel prices has obviously had an impact on distances travelled both by commercial operators and private motorists. So it is not surprising that Natyre's market has shrunk. Conditions remain difficult as distributors and retailers fight for market share but Grobbelaar has



faith in the long-term outlook for the tyre industry and feels that Calan should retain its investment in this sector.

Another cause for concern last year was the trading position of Consolidated Power. In an effort to boost sales certain of Litecor's outlets were added to CP's network and an option to acquire 50% was exercised giving Calan 75% of CP.

With so broad an operating base at least one sector can be expected to be seriously out of kilter. Last year it was Conti-Calan, the equal partnership with Continental Gummiwerke of West Germany. Subsidiary Corrosive Resistant Coatings experienced a severe downturn in profitability and Conti-Calan suffered a net loss for the year.

Since the year-end, Calan has sold this investment but has retained DI Fram and SOS Footwear. Both are profitable and the sale brought in R600 000 in cash.

In line with current practice and with possibly a shrewd eye to the group's investment rating, Grobbelaar has set certain management objectives. Among them is the aim of a pre-tax return of at least 25%, the limiting of shareholders' funds to 40% of total assets and of debt to less than 100% of shareholders' funds, and at the end of the day to pay at least a twice-covered dividend.

This time round Grobbelaar is looking

## DATES TO REMEMBER

**Last day to register for dividends:**  
**Friday September 14:** Alex Lipworth 3c, Ananint 230c, TW Beckett 23c, Berkshire 3c, Brick & Clay 5c, Claude Neon 7,5c, Cons Glass 40c, Edcon 14c, Edgars 175c, Globe 27,5c, Hugh Parker 2,5c, I&J 9c, Natal Chemical 18c, National Bolts 16c, NFS Motors 6c, Plate Glass 4,75c, Shipwrights 25c, South Atlantic 19c, Steelmetals 27,5c, Twins 4c, Union Corp 19c, Welfit Oddy 5c.

**Meetings:**  
**Monday September 10:** Fed Volks, SA Selected.

All meetings are in Johannesburg unless otherwise stated.

IV DISEASES OF BLOOD AND BLOOD-FORMING ORGANS

	W		A		C	
	M	F	M	F	M	F
0-1	0,02	0,03	0,20	0,21	0,06	0,06
1-4	0,01	0,01	0,02	0,00	0,02	0,02
5-24	0,00	0,00	0,01	0,01	0,01	0,01
25-44	0,01	0,01	0,01	0,02	0,00	0,01
45-64	0,02	0,02	0,03	0,03	0,06	0,06
65+	0,11	0,11	0,13	0,15	0,13	0,13
ALL	0,01	0,02	0,02	0,02	0,02	0,02
NO.	30	34	7	7	21	3

VI DISEASES OF THE NERVOUS SYSTEM AND SENSE

	W		A		C	
	M	F	M	F	M	F
0-1	0,52	0,18	0,50	0,41	2,02	1,56
1-4	0,05	0,05	0,02	0,07	0,45	0,26
5-24	0,03	0,01	0,05	0,04	0,09	0,06
25-44	0,03	0,01	0,04	0,05	0,23	0,09
45-64	0,07	0,07	0,21	0,11	0,36	0,13
65+	0,18	0,13	0,00	0,15	0,47	0,18
ALL	0,06	0,04	0,07	0,06	0,25	0,14
NO.	128	85	26	23	289	164

VII DISEASES OF THE CIRCULATORY SYSTEM

	W		A		C		B	
	M	F	M	F	M	F	M	F
0-1	0,51	0,33	1,10	0,21	1,80	1,59	0,13	0,10
1-4	0,05	0,06	0,02	0,10	0,15	0,17	0,02	0,04
5-24	0,07	0,06	0,09	0,10	0,14	0,17	0,11	0,13
25-44	1,09	0,44	1,31	0,70	1,54	1,27	0,73	0,78
45-64	9,75	4,44	14,76	10,70	10,33	8,25	4,61	5,01
65	42,19	32,93	55,30	47,72	43,12	40,90	13,55	14,21
ALL	4,70	3,81	3,22	2,25	2,74	2,69	1,14	1,20
NO.	9752	7926	1135	804	3114	3140	2390	1921

VIII DISEASES OF THE RESPIRATORY SYSTEM

	W		A		C		B	
	M	F	M	F	M	F	M	F
0-1	2,90	2,22	7,81	4,85	32,20	28,78	13,54	14,15
1-4	0,22	0,28	0,90	0,69	5,32	5,45	2,46	2,13
5-24	0,05	0,06	0,17	0,11	0,21	0,23	0,18	0,16
25-44	0,20	0,12	0,37	0,33	0,94	0,72	0,66	0,52
45-64	1,46	0,92	3,33	1,85	4,88	2,14	2,75	1,72
65+	11,52	7,89	16,51	13,42	20,07	10,49	9,32	6,19
ALL	1,12	0,97	1,22	0,79	2,87	2,22	1,37	1,24
NO.	2336	2019	430	282	3270	2588	2858	1951

for a 13% improvement in earnings to 87c. In view is that until the balance sheet has been further strengthened and current apex fully funded retentions will remain

high So look for a 2,5-times covered dividend of 35c, giving a prospective yield of 10,5% Grobbelaar has done much to restore the group's investment image and

it is reasonable to expect the market to lower the yield to within striking distance of the sectoral average of 6,7% over the next year or so

John White

the cost of raising the necessary funds has to be taken into account. The funds themselves are already justified by comparison with the alternative methods of provision, but there are additional costs involved in raising them: interest on loans, or administrative and incentive costs of raising taxation. These are normally insignificant for any given project, but may affect the overall amounts available for the health budget.

Where the methods of providing a given service use the same resources in different proportions, the decision-making can be by means of Linear Programming, though health service choices usually be presented in the simplified way required by this method.

## 2. CHOICE OF PROGRAMMES

So far, we have discussed methods of choosing means to obtain objective. But what tools are available to aid the choice of alternatives themselves? Can anything be said on the question of the to be given to particular diseases or age groups, whether to more to child welfare clinics or care of the aged?

Overall criteria are needed, and they have to be expressed in such a way that they can guide these detailed questions. Essentially, the problem is not only to relate resources used to objectives achieved, but to relate the various objectives to each other.

There are various means of doing this; but all of them require that expenditure be accounted for by the ends it is expected to achieve.

### 2.1 Programme Budgeting

Programme budgeting, also known as budgeting by objectives, involves the presentation of expenditure data according to the objectives to which it is directed. Thus, projects to combat TB would be grouped together, geriatric problems, sanitation programmes, etc.

This is necessary:

- (a) to know the cost of pursuing each objective;
- (b) to group together activities with the same objectives which can be compared by cost-effectiveness analysis;

(c) to know the effectiveness of a given amount of money when spent on different objectives, so that choices can be formulated in terms of the alternatives we might afford - so many geriatric day care centres, so many child welfare clinics, etc.

## POWERTECH/ASEA Caveat emptor

155  
21/9/74

Powertech's recent share price rise owes much to market rumours. Latest is that Powertech will acquire the Swedish-controlled electrical engineering group, Asea Electric, financed by a R50m-plus bank consortium loan. In response, the share price rocketed to 125c last week, up from 98c two weeks ago. However, it had slid back to 110c by the close on Wednesday.

What is happening? Altech and Powertech chief executive Bill Venter, just back from a trip to Sweden with co-directors Ken Maud and Hugh Brown, injects a note of reason, discounting many of the rumours.

'We had discussions with Asea, but the local company was not directly involved. Principles of co-operation, cross licencing and local representation of certain products were discussed. But no final arrangements were concluded. The issues were major because there are many facets to power electronics five years down the road. But, I stress, there were no conclusive decisions.'

On the steep share price escalation, Venter shrugs. 'The share price is set by outsiders, none of us at Powertech or Altech have control. We believe that Powertech has a strong role to play in the future of power electronics currently dominated by the multinationals in SA. We have stated our plans and objectives

be compared to be within a particular programme. This distinction ties up with an economic jargon of slightly older vintage - that of cost-benefit and cost-effectiveness; and through that to the main stream of neoclassical welfare economics, which attempts to make a distinction between the choice of the basket of outputs and the choice of each output.

clearly. We want the power electronics industry to become more self sufficient in terms of local participation.

On the allegations that Powertech and Altech are suffering cash squeezes, Venter retorts: 'Our cash balance is still in excess of R85m. No overdrafts, none of the properties bonded and in addition we have made provisional tax payments.

The rumour that Powertech negotiated a R50m loan is ridiculed. We have jealously guarded our financial ratios. borrowings shall not exceed 50% of fixed capital. At end-August Altech's figure was around 5%. We won't change our ratios no matter how good a deal looks. We're not going to stretch ourselves. Strapped for cash? Absolute bull. Our six month interim results will confirm our continued overall strength.

'Investors should not fall prey to unwarranted and irresponsible rumours. Speculative buying without knowledge of all the facts should be avoided.' Sound advice indeed.

He ad

"I d u q c w r g r g o t h p o b u

Program  
ing ou  
the ba  
criter

L-

With medical-technical  
the role of the public through political

GENERALLY ACCEPTED

APPLIED

QUESTIONS

DEFERRED TAX

A. Alpha Limited acquired a on 1 May 19.6. Depreci straight line. A 25% i tax purposes, wear and t

**CULLINAN** *26/9/79* (185)  
**Electrical potential**

**Activities.** Manufacturers and distributors of refractories, industrial and electrical porcelain, mining and building materials Has industrial and residential property interests

**Chairman.** F H Y Bamford, deputy chairman W G Geach, managing director N M Cullinan

**Capital structure.** 8m ordinaries of 50c\* 500 000 5,5% cum prefs of R2 Market capitalisation R34,8m

\*Before 13-for-100 rights issue

**Financial.** Year to June 30 1979 Borrowings long and medium term, R10,4m, net short term, R9,6m Debt equity ratio 88,9% Current ratio 1,3 Net cash flow R5,3m Capital commitments R873 000

**Share market.** Price 385c (1978-79 high, 390c, low, 110c, trading volume last quarter, 76 000 shares) Yields 16,6% on earnings, 5,5% on dividend Cover 3,0 PE ratio 6,0

	'76	'77	'78	'79
Return on cap %	16.8	16.4	16.0	20.8
Turnover (Rm)	31.1	34.3	40.3	54.3
Gross profit (Rm)	5.1	5.5	5.7	9.4
Gross margin %	16.5	16.1	14.1	17.3
Earnings (c)	40.3	28.5	38.0	63.8
Dividends (c)	13	13	14	21
Net asset value (c)	195	210	225	268

The year to end June was the best ever, with the group in a strong position to capitalise on an upturn in its markets as a result of several years of expenditure on improving and enlarging manufacturing facilities

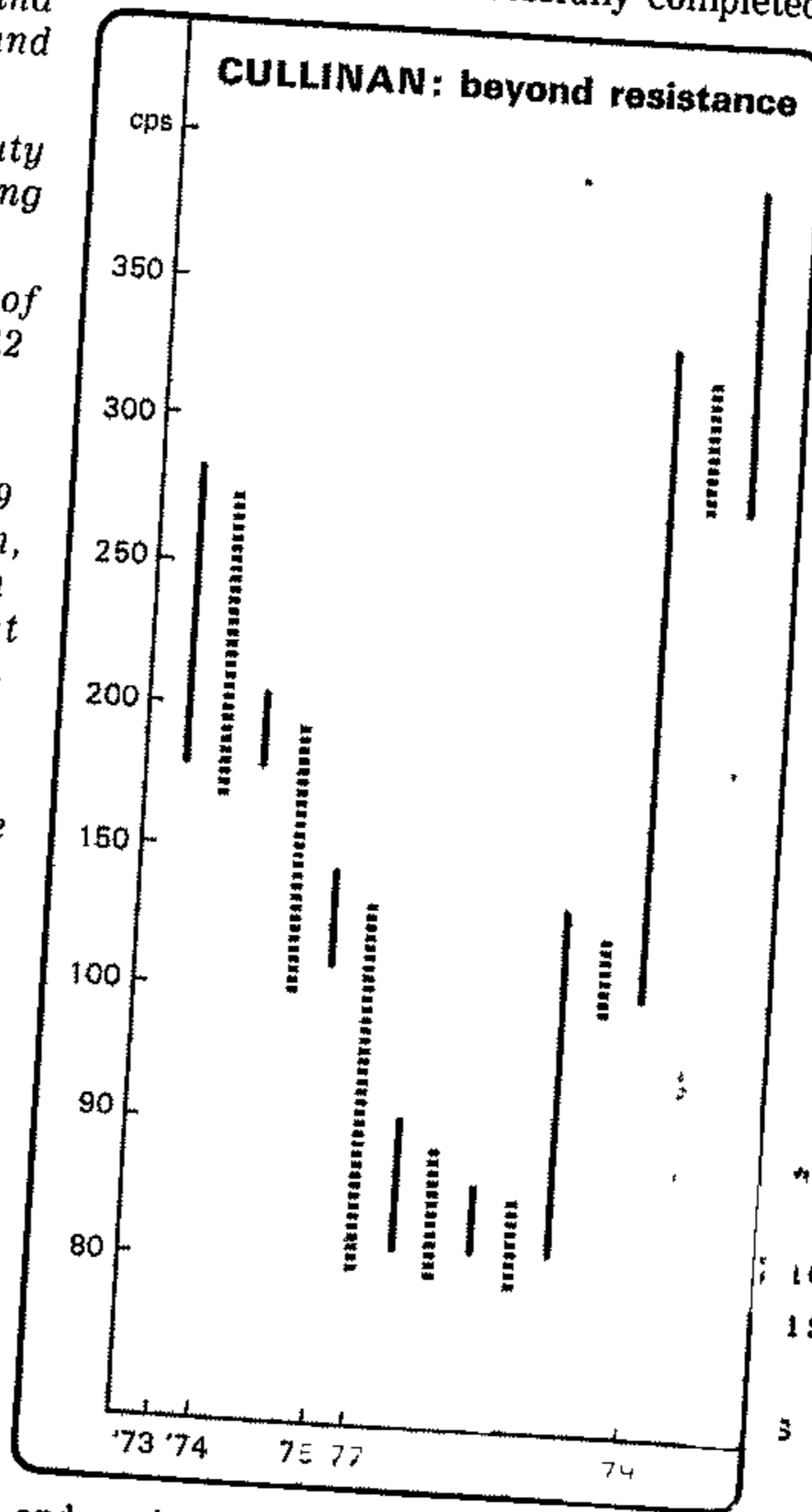
Group sales reached a record of R54m, which was a 35% rise, and as so often happens in a capital intensive industry when plant utilisation recovers, the bottom line reflected a 71% gain in attributable profit to R4,9m (R2,9m) But, while earnings per share leapt by 68% to 63,8c, the dividend was only 50% higher at 21c as cover was lifted from 2,7 to 3,0 times

In funding higher turnover, total borrowings grew from R14m to R20m,

leaving the debt equity ratio at a still comfortable level of 88,9% (72,8%) The additional capital, however, was usefully employed, generating a return of 20,8% against the previous year's 15,9% And at the end of the day, net cash flow improved from R3,4m to R5,3m, excluding extraordinary items of R332 000

In his summary of activities, outgoing chairman Fred Bamford, he is to retire on November 23 in favour of Neil Cullinan, says that the refractories division improved considerably Also, the new R5,7m electrical porcelain factory completed its first 12 months with a significant contribution to the newly-styled electrical division

The refractories division as a whole increased turnover by 28%, with domestic demand for maintenance items strengthening substantially The contract for the Alusaf carbon baking anode furnaces at Richards Bay was successfully completed



Elsewhere in the electrical division, work is proceeding on the establishing of products designed to replace imports, but the main task this year will be to integrate production facilities of SAG with those of Cullinan Industrial Porcelain

The mining division last year finally overcame its problems in the beneficiation of andalusite, making its first profit in the second half of the year The brick division recovered on the back of a slowly reviving building industry and the only sector to produce disappointing results was that of property But even here, exposure has been reduced considerably in the past few years

Although the main thrust has been towards boosting the electrical division, Cullinan feels that there are still areas within its traditional activities of refractories, mining and brick production for profitable investment So, as a result of buoyant industrial share prices, advantage was taken to raise more capital through a 13-for-100 rights issue just after the year-end

Had it been possible to tie up SAG and the rights issue before the close of the financial year, gearing would have been reduced to within the group's guideline of 75% — and the current ratio would have been better than 1,3 (1,6)

In the year ahead, Cullinan starts out not only with a healthy balance sheet, but also with buoyant outlooks for most of its products Demand for refractories is expected to remain steady, with growing prospects for exports The now enlarged electrical division is forecast to do even better and the mining and brick divisions should more than hold their own

Overall, then, there is ample justification to expect earnings to advance to around 75c on the increased capital And, given an unchanged cover of 3,0 times, the dividend could rise to 25c for a prospective yield of 6,4% On this scenario, though, the share appears fairly valued

John White

taxable  
 ie  
 ised.  
 s a set  
 al year



# Loans 'cover' may force up electricity costs

*Sum. Times 18/11/79*

185

By FLEUR DE VILLIERS

ELECTRICITY costs will rise substantially in future — following a recent Government decision to implement a key recommendation of the De Kock Commission

Escom, and other public utility companies, were informed by letter recently that the Government would no longer grant forward cover on loans raised in "hard currencies" such as the German mark or Swiss franc

This means that the public corporations — substantially borrowers in the European capital markets — will have to cover themselves against the costs involved in the revaluation of hard currencies against the dollar, and will have to

ask the consumer to pay up. In recent years, these costs — running to about R100-million annually — have been borne by the Government out of the increase in the gold price

The Reserve Bank's contingency liability through the "insuring" of foreign loans against currency revaluations is said to run to nearly R1 000-million

Earlier this year, the Government delayed acceptance of a De Kock Commission recommendation that forward cover be extended only to dollar loans and that it be dropped on all hard

currency borrowings. This recommendation has now been accepted and an announcement by the Minister of Finance, Senator Owen Horwood, that it be implemented from January 1, is expected soon

For the past year the Government has put a 3,5 per cent premium on hard currency borrowings against a 2,5 per cent discount on dollar loans

The high United States interest rate, however, meant that the European market remained attractive and that, despite the premium and that, despite the premium, the Government was still having to foot the bill for hard currency revaluations

CH UNIT

H DIVISION,  
ECONOMICS  
E BUILDING,  
CAPE TOWN,  
DE BOSCH  
7700

1979

ing  
party in our new offices on the sixth floor of the Robert Leslie Social Sciences Building.

At the same time we will be presenting our second report and launching the first volume of our new publication 'Economics of Health in South Africa'.

We should be happy if you would join us at 6.30 p.m. on that evening for drinks.

Please let us know whether you will be able to attend to facilitate our catering arrangements.

Yours sincerely,

*Francis Wilson*

FRANCIS WILSON  
DIRECTOR

R.S.V.P.

Mrs. Annette Thom Telephone: 69 8531 Ext 440



185

MANUF. - Elec.

1-1-80 - 31-12-80

CDM 20/2/80  
**Neon**  
**up 41%** 185

By ELIZABETH ROUSE

THE Anglovaal group's Claude Neon Lights might be small in its industrial stable, but its performance measures up to the more powerful companies

Taxed profits improved by 41% to R642 000 in the six months to last December from the 1978 half-year's R454 000, equal to earnings of 11,4c against 8c a share

The company, which makes and leases out advertising signs, reports a marked improvement in demand for its new signs and a good order load at all its factories in the half-year

Profits started to flow at satisfactory levels from the sign rental contracts that Claude Neon bought last year

The company expects the high level of demand for its products to continue and the year's profit should again be higher. Claude Neon's dividend was raised by 1,5c to 7,5c last year and a payment of at least 10c looks likely at this stage

ALTECH/BITCON/POWERTECH

# Gearing for growth

272 185 Rm 7/3/80

Since the Uniewinkels deal, Altech has been regarded as a liquid and highly acquisitive electronics company. And with the STC takeover in 1977 the group moved into the big league, becoming the largest local electronics operation. This week's Bitcon deal offers even further potential, and besides giving the group access to extensive finance for large scale investment in coming years, it comes at a time when Altech is looking further afield to strengthen its already stable base in the electronics and telecommunications sectors.

The deal centres on the injection into Bitcon, already rechristened Allied Electronics Corporation (Altron), of a controlling 52% stake in Altech valued at R47,5m. Accompanying this is a five-way share split of the present 371 000 Bitcon shares and the issue to the Altech directors and executives of 9,3m new Altron shares for their holding in Altech. In the end, Altron will have 11,1m shares in issue with minorities holding 1,8m.

The immediate effect is that an interest in Altech becomes easier to acquire through Bitcon, answering the now fairly common question of when Altech might have a share split to make the equity more marketable. The Altech directors and executives hold 52% of the equity, ITT (of the US) 33% and local institutions up to 8% leaving less than 900 000 shares available to the public. With the current price up at 1 300c, the share is not very marketable.

The major impact of the deal, however, is the leverage Altron gives the Altech group in its quest for further acquisitions. In Altech's business, local control is essential, particularly when tendering for strategic government contracts. Should Altech have issued shares in pursuance of its acquisition policy, the controlling shareholders' stake could have dropped below 50%. This might have paved the way for a change of control, particularly as ITT could have come out as a buyer — or a seller to a third party — at some time in the future.

Admittedly, this situation does not exist at present, says Altech chief executive Bill Venter. "But we had to guard against that possibility while at the same time ensuring we had the capacity to expand."

With the Altech directors and executives holding 84% of Altron there is now considerable financial leverage before control could change. For example, if Bill Venter and his team reduced their stake in Altron from 84% to 51% — still leaving 52% of Altech in Altron — additional

finance of more than R20m could be raised.

This does not include the R11m cash currently held by Altech, or R7m in Altron since Bitcon's listed portfolio was sold to Anglovaal, or the R10m available in borrowings to Altech before it runs up against a self-imposed 50% debt equity ceiling. Additionally, Altech could have its own rights issue. Thus, should the need arise, the Altech group could have access to as much as R60m.

Venter says nothing major is in the pipeline at present, but stresses that the acquisition hunt is not confined to SA. "We are large and our three divisions have the capability to tender on turnkey

projects here and abroad." So perhaps Altech is set to become the next multinational on the JSE lists.

Although more than 96% acceptance has been gained on the Bitcon takeover, the preliminary results for Altech and sister company Powertech should encourage any recalcitrant minorities to accept happily. Altech's turnover rose 51,7% to R88m (R58m) while pre-tax profit increased 45% to R15,4m (R10,6m). On earnings of 100,4c (71,7c) a higher 40c (28c) dividend has been declared to more than match market expectations.

These earnings did not include any benefits from the Messina acquisition during the year nor the recent tie-up with the French CGE group for the local manufac-

ture of telephone exchange electronic digital switching equipment for the Post Office. Next year this latter deal will kick in, and offers the telecommunications division a solid 15-year contract which will further enhance earnings. For subsidiary Powertech, the year to end-February was better than budget. Earnings of 5,1c compare with the forecast of 3,4c at the time of the Circulaire takeover in July, and a 2c maiden has been declared. The market responded enthusiastically to Altech's results, marking the share up to 1 300c from 1 225c on Monday. Powertech, however, remained almost unchanged at 110c. Venter cautions against expecting too much from Powertech in the short-term, but reminds shareholders that in its first year Altech did not perform as well as Powertech did in 1979/80. This week's results and the Bitcon deal mark a watershed for the group. The full implications of the funding channels opened to an already liquid group will not be seen immediately. But in the next three years it should pay off as the group operates on its own stringent investment criteria and steers clear of excessive gearing. So far, Venter's management has pushed Altech from 100c to 1 300c in just four years. The next four-year span could be as exciting.

Des Klatela



Bill Venter . . . perpetuating control

185 9/3/80

# Gas producers to spend R35m on expansion

Sund Times

**EXTENSIVE expansion is helping lift off industrial gas producers who are predicting market growth at double the rate.**

Upwards of R35-million will be spent in the next 18 months by the four major producers on expanding production and distribution outlets

This could rise significantly in coming weeks as customers such as mining companies place major new orders

Continual development of new applications and growing sophistication of users — and further boosts from spending by the mining industry and the Defence Force — has recently kept this industry busier than most

It also stands to benefit more than most from better economic conditions

By far the bulk of this spending will be done by the R153,5-million-a-year Afrox group

By ANDREW MCNULTY

which dominates the market, claiming an overall market share of about 65%

Estimates of the market value and market shares vary with definitions used

But a market of some R120-million to R150-million is rigorously contested by Afrox, Air Products, Union Liquid Air and Fedgas

Subtracting tied sales to Iscor by Air Products, a former Iscor subsidiary, remaining market shares appear to be roughly Air Products 18%, Union Liquid Air 9% and Fedgas 9%

With relatively slow growth seen in the long established "classical gas" fields, oxygen and acetylene, producers are looking towards what they see as being an exuberant growth rate in specialised gases which are finding increasingly innovative applications

Examples are in food processing, sophisticated steel engineering, medical uses and in industrial effluent treatments — in these areas Klaus Hildenbrand, general manager-elect of Fedgas, sees growth well above 9% in the next two years and aims to concentrate operations in these sectors

"We are striving to become market leader in scarce applications," he says

Mr A H (Hoffie) Hofmeyer, general manager of Afrox's gas division is preparing for a 10% to 20% rise in demand in bulk gases, with big orders coming, for example, from specialised steel producers such as Southern Cross and Cape Iron and Steel

The group's capital spending programme includes

● R8,5-million to increase the capacity of the company's Ger-

miston plant — producing oxygen, nitrogen and argon — to 120 tons a day with the capacity to further increase this to 300 000 tons a day This is now being commissioned

● The liquifier plant at Germiston has been doubled in output to 200 000 tons a day

● More than R1-million is being spent on expanding the holding in cylinders

● About R1-million has been spent on liquid oxygen and liquid nitrogen storage tanks

● The national distribution network, now at 52 points, is being expanded

Among expansions being carried out by Fedgas, Mr Hildenbrand says the company is just bringing on stream a doubling of argon production capacity, carried out at a cost of R650 000

Air Products' general manager, Mr G R Prevett, says the company has a similar expansion planned, although details are still under discussion

SYMBOL	PAGE	15016
UP (50)	1	153902X
ABS (28)	7	1565290
F (44)	7	1555472
UP (50)	1	1540388
SVX	1	157915X
ISTRAR (ACADEMIC)		

12

estors and a wide range of cables  
Asea of Sweden holds 45% of the  
equity

Chairman D L Keys, managing direc-  
tor R L Lannarsson

Capital structure 11.5m ordinaries of  
R1 Market capitalisation R47.2m

Financial Year to December 31 1979

Borrowings long- and medium-term,  
R8.1m net short-term, R7.7m Debt

equity ratio 55% Current ratio

1.5 Net cash flow R6.5m Capital

commitments R2m

Share market Price 410c (1979-80  
high, 410c low 103c, trading volume

last quarter 529 000 shares) Yields

1.9% on earnings 3.9% on dividend

over 31 PE ratio 8.1

Return on cap % 28.7 23.7 28.5 17.4

Turnover (Rm) 50.2 57.4 58.9 71.9

Pre tax profit (Rm) 6.1 6.2 8.7 7.6

Gross margin % 13.4 13.3 11.4 10.4

Earnings (c) 32.1 35.7 42.4 48.8

Dividends (c) 8.5 8.5 11.0 16.0

Net asset value\* (c) 163 186 220 255

\* Adjusted for one-for-one issue and based on 10.8m ordinaries

Early last year Asea chairman Derek  
Keys hinted that earnings might fall in  
1979. In the event, taxed profit actually  
increased a modest 15.8% to R5.1m  
(R4.4m) which meant earnings of 48.8c  
(42.4c) and a 16c (11c) dividend.

Keys explains that the upturn in the SA  
economy in 1979 spilled over into in-  
creased orders for Asea's products. The  
effect was that order books for longer-  
term items like transformers began  
building up while sales of faster moving  
products, like cables, were over budget.

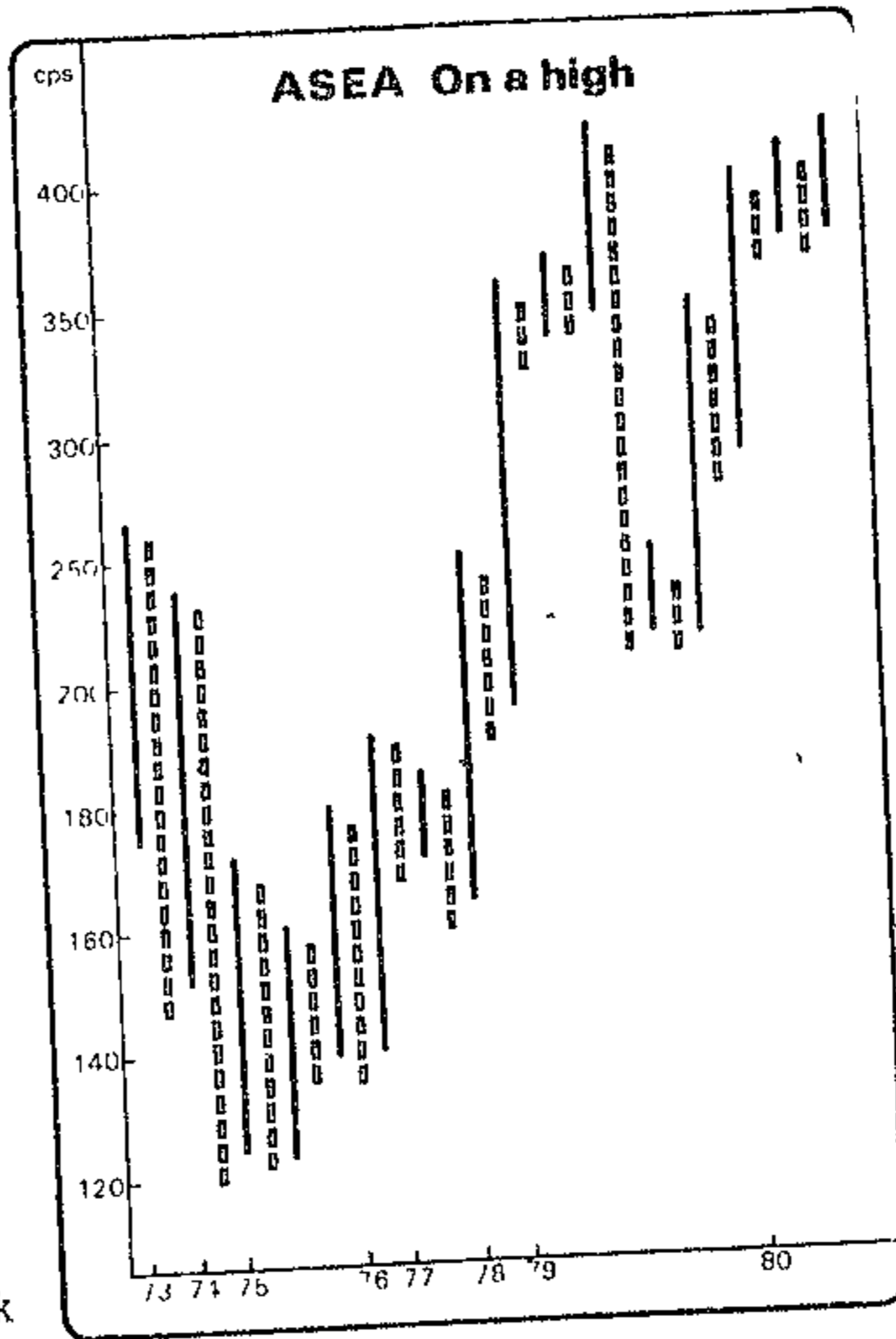
Asea also had some success on the  
export market where sales to South Amer-  
ica, Hong Kong and certain African coun-  
tries contributed marginally to profit. The  
local electrical/electronics industry still  
faces import competition.

Last year Asea bought the IDC's 40% in  
Asealac for R2m, settled by issuing  
570 000 ordinaries at 350c a share. The  
group also acquired Seco which became a  
wholly-owned subsidiary of group member  
Astra Condensers. The merged operation  
is now called African Capacitors.

Asea has now completed its record ca-  
pex programme, spending R8.7m on ca-  
pacitor and distribution transformer fa-  
cilities. The latter project was commis-  
sioned before the year-end and Keys ex-  
pects the facility to be increasingly uti-  
lised with the rise in general demand.

Because of the high capex, Asea used up  
most of its surplus funds as well as  
gearing up to 55% of equity. Total borrow-  
ings at end-December amounted to  
R16.1m (R6.7m), fairly evenly split be-  
tween short and long-term finance. At  
end-December 1978, the debt equity ratio  
was low at 28.7%.

Keys says the higher rate of borrowings  
should be seen as 'temporary', and the  
situation will correct itself in 'due  
course'. This level is not too high if the



ASEA (1985) (70) Rm 2.13/80  
Charging up

Activities Manufactures transform-  
ers, high voltage isolators surge ar-

1215

return on investment increases towards  
previous levels. The average interest leas-  
ing bill is more than adequately covered.

Asea's stock level was also well up at  
end-December at R22.8m (R14m). Keys  
notes that with the increasing cost of raw  
materials Asea might require further  
working capital. But this can be met, as  
and when needed, from overseas finance,  
which the group has been running down in  
recent years.

This year profit should benefit from the  
investment allowances deferred over the  
next seven years, as well as from efforts  
to increase factory utilisation.

In the past year, the share has benefited  
from speculation that Asea might be taken  
over by Powertech. However there seems  
no truth in this and anyway, with the  
changed government in Sweden there is  
probably far less pressure on Asea's par-  
ent company to disinvest from SA. At  
410c the share yields 3.9%. Longer term  
there must be profit in holding on to  
energy-related investments, though in the  
short term the share looks expensive.

De L. L. L.

STIMES 23/3/80 (345) (185)

# R40m Soweto contract

By ANDREW McNULTY

THE long-awaited electrification of Soweto will be given a powerful boost this week when the contract for underground reticulation services is awarded

A spokesman for the consulting engineers responsible for the planning and implementation of the project, Mr G Marais, says details of this contract — worth around R40-million — will be announced this week

Eleven companies tendered for all or part of the contract, which may be awarded wholly to a single company or may be spread over a number of organisations

"The criteria will be price, speed and reliability of delivery — in other words, what will be in the best interests of the people of Soweto," says Mr Marais

"But I believe we will pleasantly surprise people with the results"

Major companies such as GEC (SA) and Siemens, which are believed to have tendered for the full reticulation contract, stand to benefit substantially

GEC has already been awarded a R17-million order to supply mini sub-stations. Provision of these stations will enable even distribution of power from the Johannesburg municipal

and should prevent any power cuts during the winter overload period

The next major step will be a call for tenders for the high tension, overhead power network expected in about two months

The total electrification scheme involves orders estimated at R100-million

Mr Marais says that while the initial target for the project was 1985-1986, but with the degree of co-operation now being received the completion date will be brought forward "very substantially"

"World records could be set, particularly on the manufacturing side, he says

**Toeing the line**

185  
 28/3/80

Although SA's cable industry has suffered in the past as a result of the high level of competition and tight margins, local companies are now turning in some impressive results, largely due to a spate of sizeable projects

At the same time, prospects for new work in Soweto and other black townships must enhance the sector over the next couple of years. African Cables hasn't quite managed to match the doubling in turnover which Scottish Cables achieved

mainly, they say, as a result of the firm's acquisition of BICC (SA) — but it at least upped its interim dividend to 25c to 7c in the six months to end May 31. According to managing director Edward Levin, turnover increased to R22.8m in the same period and its profit rose to R5.0m (R1.2m). Profit grew more slowly as a result of tax offsets following the completion of capital projects.

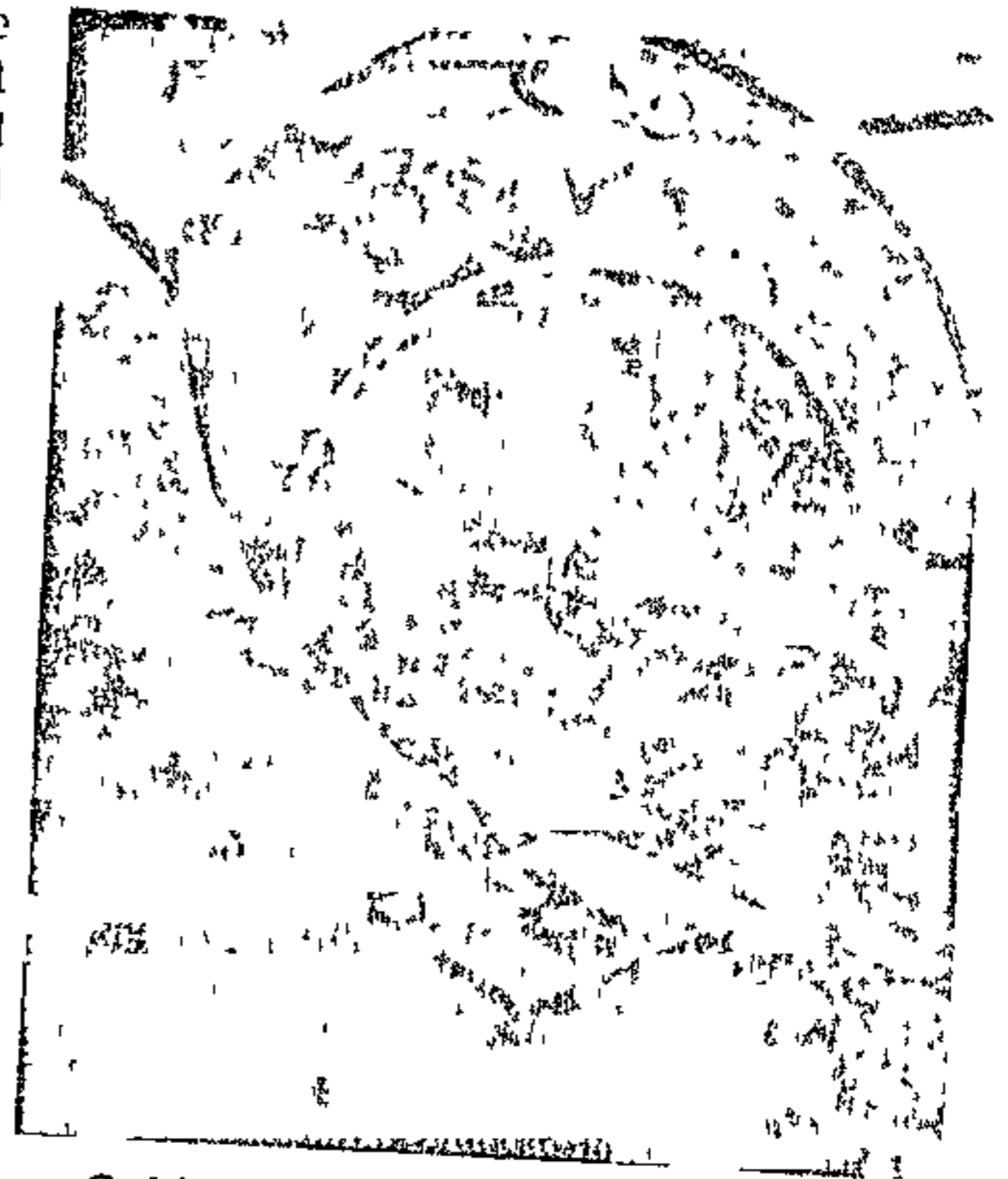
Levin adds that there is little expenditure for the remainder of this year as commitments were only R24,000 at the end of May compared with R375,000 at the same time in 1979. However, with the company already pushing up fairly close to its production capacity limits, at least a R2m capex for modernisation and expansion is on the cards for the next financial year.

In addition, says Levin, the company in partnership with GEC is expecting a response to its bid for part of the Soweto electrification project before this weekend. Trade in the sector is generally very buoyant, Levin reckons, and current trends in profitability are certain to continue in the second half. The Railways, mining houses and municipalities, as well as the public corporations, are all actively expanding at present, Levin adds.

The company is still coming up against areas of high cost, of course, especially with the copper price firm and PVC prices rising.

Dividend cover is a bit thin at 17 times, compared with 21 times for the same period last year, presumably as a directive from the overseas cable companies which own the bulk of the equity.

Although there were rumours of a takeover at this time last year which drove the share price up from 480c to around the 900c mark, the share now stands at 350c — after a four-way split last December — offering a yield of 4.6%. Levin emphatically denies there is any prospect of a takeover. On the other hand, he says negotiations are taking place frequently with a view to diversification, and there



**Cable making plenty of scope in Soweto**

are solid plans on the drawing board which will lessen the company's reliance on the cable industry.

Levin points out that dividend policy is changing to remove the disparity between interim and final dividends.

On this basis, it is probably not unreasonable to expect a final of around 18c, compared with last year's 14.5c, which would give a prospective yield of 7.1% on current share price.

Scott Young

AS AT 29 02 80

EXAMINATION RESULTS IN FACULTY ARTS

PERFORMERS DIPLOMA IN SPEECH & DRAMA YEAR : 1

STUD NO	SURNAME	FIRST NAMES	COURSE	DESCRIPTION	SYMB
135656C	BAIJES	EDUARD SIEPHANUS	116120	DRAMA I	F
154249M	COOPION	MATTHYS CHRISTOFFEL	116120	DRAMA I	F
156762U	KRUSKAL	MEGAN	116120	DRAMA I	UP
162343K	MILITZ	NICOLA ANDREA	116120	DRAMA I	UP
154826P	SAMUELS	ANDRE CHRISTOFF	116120	DRAMA I	F

\* TOTAL NUMBER OF S

29	DEAN
31	
33	
35	
37	
39	
41	
43	
45	
47	
49	
51	
53	
55	
57	
59	
61	
63	
65	

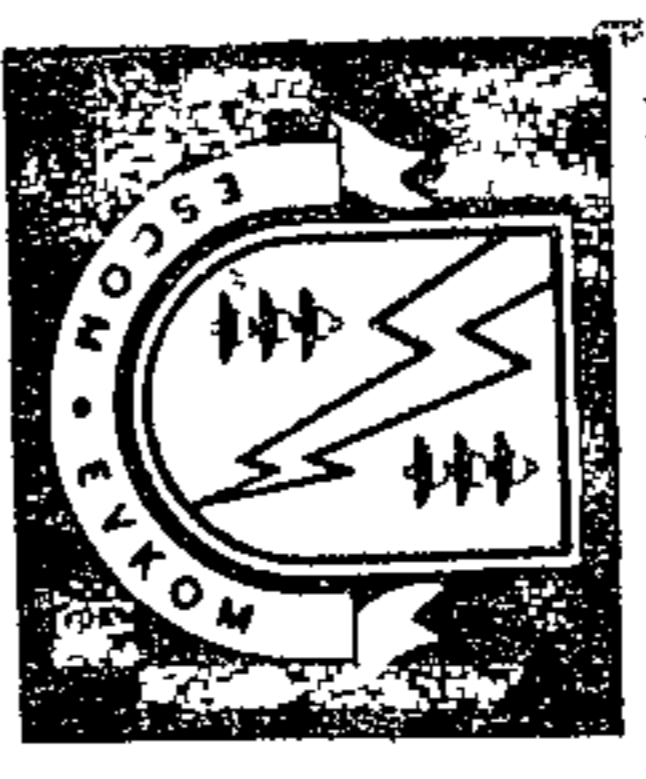


9/14/80 DB

185

266

# Escom's Shock for Border



**JOHANNESBURG —** Electricity tariffs in the Border are to rise by 7.5 per cent from the beginning of July.

Escom announced yesterday that increases throughout the country would average 7.26 per cent and yearly increases would be expected until 1984. The Border region is particularly hard-hit only

the Rand and Free State are to receive a higher percentage increase

Rises for particular areas are Rand and OFS 8.17 per cent, Border 7.5, West Cape 7.14, Orange River and East Cape 6.9, Eastern Transvaal 6.67, and Northern Cape 5.88. The chairman of Escom, Mr Jan Smith, said Escom had considered not applying any tariff increases in 1980 but rising costs for operations and capital needs made the increases

necessary

Rising costs were such that if tariff increases had been postponed, it would have meant an increase next year of more than 10 per cent. This, Mr Smith said, was "obviously unacceptable". Escom expected to get R60 million from the higher tariffs in the last six months of 1980, but there would be a deficit for the calendar year which was expected to wipe out the R80 million

surplus it had at the start of the year

Pointing out that the July increase was considerably below the present inflation rate, Mr Smith added "Our planning indicates that yearly increases, lower than the inflation rate, will be possible until 1984".

"The commission is convinced that relatively low but regular tariff adjustments are absolutely necessary to ensure the financial stability of

Escom"

He said that as the new tariffs would only apply for six months, the average sales price for the year would only be about five per cent higher than the 1979 figure. Capital accounted for 50 to 60 per cent of costs and in the past few years the cost of power stations had increased by 14 per cent a year.

The prospects of meeting more of the

capital costs by raising loans were described as poor, with the asked rates for some foreign loans in the 15 to 20 per cent region.

In addition to the increased tariff, Mr Smith said, Escom had made representations to the Electricity Control Board for tariff structure changes to be made for Escom's Rand and Free State and Eastern Transvaal undertakings — SAPA

**EAST LONDON —** Commerce and industry were, shocked at the electricity tariff increases last night and leaders pledged to fight it. Mr Jock Allison, secretary of the East London Chamber of Commerce said "We are going to fight this all the way. This increase means that our tariff structure here is still among the highest in the country — and that's what is hamper-

## Border pledge to fight new

factory owner at Dimbaza, said "Although our percentage increase is lower than the Reef, our base rate is higher. In other words a housewife and industrialist here will pay more for his electricity than on the Reef". He said under the Act of Parliament under which Escom operates, they should break even for each of their undertakings. Escom had no choice but to adjust its

books in this "Select Readings" date from the last  
Planning theory, Transportation, etc. Planning is a  
Primary science.  
as entirely separate from Urban History, Urban

the Border Counties of  
industries said: "I would  
hate to believe its true.  
You have just ruined my  
evening and I am very dis-  
appointed. This is  
ridiculous."

He said it was another  
slap in the face for  
decentralisation in the  
Border area and would be  
a negative step for  
development.

"We are going to fight  
this increase. The tariff in  
the area is already one of  
the negative aspects. It is  
dastartening and  
shocking."

Mr Joe Yazbek, who  
holds the industry port-  
folio on the city council  
said "As Shakespeare had  
put it, "that was the un-  
kindest cut of all." At a

time when we are at our  
bottom, we really felt the  
government would do  
something to rectify the  
situation. We do not need  
this."

He said a Labour inter-  
sive industry, was on the  
verge of moving to East  
London. Then the last  
tariff hike came and after  
doing a viability study,  
they decided not to come  
as the electricity would  
cost them too much.

"We must fight this  
footh and nail even if it  
means seeing the  
Minister."

Mr Ian Duncan-Brown, a

the high tariffs is the  
biggest reason in-  
dustrialists do not want to  
settle here."

He said the only solu-  
tion seemed to be either  
an alteration to the Act  
under which Escom  
operated, or an alteration  
to the boundaries of the  
Border undertaking. The  
Border was a small  
percentage user of Escom  
power but the  
geographical area was big  
— DDR

DD 10/4/80

EDITORIAL OPINION

# Electricity shock

260  
185

Why the burden of heavier increases in electricity tariffs for the Border area and its adjoining territories than for most other regions in South Africa?

It is basically due to the under use of Escom's undertaking in this part of the country.

The power infeed into the area and its redistribution in many directions involves transmission over great distances to relatively few customers.

This makes the Border undertaking particularly costly — long lines of communication and small consumer demand, especially in the more distant distribution areas.

The supply is there at a price. That price has to be met, but if there were greater demand, through greater industrial development all along the line of electricity supply the tariff structure could change to consumers' advantage.

But as one industrialist in this part of the country says, the high electricity tariffs are one of the deterrents to industrial expansion. And without new industries, which would mean more customers for the available Escom power, the high fixed costs of Escom's Border undertaking prevent a lowering of tariffs.

Escom operates on a break-even financial principle for each of its un-

dertakings in South Africa. There is no single national tariff. Yet Escom provides a national service and has no competition. If the government is really serious about decentralisation of industries and generating greater economic activity in underdeveloped areas, it should therefore liaise with Escom about a possible equalisation of tariffs throughout the country.

Alternatively, the government should seriously consider subsidising electricity tariffs in the Border, Ciskei and Transkei areas as a further incentive to entrepreneurs to start new ventures in the three regions.

The government does not need to be reminded how serious the unemployment situation is in the Border and Ciskei regions.

The infrastructure for growth exists — a fine harbour at East London, a fine airport, good roads, good rail links, the intricate Escom power network, a dense population providing an abundance of labour, fertile soil, plenty of water and a delectable climate. Only essential financial inducements to strike out for prosperity are lacking.

Therefore, we say to the government: Stop telling us to get off our backsides. Get off yours and see to the basic requirements for development — competitive rates for power and, incidentally, also for transport.

*Electricity shock!*  
The question will fluctuate more because investment depends on how much a person can afford to invest. Therefore it depends on how much one invests and you cannot invest your money that need money it will cause the investment to fluctuate to fluctuate. Where as the consumption fluctuates does not fluctuate. No need to because like food everyone has to eat to survive. Therefore most people buy the same goods every month, so there consumption for these goods is the same naturally every month, this applies to many other things as well.



# R360m Eskom order for British group

**Financial Reporter**  
LONDON — Eskom has awarded a R360-million (over £200-million) contract to the British GEC group for six 600 megawatt turbine generators.

This was announced in London by Mr Robert Davidson, the managing director of GEC Turbine Generators.

A statement released in Johannesburg said "GEC South Africa is pleased to announce

that the Electricity Supply Commission has given a letter of intent to GEC Engineering (Pty) for the supply of six 600 MW turbine generator sets complete with feed heating and condensing plant for a new power station to be known as Tutuka.

"The contract is one of the largest single orders ever to have been placed for turbine generator plant and will be in

excess of R360-million.

"GEC Engineering will sub-let the contract to GEC Turbine Generators in the UK and the manufacture of the equipment, which will extend over six years, will provide valuable work for GEC plants at Hough, Manchester and Stafford.

"As, on the Duvha contract, there will be considerable local content to this order and work will be placed not only with

local GEC companies but with associated companies such as Barlow Heavy Engineering in Benoni.

"The Tutuka Power Station will be located 150 km south-east of Johannesburg and will utilize coal from the Standerton area.

"The first unit is scheduled to enter commercial operation in early 1985 and the remaining units at nine month intervals.

"The turbine generating units will be duplicates of the six 600 MW units which GEC are supplying to Eskom for the Duvha Power Station.

"The first of these units has received its main components and has already carried full load.

"The execution of the Duvha contract is obviously an important factor in the expansion of this unit of the company's business in the region of the country.

"However, for the project is being supported by the company.

# R40m for Escom training centre

**JOHANNESBURG** — Escom will spend an estimated R40 million in the next five years on a sprawling university campus-style employee training college here

The centre, aimed at centralising Escom's training schemes and running courses for about 6 000

employees a year, will be situated on a 120 ha site will be built in three stages and be completed in 1985. It will start operations next year

The centre will cost even more than the planned R32 million expansion of Escom's controversial Sandton headquarters,

Megawatt Park. Escom announced nationwide electricity tariff increases last week, but said the cost of building the training college and the erection of a replica of Megawatt Park would have a negligible effect on tariffs. — DDC

202

Alchian  
Proda

## Joint, Team Production

We examined specialization in the preceding chapter; now we examine another source of enhanced output, teamwork. People work with other people or with other people's resources to jointly produce something. Two of us, navigator and pilot, operate an airplane. Two of us operate a steel mill, I as crane operator, you as rolling mill controller. Three of us operate a fishing boat, as helmsman, as engineer, and handler of the nets. Four people perform surgery on a patient: a surgeon, anaesthetist, surgical aide, and attending nurse. Five lawyers work together on a law case jointly creating their strategy. The magic of increased output from joint physical or mental effort is taken as a fact that need not be explained here. (We need not explain, for example, why two people pushing a car can push it farther than one person could push it for twice as long.) Instead we examine how people are guided to teamwork, on a team that is known as a *business firm*. We also inquire into what influences how those firms are organized and internally controlled, and how each member's reward (pay) is determined. We first examine a few control techniques; we assume temporarily that all possible participants are identical in ability.

In exploring these basic issues, we can ignore features such as whether the enterprises are small or large, unionized or nonunionized, conglomerate or single-product, local or multinational, new or old, retailing or manufacturing, corporation or proprietorship. We pass over administrative problems like how to select personnel; to plan production schedules; to arrange for

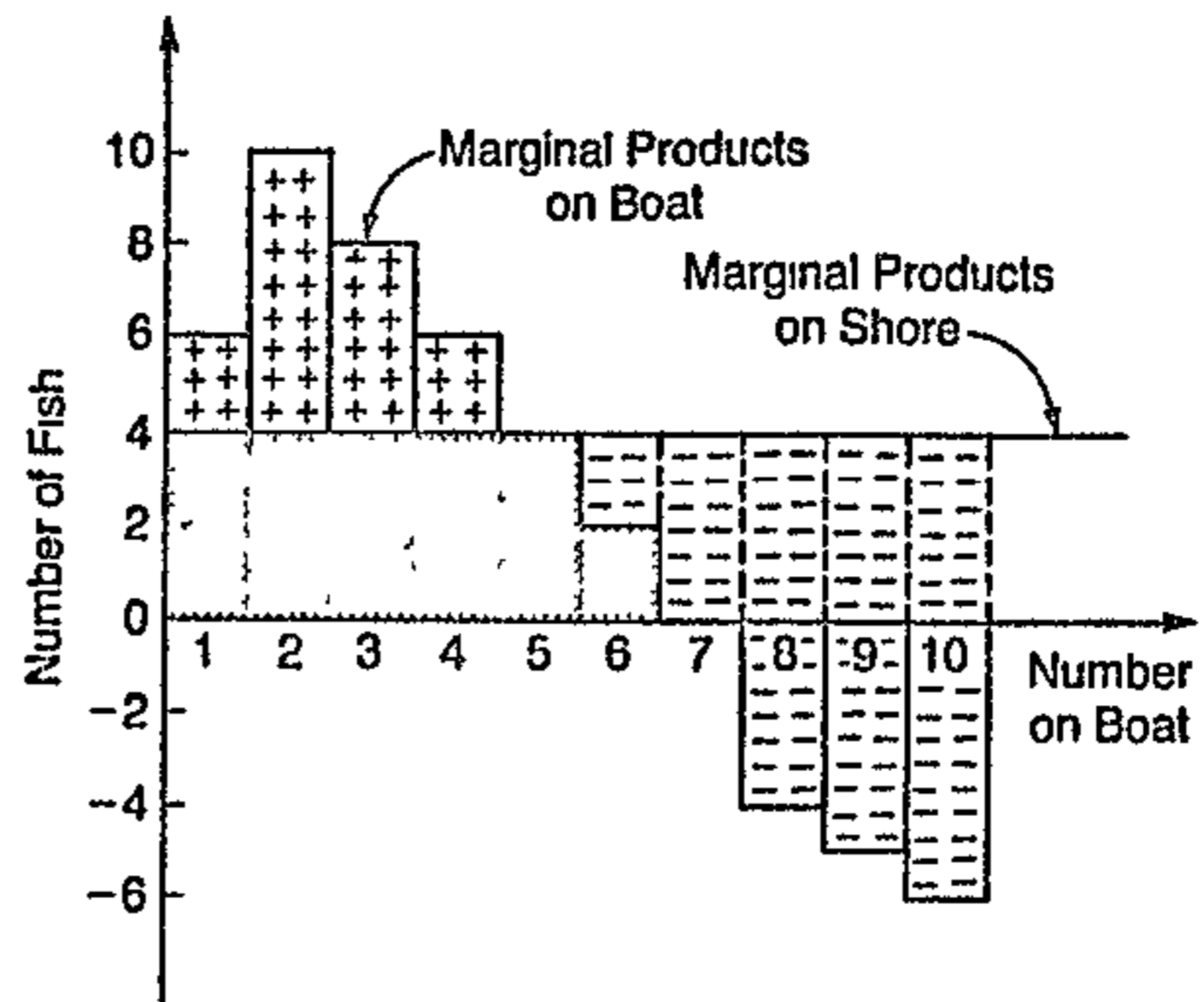


Figure 9-1. Marginal Products on Boat

The vertical bars represent the marginal product (in fish) on board the boat. The horizontal line at 4 fish is the marginal product (in units of fish) on the shore. The areas occupied by plus signs denote the gain by having fishermen on the boat, while the areas marked with minus signs are the losses of having too many people fish on the boat.

purchases, storage, keeping tax and accounting records; to persuade politicians on proposed legislation or regulation; and an incredible array of varied tasks that occupies a businessman's time.

To isolate essentials, assume that 1000 similar people in a community do nothing but fish from the shore, each always catching four fish daily no matter how many people fish. A boat is found; some can now fish out on the ocean. Everyone is interested only in how many fish are caught, fishing from shore or a boat is equally pleasant or arduous. Table 9-1 summarizes the details. The discoverer and sole user of the boat catches

MDM 1/5/89  
Soweto electricity  
work gathers pace

By SIMON WILLSON  
Industrial Reporter

THE R153-million programme to electrify Soweto will gain further impetus this month with the passing of the closing dates for two more tenders for projects in the programme.

The first tender, for 101 panels of 11 KV switchgear, will close on May 14. Tender documents will be issued today for another contract to supply 132

KV switchgear, 132 KV substation buildings, earthworks for the substation sites, civil work on substation structures, KW/hour meters and 11 KV switchgear, with a May 30 deadline.

Officials of the Ecoplan consortium, the umbrella organisation designing and supervising the programme, say the work is on schedule and power lines and substations should be complete by the end of 1981.

The Ecoplan consortium comprises four companies: G H Marais & Partners Incorporated, which is handling the electrical engineering; Walter Roux & Partners and De Leuw Cather & Associates Incorporated, which are doing the civil engineering; and Abramowitz Sachs, Moss, Sack, Feldman & Associates Incorporated, the town planners and architects.

A spokesman for Ecoplan says the consortium is, where possible, exceeding by a big margin the minimum statutory tendering time of 14 days, and in the case of the tenders issued today is allowing potential contractors a full month.

He said contractors had not raised queries about the required completion dates, most of them set for the end of next year. He said if any contractor did anticipate delays, the extra time would be incorporated into the contracts.

'Another method we propose to use to keep the programme as speedy as possible is to share contracts among the lowest bidders if one contractor cannot meet the required deadline alone.'

Contractors had encountered no problems with the tenders allocated in the programme since last year, he said.

The cost of the cable-laying and substation construction is estimated at between R20 million and R30 million.

Contractors are expanding the capacity of the existing power supply system, which frequently suffers from overloading.

The capacity expansion is designed initially to supply 20 000 homes with electricity at a cost of R2 500 000.

The electrification programme is part of a larger R605 million master plan intended to give Soweto new housing, recreational and business areas.

~~Soweto~~  
8/5/88  
job for  
GEC SA,  
Siemens

TWO OF South Africa's biggest electrical groups, GEC South Africa and Siemens, have received letters of appointment from the Deep Meadow, Dobsonville and City of Soweto community councils for the R100-million greater Soweto electrification project

The announcement follows the statement in Parliament by the Minister of Cooperation and Development Dr Koornhof that his department would go ahead with the R153 million electrification programme

The contract will be handled by TFSACON a consortium formed on a 50/50 basis by GEC Power Distribution a GEC SA company and Siemens

A spokesman for TFSACON (Township Electrification South Africa Consortium) said work would start immediately. The contract called for the supply and installation of the 11 000-volt and low voltage networks for Deep Meadow, Dobsonville and the City of Soweto

Job opportunities for several thousand black workers would be created and on-the-job training would be undertaken. Local content of the products and services to be supplied would be close to 100%. Sub-contractors would be widely used especially for installation work

The large installation portion of the contract would be carried out by a sub-consortium led by Industrial Electrical Company (Pty)

One of the first tasks for the project coordinators would be to make final a project timetable in collaboration with the consulting engineers G H Marais & Partners Incorporated acting for the councils

Both partners in the consortium had executed projects in Soweto. GEC Power Distribution supplied about 50 mini substations and Siemens installed five containerised telephone exchanges

GEC Power Distribution through its Power Projects Division, and Siemens were the only companies to tender on all the inquiries issued for the project

With the completion of the contract many of the blacks trained while in the employ of the consortium will become available for employment by the electricity undertakings in the area to create the infrastructure that will be necessary for the maintenance of the electrical networks

6



# ELECTRICITY SUPPLY COMMISSION



(Escom)

## Issue of R500 000 000 Local Registered Stock – Loans Nos. 146, 147, 148 and 149

R50 000 000 of the R500 000 000 issue has been underwritten by a consortium of financial institutions managed by Volkskas Merchant Bank Limited and Union Acceptances Limited. Applications from the public are invited for the following loans in units of R100 or multiples thereof.

### SUMMARY OF TERMS

**Amount** R500 000 000 (Of which R450 000 000 will be obtained by Escom leaving a balance of R50 000 000 to be underwritten and subscribed for by the public)

Loan No	146	147	148	149
Issue Price	R100 0%	R100 0%	R95,30%	R100 0%
Interest Rate (per annum)	8,10%	9,05%	9,05%	9,55%
Yield to Redemption on	1/6/1987	1/6/1992	1/6/2005	1/6/2005
at issue price	8,10%	9,05%	9,55%	9,55%
*cum commission of 0,125%	8,12%	9,07%	9,56%	9,56%
*cum brokerage of 0,25%	8,15%	9,08%	9,58%	9,58%
*cum commission and brokerage of 0,375%	8,17%	9,10%	9,59%	9,59%
Period	7 years	12 years	25 years	25 years

**Interest Payable** Half yearly in arrear on 1 June and 1 December with the first payment on 1 December 1980

**Dates of Issue** Application lists will open at 09h00 on Tuesday, 13 May 1980 and will close at 12h00 on Monday, 19 May 1980 or earlier at the discretion of Escom in the event of a full subscription before that date.

**Payment** Not less than R10 per cent of the nominal value on application and the balance, if any, by not later than 12h00 on Friday, 15 August 1980.

\*Commission of 0,125% will be paid on all allotments in respect of each SINGLE application form received for R100 000, or more. Brokerage of 0,25% will be paid on applications bearing the stamp of certain approved organisations.

### Copies of the prospectus and application form may be obtained from

**Volkskas Merchant Bank Limited**, at the following address  
40th Floor, Carlton Centre, Commissioner Street, Johannesburg, 2001  
**Volkskas Limited** at the following addresses:  
136 Adderley Street, Cape Town, 8001  
23 Gardiner Street, Durban, 4001  
230 Van der Walt Street, Freetown, 0002

or

**Union Acceptances Limited**, at the following addresses:  
43rd Floor, Carlton Centre, Commissioner Street, Johannesburg  
3rd Floor, Nedbank Centre, Durban Club Place, Durban, 4001  
Mezzanine Floor, Nedbank Centre, 88/90 Main Street, Port Elizabeth, 6001

or

**Electricity Supply Commission**, Megawatt Park, Maxwell Drive, Sunninghill Extension 3, Sandton, 2199

Managing underwriters and merchant banks to the issue



**Volkskas Merchant Bank Limited**  
Registered Merchant Bank

Johannesburg

12 May 1980



**Union Acceptances Limited**  
(Registered Merchant Bank)  
A member of the Nedbank Group

DIMENSIONS 641R

FH  
16/5/80  
185  
258

ALTECH FM 30/5/80 <sup>185</sup>

# Growth unlimited

**Activities** Manufactures and supplies telecommunications equipment electronic components electronic and electrical equipment and systems for professional users

**Chairman** L. Wildman chief executive W.P. Venter

**Capital structure** 8.7m ordinaries of R1 34m 11% cum red prcis of R1 Market capitalisation R113.3m

**Financial** Year to February 29 1980 Borrowings long- and medium-term R2.3m Net cash R12.2m Debt equity ratio 9.5% Current ratio 1.5 Net cash flow R6.8m Capital commitments R637 000

**Share market** Price 1 300c (1979-80 high 1 375c low 540c trading volume last quarter 30 000 shares) Yields 7.7% on earnings 3.1% on dividend Cover 2.5 PE ratio 13.1

	'77	'78	79	80
Return on cap %	30.9	34.7	41.7	45.6
Turnover (Rm)	31	53.8	58.0	88.7
Pre-tax profit (Rm)	0.6	7.4	10.6	15.2
Gross margin %	21.3	14.5	18.7	17.3
Earnings (c)	20.9	50.8	68.7	99.6
Dividends (c)	8	20	28	40
Net asset value (c)	114	192	224	286

"It is my conviction that Altech today faces an era of opportunity unmatched in its history. I refer to the introduction of electronic digital telephone exchange switching of fibre optics for communication solid state controllers advancement in electronic component manufacture and the swing to power electronics as an alternative source of energy. I believe that no other company is better positioned to meet the challenges that lie ahead.

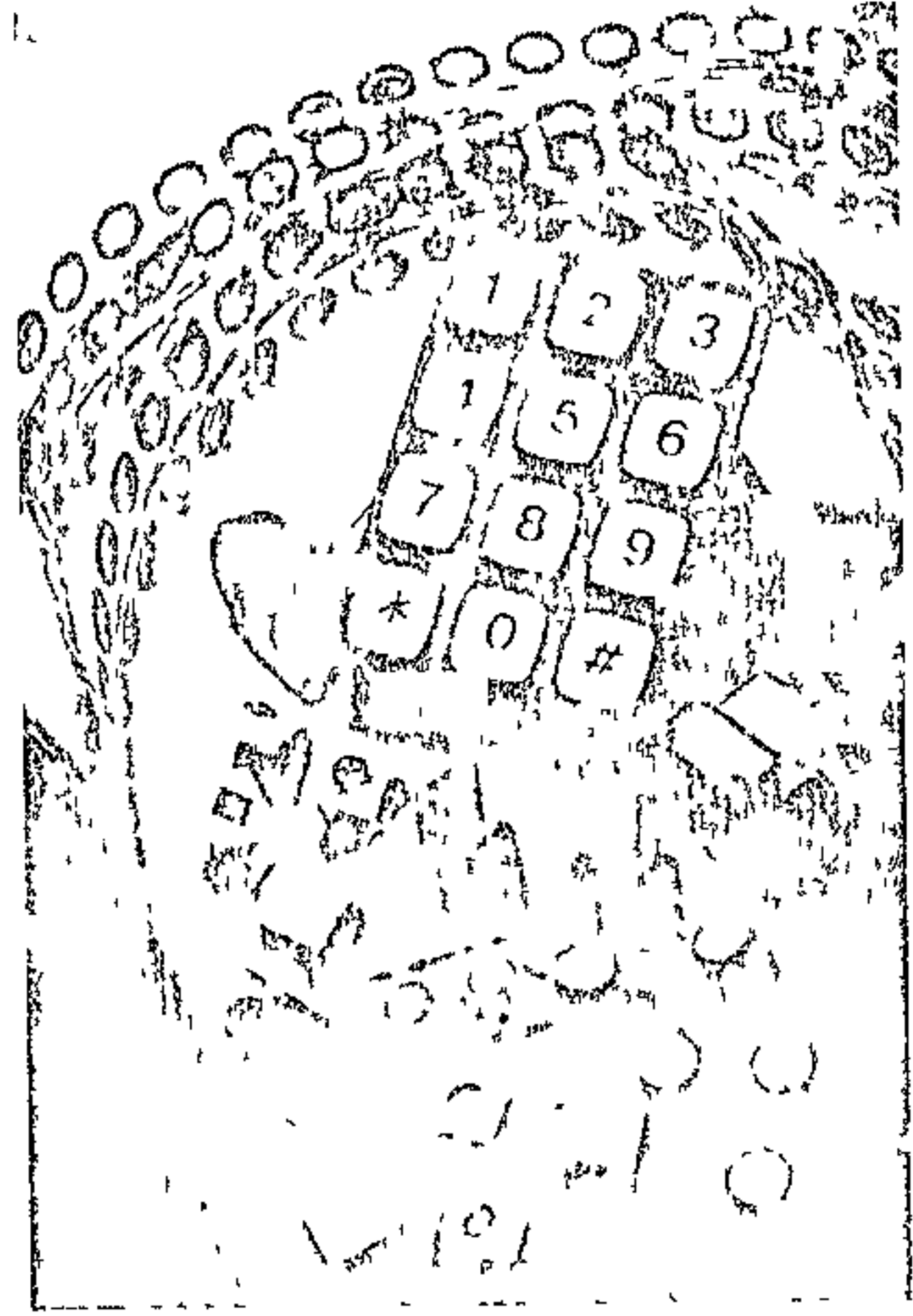
This statement from chief executive Bill Venter is typical of the confidence with which his group views the new decade. It is an attitude enthusiastically endorsed by the market which has long since accorded the share a glum stock rating with a dividend yield substantially below industrial sector averages.

And not without reason. In the four years since the rescue of the Uniwinkels shell earnings have leapt from under 5c to almost 100c while the total asset base of the group has increased from R1.6m to almost R6.6m. It is noteworthy that although during the last two years there have been no major takeovers (last year's purchase of Messina Electronics came too late to have any material effect on results) growth has nevertheless averaged about 40%.

This is well ahead of the growth rate of the electronics industry (estimated to have been about 25% last year) which in itself is one of the fastest expanding

sectors of the SA economy. The picture which emerges therefore is that Altech is getting a progressively bigger slice of a progressively bigger cake.

At year's end the group order book stood at R89m a 41% increase on the previous year and an indication of the potential for improved activity. Apart from normal growth profit should be enhanced by the marketing of locally developed products in which the group is also hoping to build up an export trade.



**Altech assembling a solid performance**

Looking further ahead the group will take a major step forward when Telecommunication Technologies (Teltech) jointly formed with the CGE of France starts delivering its share of the GPO's electronic telephone exchange switching equipment order. The initial contribution to group profits from this company is expected in the 1980 financial year.

The considerable growth potential of Altech is of course the reason why the share trade at such a low yield (3.1% at the current 1 300c). But it is difficult to argue that the share is over-priced. Even if the group achieves an average annual growth rate of only 35% over the next five years compared with the 40% of the past two the total earnings during this period would fully cover the cost of a purchase now.

There are however two negative aspects the share is unmarketable and it still pays only annual dividends which, at the present rate of inflation, means that the distribution is worth about 7% less to shareholders than would be the case if the same amount was paid in two equal instalments.

The marketability aspect has been overcome to some extent since the start of the current year by the establishment of Allied Electronics (Altron) as Altech's immediate holding company. Formed out of the Bitcon shell this company has 11.1m shares in issue, of which about 1.9m are in public hands compared with around 1.6m in the case of Altech.

Altron dividends will be proportionate to the income it receives from its 52% holding in Altech and would have amounted to 20c last year - instead of the 4c actually paid - if the restructuring had been effective for the full period. At the theoretical yield of 3.6% at 750c it is thus a relatively cheap entry into Altech.

But a share split or cap issue in Altech itself would still be desirable.

by Ian Thompson

Takeover hungry

185

**Activities** Manufacture and installation of an extensive range of products which include power transformers, tap-out and control cable, power in various industrial and domestic applications.

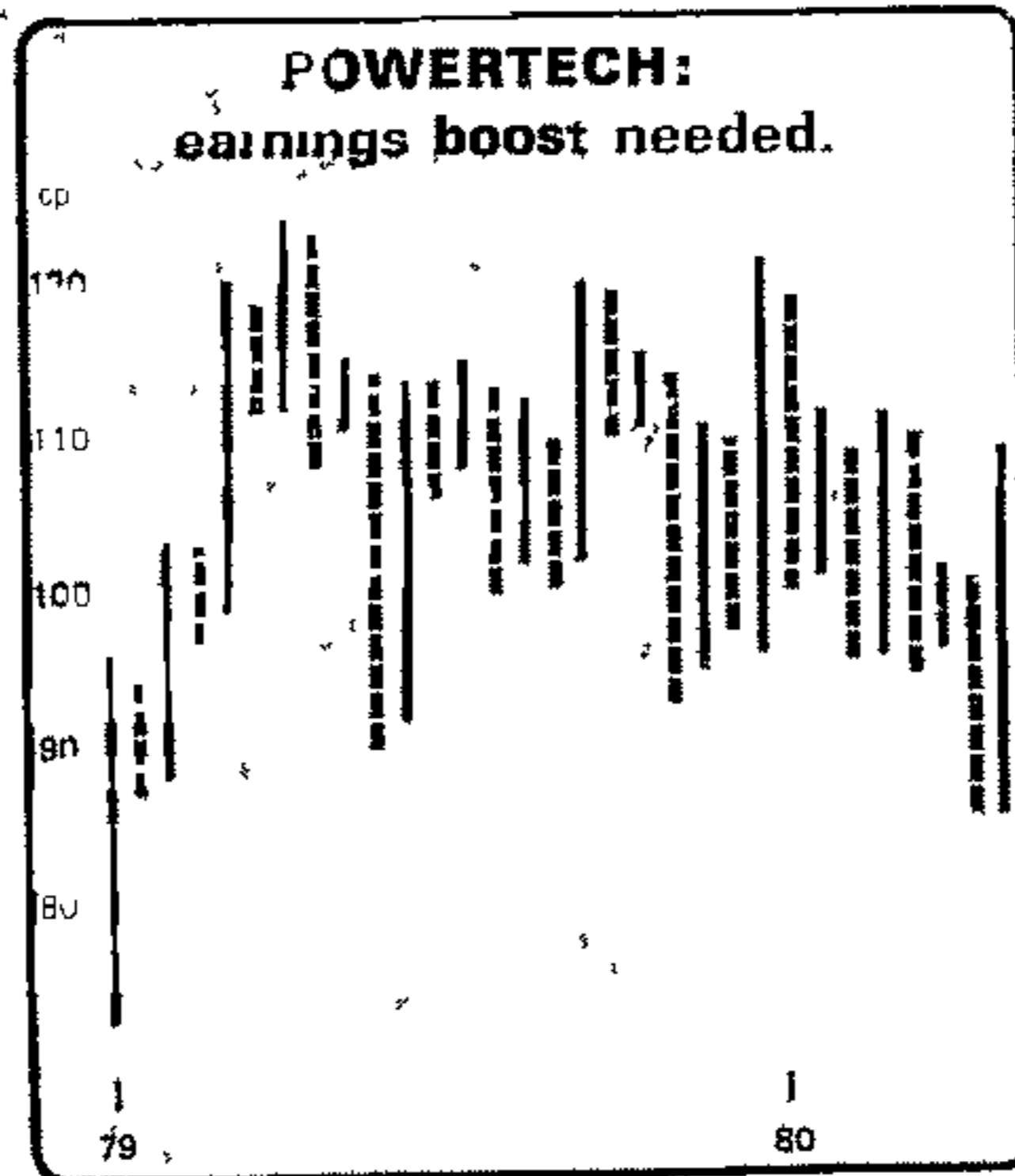
**Capital structure** 21501 of limited market capitalisation R220m

**Financial** Year to February 29 1980 Eps 5.2c dividend 2c net asset value 1.5c. Borrowing net short-term R62000 Debt equity ratio 7.1 Current ratio 1.1 Net cash flow R540000 Capital commitments R10000

**Share market** Price 101c (1979 80 high 125 low 45c trading volume last quarter 994000 shares) Yields 2.1% on company 2.0% on dividend Cover 2.6 P/E ratio 19.4

If Powertech is to follow in its parent's footsteps the next major development must be an acquisition comparable with Altech's takeover of SPC. Although the first full year of operation yielded results ahead of expectation earnings of 5.2c and a total asset base of under R8m at year's end underline the smallness of the operation at this time and the limited base from which to grow.

It is nevertheless noteworthy that



Powertech profits attributable to Altech represented nearly 10% of that group's net earnings.

The annual report notes that during the course of last year a number of potential acquisitions were investigated but most failed to meet group requirements in terms of market position and strength of management.

The only takeover of any consequence was Circuitair, which turned in a loss after being faced with a number of problems not apparent at the time of the deal. However, these have now apparently been overcome and the company is expected to make its maiden contribution to group profits in the current year.

Despite the Circuitair loss, the group achieved a fairly respectable rate of profitability last year, with gross profits, before tax and interest, amounting to 27.5% of total capital employed. The net return on equity funds was 29%. Management expects these returns to improve materially with the losses in Circuitair eliminated, although by the nature of the business, profitability is unlikely to match the 46% gross return of Altech.

But if, for example, the gross return was to improve to 35%, there would be an increase of about 30% in pre-tax profits before taking into account any normal growth of operations. The gain in earnings would depend on the tax rate, which was a very low 9.7% due to investment allowances and the use of previously-incurred assessed losses. Assessed losses amounting to R958 000 remained at the year-end for set-off against future profits.

Like Altech, Powertech is financially sound with no borrowings of any consequence.

At 112c the share already discounts a considerable measure of growth, as is evidenced by the low yields of 5.1% on earnings and 2.0 on dividends. These would be justified if the development of the company matches that of Altech in its initial years, but the more conservative investor would probably prefer to receive his benefits through a stake in the more mature parent.

Brian Thompson

most costly technology to reduce its consumption, but also to consider the most unfavourable or even impractical terrain for the erection of power stations

Since 1969, Escom has managed to reduce by around 20% its consumption of water per kilowatt-hour supplied, this achievement has cost the consumers of electricity millions of rand. But even a gigantic percentage saving in water consumption by Escom can have only a negligible influence on total national consumption

A second example concerns the issue of the environment. Coal-fired power stations, conceded Smith, are inherently polluters. Modern technology can eliminate this problem almost completely, but, again, at a high cost. The goal ought to be to ensure that the level of pollution is not so high that it can damage man and his environment. But all too often, the debate is not about the achievement of realistic goals, but over idealistically conceived measures which can have no significant practical effect.

Unfortunately, this process of debate absorbs valuable time and resources, while costs rise. And the difference between necessary and idealistic environmental requirements can be measured literally in millions of rand.

SA should take careful note of Smith's comments, especially in the context of recent developments in the US, where extravagant and emotive demands by the environmental lobby have made the solution of the energy crisis infinitely more complex and expensive.

Financial Mail May 30 1980

## ELECTRICITY SUPPLY FM 30/5/80 Short circuit (185)

SA runs the risk of creating an artificial crisis in electricity supplies through muddled priorities, said Escom chairman Jan Smith in a recent address to the Engineers' Association of SA.

Smith gave two examples of such confused priorities. Firstly, he noted that unreasonable demands are placed upon Escom to save water, a resource in short supply in SA. But Escom uses less than 2% of national water consumption, while agriculture uses 74% (The balance of 24% is used by the rest of industry and domestically.)

If SA ordered its priorities correctly, argued Smith, greatest attention would be directed to the more effective use of water by agriculture. Yet it is Escom which is required not only to employ the

UET

# 1 000 down tools over pay dispute

MORE than 1 000 municipal workers in Johannesburg and Roodepoort went on strike yesterday after pay disputes.

The Roodepoort workers returned to work after an assurance that increases of between 15 and 20 per cent were effective as from today.

But in Johannesburg the workers were ordered off the premises of the Orlando Power Station, where they staged their strike. About 500 of the 650 that went on strike were yesterday reportedly stranded with accommodation as they are migrant workers and occupy hostels while in the employ of the Johannesburg Electricity Department.

Negotiations between the Chief City Electrical Engineer, Mr W Barnard, and the strikers, drew a blank.

Addressing the strikers, Mr Barnard said: "I am not prepared to talk to you while you are not

By MAKGARE SEKOTO

working I want you to be back at work within 30 minutes or else I will be left with no option but to repatriate all migrant workers and dismiss the rest."

To this the strikers answered with shouts of "do as you please"

A spokesman of the workers' Action Committee told POST that they decided to down tools after management had refused to talk to a workers' delegation over pay increase.

According to a spokesman, the workers are demanding a uniform R58 weekly salary for all their unskilled labourers — a R25 increase from the current average salary of R33.

Mr Barnard, who had earlier said that he was not prepared to speak to a delegation of the strikers, later asked Wraab police to invite the delegation to an office where talks were held for about an hour.

The Press was barred from the meeting, but both Mr Barnard and the delegation announced a deadlock after their talks

The strikers had also demanded that the wage gap be closed with immediate effect. Black electrical wiremen, with double qualifications earn R564 per month. Their white counter-parts' salary scale is unknown to the strikers.

The peaceful strike nearly went wild as tempers went high after word had gone around that Mr G S Webb, a white engineer working in Soweto, had said the strikers were a 'bunch of idiots'.

Mr Webb is also alleged to have called Mr Martin Sire, a member of the delegation, a troublemaker.

Mr Barnard said in an interview that Johannesburg and suburbs, including Soweto, would not be blackened out despite the strike.

"We can generate power from Escom near Pretoria, though at very high costs," he said.

And yesterday the Black Municipal Workers' Union said that other City Council departments had indicated their intentions in joining the strike.



# City sacks 1350 labour strike in 10 minutes

*SW 25/1/80*  
*[Handwritten signatures and initials]*  
 185-

About 1350 Johannesburg electricity workers have been fired and another 300 transport labourers went on strike today as municipal labour unrest mounted.

In developments today:

● About 800 electricity workers went on strike for more money and in support of the 550 Orlando Power Station workers who were fired for striking yesterday. The 800 were fired early this afternoon.

● Another 300 transport labourers at the Transport Department's Fordsbury workshop went on strike for higher minimum wages. Workers said they had refused to replace workers at the understaffed Orlando Power Station.

● A union official warned that 9000 workers, including men in key departments, could strike on Monday.

The strike cut output by half at the Orlando Power Station, but Johannesburg electricity supplies were not affected. The effects of today's further strikes are not yet clear.

Shortly after lunch today, the 800 electricity workers who were sitting in the Van Beek Compound in Doornfontein as police stood by, were fired.

Compound manager Mr P J Roberts told the group over a loudhailer that the council would

## Staff

## Reporters

not put up with their actions.

The crowd shouted back at him. He told them they were all fired and they dispersed from the compound.

Early this afternoon transport workers at Fordsbury went on strike demanding a minimum wage of R58 a week. They said they were earning A29 a week.

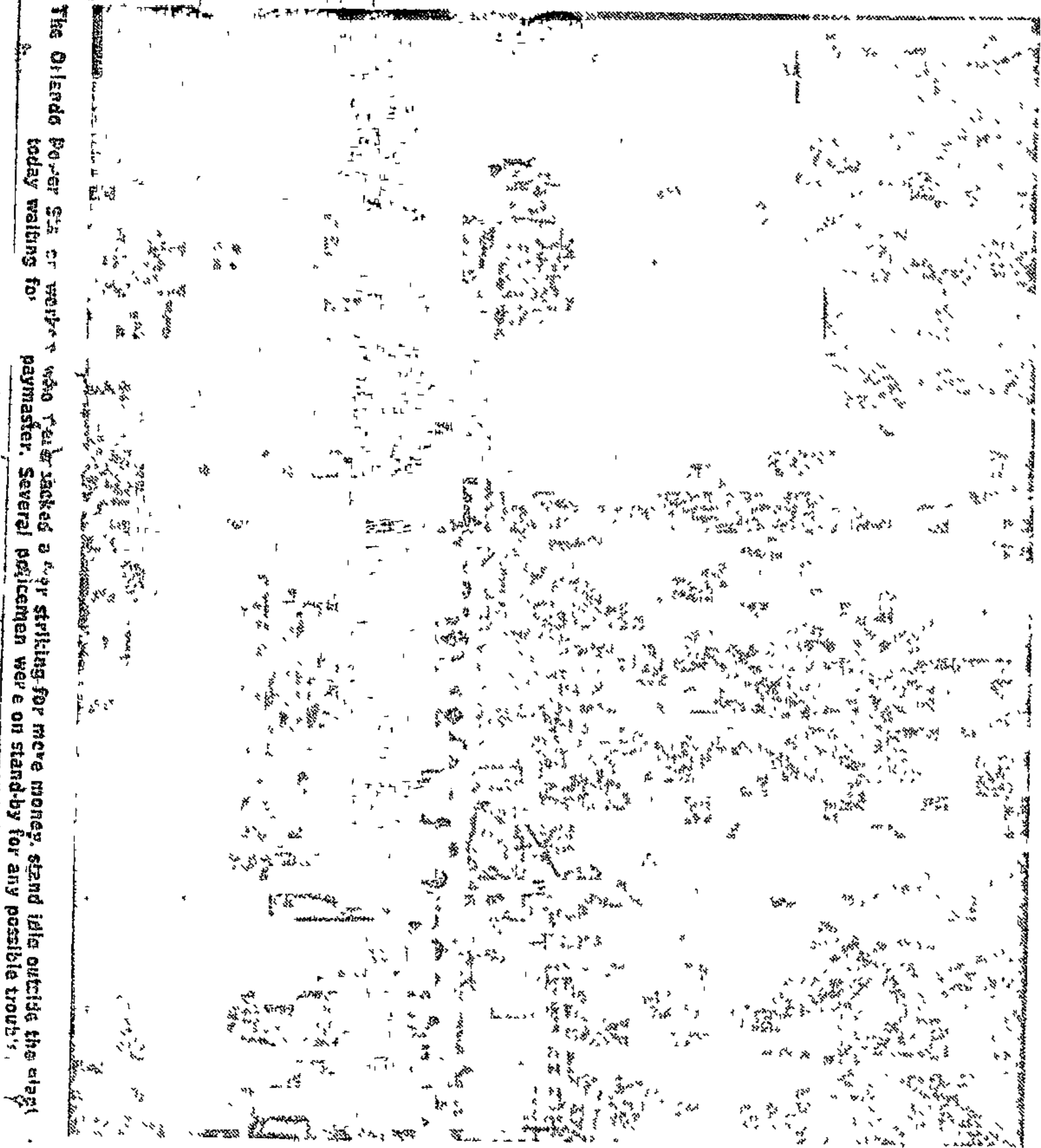
Union leaders said the situation appeared to be worsening. They warned the strike could spread to municipal bus drivers and workers in other essential services departments.

The union claims to have members in the traffic, transport, electrical, fire and ambulance departments.

At Orlando Power Station the 550 dismissed workers were still waiting outside the gates for the arrival of the paymaster.

A number of indications of mounting labour unrest — even in placid areas —

— Opposition city councillors in Johannesburg have slammed the council's



The Orlando Power Sta. workers today waiting for paymaster. Several policemen were on stand-by for any possible trouble.

185

# The Star Fired with enthusiasm

IN legal terms it was permissible to fire striking black workers during the bad old '70s. But it was never desirable then and it is a senseless reflex action that could destroy industrial relationships in the sensitive '80s. There is a need for skilled negotiators to handle strikes with sophistication and on a scientific basis.

What is happening is that black workers with a grievance, are denied the legal means of conciliation or proper collective bargaining. Frustrated, they take what seems to be the only course left open to them: withholding their labour. Employers, usually on the advice of the Department of Labour, then dismiss them.

Dismissals may be legal, but are they just or wise? They suggest a lack of understanding and an absence of sensitivity. The snowball effect of strikes and dismissals has already begun. It is fallacious to believe that firing easily replaced unskilled labourers solves the vexing problem: sooner rather than later employers are going to have to deal with more skilled workers—or at least more sophisticated ones—and then hasty employers may find they are cutting off their own noses.

Employers have a lot to learn—and they had better start learning it fast. Employers must find expert negotiators; specialists who can communicate with angry black crowds. The negotiators need to know all they can about labour relations because the current restlessness is going to last a long time.

## Exposed

THE Saturday comic-strip hero Garth is a high-minded fellow. To demonstrate just how high, the artist had him tempted—and refusing—the overtures of a well-endowed lady known as Queen Patroklea. But high indignation was what the bare sight of those temptations elicited from a few readers.

The uncovered female nipple is a matter of unusual contention in South Africa. Most societies are now accustomed to topless beaches, topless cabaret, topless photographs in magazines and even in daily newspapers. Our mores seem to favour nipple caps and little black strips pasted over pictures—which show the rest of the breast, all right, and somehow make the whole thing a trifle more titillating. There is also the curious apartheid double standard which makes nude black breasts more acceptable than white.

Our indignant readers have a point, of course. "Garth" is a comic, presumably read by children, and his temptations need to be carefully watched. Yet as other readers respond, it was only a drawing, and there are many worse things to which today's young can be—and are—exposed.

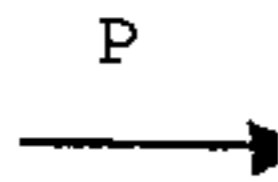
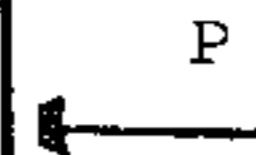
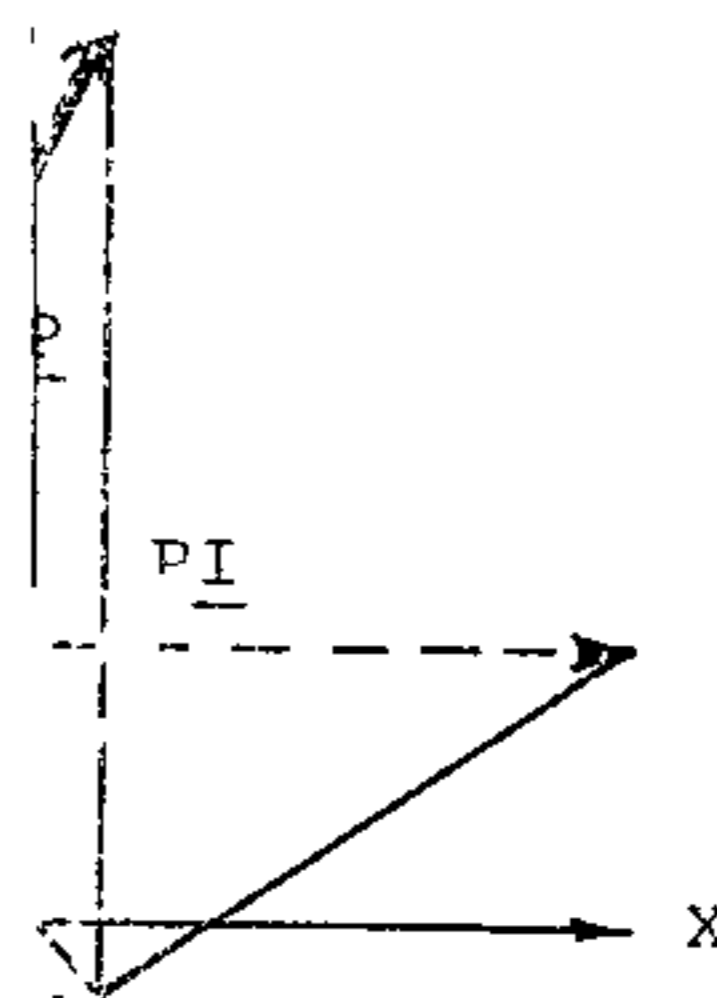


Figure 2



loading; b) axial loading.



Z

Figure 2.4



UNIVERSITY EXAMINATIONS

1350

Strikers

fired

on Rand

185

All answer books must be

Number of books handed

Number of this book

Surname

First Name(s)

Date

Degree/Diploma/Certificate you are registered (e.g.)

Subject (to be copied from)

Paper No. (to be copied from)

JOHANNESBURG. — A total of 1350 Johannesburg municipal electricity workers have been dismissed and about 300 transport labourers went on strike as municipal labour unrest mounted here yesterday.

In developments yesterday ● About 800 electricity workers went on strike for more money and in support of 550 Orlando power station workers who were dismissed for striking on Thursday. The 800 were fired yesterday afternoon.

● About 300 transport labourers at the municipal Transport Department's Fordsburg branch struck for higher minimum wages.

● A union official warned that 9000 workers, including men in key departments of the city council, might strike on Monday.

The strike cut output by half at the Orlando power station, but Johannesburg electricity supplies were not affected. The effects of yesterday's further strikes are not yet clear.

After lunch yesterday, the 800 electricity workers who were sitting in the Van Bék compound in Doornfontein were dismissed. The compound manager Mr P J Roberts, told the crowd over a loud-hailer that the council would not put up with their actions.

The crowd shouted back, he told them they were fired and they dispersed. Earlier, the workers had declined to appoint representatives to discuss their grievances. They also rejected efforts by an official of the Department of Manpower Utilization to intervene on their behalf, and insisted that the minimum wage be raised.

Most of the Orlando workers paid off were promised repatriation to their homelands, but were refused train tickets on the grounds that this was not in accordance with council policy.

Yesterday afternoon transport workers at Fordsburg went on strike, demanding a minimum wage of R58 a week. They said they were earning R29 a week.

● The leader of the black Municipality Workers' Union, Mr Joseph Mavi, said bus drivers, clerks, sanitation and maintenance men and technicians would join the strike on Monday, as would electricity workers at the Kelvin power station at Isando. Mr Mavi said he had ordered City Council health workers and ambulance drivers who had wanted to join the strike, to continue with their work as usual so that the sick, injured and disabled would not be affected.

— Own Correspondent, Sapa

NOTE CAREFULLY

- 1 Enter at the top of the block of the question you answer.
2 Blue or black ink for answers. The words 'Red' or 'Underlining' which pencil marks.
3 Names must be written in block letters (e.g. graph) in the examination room.
4 Do not write anything dishonest.

WARNING

- 1 No books, notes, pieces of paper or other material may be brought into the examination room unless candidates are so instructed.
2 Candidates are not to communicate with other candidates or with any person except the invigilator.
3 No part of an answer book is to be torn out.
4 All answer books must be handed to the commissioner or to an invigilator before leaving the examination.

liable to disqualification and to possible exclusion from the University

Made in South Africa

PSL UPD 100 000 1978 PD UCT AM7a

Vervaardig in Suid Afrika



Star 26/7/80

185

# Fear of Jo'burg municipal strike spreading

Staff Reporters

Fears have been expressed that more than 9 000 municipal workers could go on strike on Monday in support of the 1 700 striking Johannesburg City Council workers.

The strikers want the minimum wage of R33 a week for unskilled labourers increased to R58 per week.

It is believed that several municipal departments have drawn up contingency plans to cope with the threatened strike which could affect services ranging from refuse collection to bus services and general maintenance.

The 550 dismissed Orlando Power Station workers spent last night in the open and will sleep in the veld tomorrow unless they change their decision to strike and return to work.

Mr Joseph Mavi president of the Black Municipality Workers' Union, said today that in view of the council's attitude, workers in many departments might strike on Monday in sympathy.

"If they don't meet the workers' demands on Monday many departments will follow suit. But we don't want ambulance, fire and other essential services to suffer," he said.

Mr Wessel Barnard, City Electrical Engineer, said the strikes had halted electrification in Soweto for the foreseeable future. Orlando workers fired on Thursday included about 40 electricians who worked in Soweto.

Workers had been called in from other areas to help white workers at Orlando. Many were working double shifts.

Worker demands were rejected by the Town Clerk, Mr A P Burger, and at a special meeting yesterday, the management committee endorsed his decision.

PFP councillors say the sackings could have "serious repercussions," but management committee chairman, Mr J F Oberholzer MPC, thinks the strike will not spread.

"They are confined to certain groups of people. We are taking certain steps to ensure that they do not spread." He refused to elaborate.

Instead of dismissing workers, the council should investigate the reasons for the strikes, say PFP councillors. They warned that if other municipal workers came out in sympathy there could be a labour crisis.

185

**SUNDAY**  
**POST**  
 Shocking action  
 by Council

**MORE** than 1 000 electrical workers were this week fired by the Johannesburg City Council when they went on strike for higher wages

Hundreds of other workers have threatened to join the strike in sympathy with the fired workers — and Johannesburg could literally come to a standstill if the threat materialises

The action by the Johannesburg City Council has done much to sour industrial relations. Of course, the reason for the council's action is not difficult to find. It is easy to go out to Venda or some other homeland and come back with truck loads of people who would be willing to work for the wages the fired workers have rejected as inadequate

This, coming from an "enlightened" council, leaves us wondering.

With unemployment running very high in Johannesburg itself, why is it difficult to find

labour in Soweto? Again, the reason is simple it is cheaper to get labour from outside because of the low wages being paid to the workers than it is to get workers from Soweto, who would want to be paid reasonable wages

At the same time, while denying job opportunity to people who are out of jobs at home, officialdom insists influx control is necessary. This is obviously only meant for occasions when it suits officialdom. In the present case, Johannesburg simply does not care for the people of this town. It is an economic issue, not a social or moral one

We believe the council should have listened to the workers' grievances. Then serious consideration should have been given to their demands for increased wages.

For, in the end, the council must accept that as long as they do not pay people enough, so long will they have industrial problems

distinguish  
 The se  
 per orally  
 purposes,  
 not neces  
 because of  
 other reaso  
 because o  
 actual rela  
 nected wit  
 other hand  
 producing  
 the carry in  
 facilitating  
 consider a  
 between tw  
 organization  
 the relation  
 The seco  
 MEMBERS  
 STUDYING  
 the individ  
 comparisons  
 with these  
 actions of m  
 zation as a w  
 members of  
 for measur  
 a whole For  
 say the econ  
 the organiza  
 tures to est  
 framework  
 The purp  
 actions, but  
 that they c  
 have been d  
 field of orga  
 research hav  
 til and ma  
 from the hel  
 In most inc  
 with the man  
 members of



185

THE Black Municipal Workers Union (BMWU) will tomorrow seek a court interdict restraining the Johannesburg City Council from ejecting over 600 dismissed labourers who live at the Orlando power station compound

And union leaders have warned that 9 000 black municipal workers, including bus drivers, could join the strike tomorrow. BMWU president Mr Joseph Mavi said there was a lot of "sympathy and solidarity" with the 1 630 striking workers from several Johannesburg municipal departments

Mr Mavi told SUNDAY POST that over 600 striking workers who lived in the Orlando power station compound still had money and other belongings in the rooms. Security officers refused to allow the workers into the compound and they had to sleep in the veld on Friday night

The labourers were now staying in the homes of friends, relatives and colleagues until they were paid off and could return home.

He said it was "disgusting" the way officials had settled new recruits in these rooms "What of the money and belongings of these workers got by?" he asked

He said his union's attorneys had been briefed to handle the matter

Mr Mavi said the city electrical engineer, Mr Wessel Barnard, should be removed from his position of dealing with the black staff as he had "no respect"

Shortly after the dispute, Mr Barnard said "I feel very upset because the black skilled staff was highly motivated and qualified" He said some had been with the council for more than 10 years

He said he did not sack the workers. He had explained to them that he would have to take their demands to the City Council's management committee for a decision. He said the workers could be reinstated

The strikers want a minimum wage of R33 per week for unskilled labourers increased to R58 per week

But their demands were rejected by the town clerk, Mr A P Burger. And at a special meeting on Friday, the management committee endorsed his decision.

Mr Burger said the 40 electricians who had joined the strike at Orlando power station on Thursday had "just been put on the white rate of pay" All workers had this month received an increase plus a 13th cheque.

"We could not therefore agree to their demands. In addition, we cannot differentiate between them and the other council workers," he said

The council also took the stand that the strikes were illegal in terms of the Industrial Conciliation Act.

Mr Mavi said the strikers could agree to being reinstated provided this was unconditional and their pay increase demands were met

b. Post 27  
Headmaster

# More join strike

Post 25/7/80

132  
287

185

**THE STRIKE** by Johannesburg municipality workers spread when refuse removal workers at the Selby depot refused to start work last night, demanding more pay

The men were due to start work at 6,30 pm but by 6,45 they were milling around, shouting angrily to a white man who tried to address them.

ant chief solid waste engineer at Selby, last night said the men had been told to go home for the evening.

"We do not want a confrontation and we have cancelled our operations for the night," he said

He said he believed about 120 workers were due to start work at 6,30 pm and another about 60 and 7,45 pm.

The strikers are demanding:

- A minimum pay of R58 a week,
- Recognition of their trade union; and
- Better working conditions.

The strikers say they cannot live on their present wage, recently raised to a minimum of R33 a week for adults and about R30 for juveniles

Fears now are that the strike will spread to other municipal workers like bus drivers, clerks, etc

About 400 men listened as the official told them they would not be able to get more money by striking. He told them there were channels they could use to ask for more money

The men shouted him down. They also threatened to assault journalists who went to the cleansing depot office

The first municipality workers to go on strike last week were from the Orlando Power Station. By the end of last week 1 630 workers from various departments were on strike.

The newly formed Black Municipal Workers Union has responded by warning that 9 000 black municipality workers will join the strike

Mr G Pirie, the assist-

productive technological resources, or capital resources, at the available resources level) Together cultural production, thereby - if exports are not the general nutrition levels (Physical health & living level) direct consumption consumption not allocated to specific activities, they can be used for consumption. (Security component of level of living and technical resources (energy and

... of the investment in the development

The basic level of that of the state of welfare of the group (cf [9]) this is a state of the group at a particular instant of time, and is the quantity of ultimately concerned with. It can be considered as consisting of two major components, one concerned with material well-being and one with socio-cultural well-being. As mentioned above, it is very difficult to assess (it will be discussed further in Appendix A, where each level in turn will be considered in more detail)

It is easier to measure aspects of the first level of control, namely the level of control. (we use Drenowski's name for this level) This is concerned with the deployment of the available flow of resources and amenities which is possible. The maintenance and improvement of the state of the welfare. Thus one would find here, for example, the way available income is used in expenditure on food and medical services on rental payment or other payments to plant or shelter, and so on. However, the concept of resource-usage implied here is not a narrow financial one, it encompasses all resource usage leading to increased welfare, using the term 'resource' in its widest sense (cf [29]) to include, for example, clear air and quiet, unspoiled countryside, secrets and symphonies or feature whose use or development can be controlled to improve the group's welfare. Thus an art gallery is a resource which I use ('enjoy' or 'consume') if I visit the gallery, similarly in the case of a concert hall, where I may hear symphony concerts. A beach or wilderness park is a resource I am able to 'consume' if I am able to visit it. Thus such resources would be recorded for at this level. Again, both 'organisation' and 'knowledge' are resources which can be used or 'consumed'. Overall, this level is concerned with all ways the flow of available resources is used to increase the group's welfare, the main four categories of such resource use (discussed further in Appendix A) are resource use for physical welfare and safety, for security, for 'higher' needs and for organisational purposes. In quantifying this level, there are two basically

14 See, for example, pages 139 and 140 of [85], and article 100

# TWO Starboard in Strike Violence

WIN 29/11/70

143  
157

Morey's Correspondent

JOHANNESBURG—More than 4000 of the city's municipal workers are now on strike after a day of tension in which vehicles were stoned, two men clubbed, and men from Soweto's Orlando tower station marched to join fellow-strikers at the City Council compound.

## Riot

## Police at

## Isicourt

Protesters of the 1973 sections of the police riot squad in Isicourt moved into Isicourt to monitor a bus boycott that started there yesterday.

Casual, cash paying commuters boycotted the Khanyani bus service when their fares were increased and made the 14.5km journey to work from Wembezeli township in Isicourt on foot.

A senior police spokesman said some commuters intimidated season ticket holders. Five women were arrested.

A strong contingent of heavily-armed police kept a close watch on the compound and at one stage rained a crowd which spilled out of the gates into West Street.

Workers are expected to meet at the City compound again this morning.

They are told by a council official that there would be no further increases after one of between R11 and R15 at the beginning of the month. The minimum wage paid by the council is R53 a week.

A stoppage by about 2000 Cleansing Department workers meant that garbage collection from homes had come to a halt. Services to hospitals, restaurants and office blocks were being given priority but on a reduced basis.

Tousletiders had been asked not to dump refuse in the streets, but to take emergency refuse to municipal dumping sites.

In the Transport Department, nearly 100 drivers had been fired and would be paid off today unless they returned to work immediately. More than 500 maintenance men had also been fired.

Buses were staffed yesterday by white drivers and inspectors, and ran about an hour late as thousands of commuters lined up at bus stops.

Mr Les Petey, general manager of the department, said he hoped today to provide at least the same level of services as those of yesterday.



SOME of the strikers at Sandy compound yesterday

men promised to provide workers at the Van Beek compound in Doornfontein with armed escorts to prevent intimidation on the way to work.

The council said all 800 Van Beek workers were back at their jobs and that only about 300 of the 550 Orlando power station workers were still on strike. There is no danger to services to Johannesburg and Soweto, and the Kelvin power station's 200 workers have not joined the strike.

The day began when about 4000 workers met at the Selby compound. Police received reports of stonings outside the compound and cordoned off the surrounding streets. The man quickly went back into the compound.

Then a municipal bus inspector was dragged out of a bus and stabbed, and a municipal store clerk was stabbed in the leg and beaten outside the compound.

Police confirmed that the bus inspector Mr E Mithlelo was dragged out of a municipal bus after he took control of it when bus drivers refused to drive it.

### *Stabbed*

He was stabbed in the side and taken to hospital by ambulance.

In the other incident, a Traffic Department official was dragged out of a municipal van as he was driving it on to the premises. He was stabbed in the thigh and then severely beaten.

The Divisional Commissioner for the Witwatersrand Freeport Kruger said yesterday that police were listening a lot profile and did not want to get involved in the domestic discussions between employer and employee.

# Afrox to look at 185 big new projects

By DAVID CARTE  
Deputy Financial Editor

**AFROX**, the country's biggest supplier of gas and welding equipment, is to spend R50-million expanding its existing business and is investigating spending more millions in entirely new green-field industrial projects.

The new managing director of Afrox, Mr Peter Joubert, who has just returned from a two year stint as chief executive, gases, of Afrox's parent, British Oxygen, in London, will not say what the new project will be.

"We have only a vague idea at this stage and I cannot even say whether it will be in engineering. But we have a large unused debt capacity that I think should be put to better use.

"We are not interested in buying existing companies because in the present liquid climate, they are too expensive. And the boom is tending to disguise weaknesses in existing companies. Our policy is not to buy businesses in a boom.

"I guess you could say we have bought badly in the past and now we're wary."

The new projects are just some of several goals Mr Joubert has set for Afrox on taking over the helm.

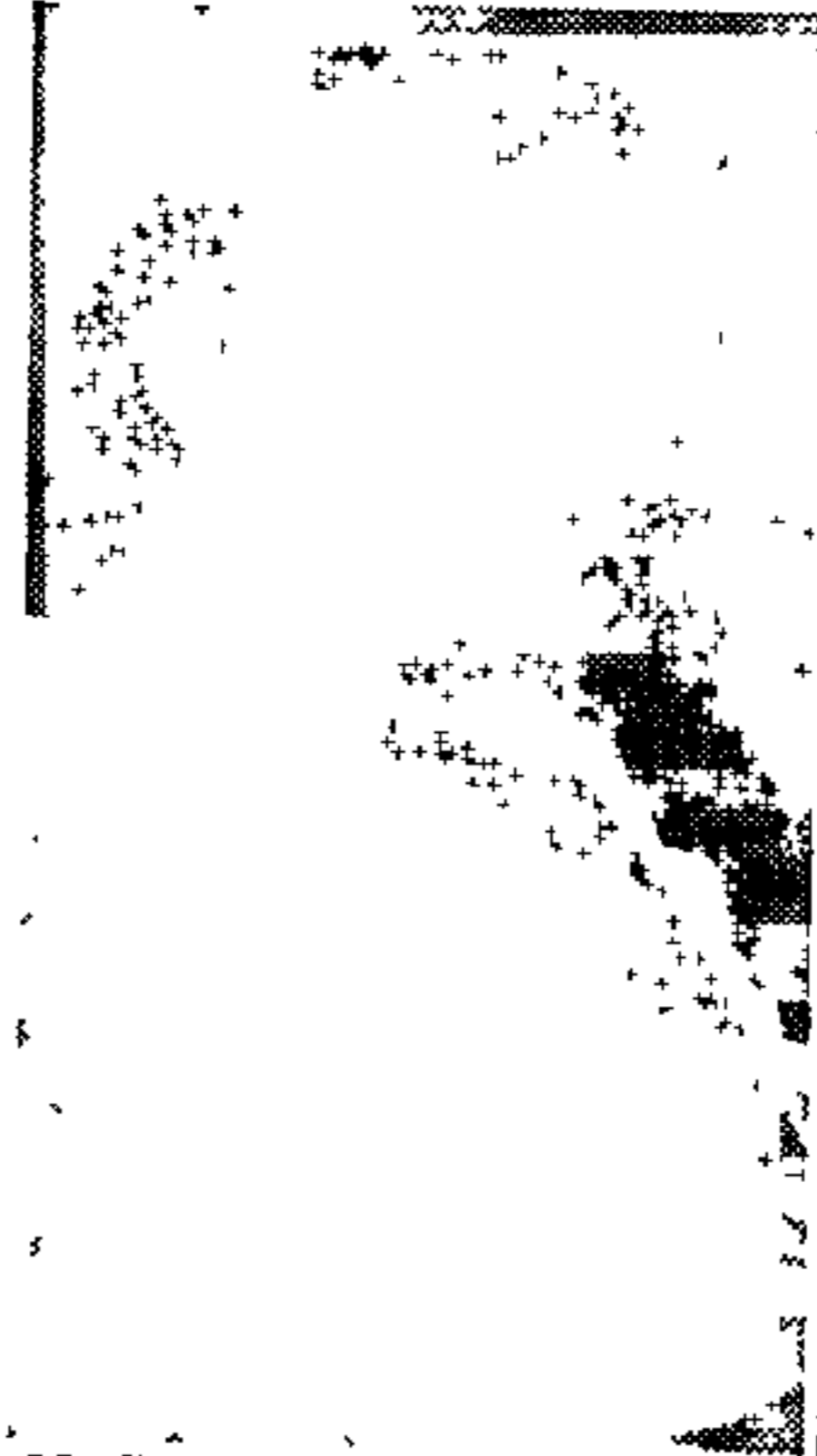
Other priorities are returning Dowson & Dobson, the engineering and mining supply company, to more acceptable profitability and the complete integration of the gas and welding and the engineering divisions.

These divisions are now run entirely separately, each with its own personnel, accounts and other sections. They will be integrated with, he hopes, big savings.

Dowson & Dobson has been a disappointing performer in the current mining boom and Mr Joubert intends "devoting a lot of time to this operation."

It is the only one he does not know well. He was head of the gas and welding divisions for nine years before he left for the UK.

"I have been back in South Africa only a week, so I don't really know what's wrong there. But I have a feeling they have overcapacity and too wide a range of products. A lot of



Mr Peter Joubert, Afrox's new MD, has just returned from a two-year stint at Afrox's parent, British Oxygen, in the UK.

management effort seems to be going into the wrong areas."

Asked if Afrox would consider selling Dowson & Dobson, he said "only if we feel we cannot run it effectively ourselves. But I'm sure we can."

Mr Joubert says people at Afrox are not working as hard in the boom as they were in the lean times two years ago.

This "relaxation of tension" was partly the result of easier trading conditions and partly because new products and processes started then were now on the rails and making money.

A prime objective will be to motivate people and eliminate fat in the company.

Asked how the company was performing at present he said, "I can't say too much because we bring out our results for the year to end-September in November. But I can say Afrox is geared to the general economy and we have done as well in the boom as others."

On why Afrox should be able to outgrow the economy in the long run, Mr Joubert said "We have a solid base. We generate a lot of cash. We have demonstrated we can ride out recession better than most. The country is wealthy. If you have cash and ideas in this environment, I believe, you must do well."

# Unions link up in unique federation

Edm  
2/12/80  
185

By STEVEN FRIEDMAN  
Labour Reporter

THREE trade unions for electrical workers joined together on Saturday to form a unique multiracial federation

It consists of one white, one black, and one coloured union which have decided to remain separate but to co-operate through a federation

Its constitution stipulates that no decision may be taken unless a majority of all three union representatives on its national council agree

It is designed to ensure that "no group can dominate any of the others and that no two unions can gang up on the other one"

This was announced yesterday by Mr Ben Nicholson, director of the new federation, the Federation of Electrical Trade Unions of SA (Fetusa)

The three unions which have joined it are the (white) SA Electrical Workers Association, the (black) Electrical and Allied Workers Union and the (coloured) Electrical and Allied Trades Union. All three unions are registered

They have decided to form a federation as an alternative to merging as a non-racial union

Mr Nicholson said Fetusa's constitution was approved on Saturday at a joint meeting of the three unions' executive committees

A representative of the white union had been elected president, the first vice-president was a member of the black union, and the second vice-president, of the coloured union

The constitution stipulated that each union must have a representative in one of the top three positions

Mr Nicholson said the meeting had been "harmonious"

Although there was lively debate on the constitution all delegates are pleased with developments and are happy with the new federation," he added

One of its major tasks would be the drawing up of common policy between the unions on a range of issues, including negotiations

The federation's members would also pool finances and other resources. However, "all three unions will be completely free to manage their own domestic affairs," Mr Nicholson said

Fetusa's national council would consist of five representatives from each of the affiliated unions

At present the three unions would remain separate but mergers could take place in the future, Mr Nicholson said



# Underpayment of staff alleged

Staff Reporter

THE OWNER of a Long Street electrical shop, who allegedly owes his former employees R4 600 by underpaying them and failing to pay overtime wages, holiday pay and holiday bonuses, appeared before a Cape Town magistrate yesterday.

Gunter Walther, of Blinkwater, Disa Park, appeared for himself and ACS Electrical (Pty) Ltd on six charges under the Electrical Contracting and Servicing Industry (Cape) Agreement.

He pleaded not guilty. Similar charges against Miss C H A Eggers of Silverstream, Disa Park, were withdrawn.

An inspector of the industrial council for the industry, Mr Reginald Betteridge, said that at ACS workshop last year he found Mr Graeme Hindley and Mr David Veldsman repairing washing machines and refrigerators. They told him Mr Walther paid them R60 a week. This should have been R110.

Mr Walther said the men were self-employed under terms of a contract he had drawn up with them. He looked after the financial side, they contracted for jobs and effectively "owned the business".

In evidence, Mr Hindley said he and Mr Veldsman had been offered the chance to buy the business under the contract and had worked accordingly for a trial period. Then they became dissatisfied as they continued to receive only R60 and no commission.

They told Mr Walther repeatedly they were not interested in the contract, which they had not signed but continued to work as before.

Giving similar evidence, Mr A A J van Zyl said he resigned in March this year. He had signed the contract as Mr Walther gave him an alternative of resigning.

The hearing continues tomorrow.

Mr E van Zyl was on the Bench. Mr P Laubscher appeared for the State.

# Firm underpaid workers by R4 000

5/12/80  
Argus

A Cape Town magistrate yesterday found the owner of a Long Street electrical firm guilty of five charges of underpaying employees in contravention of the Electrical and Servicing Industry (Cape) Agreement.

Gunter Walther, of Blinkwater, Disa Park, who appeared for himself and for ACS Electrical (Pty) Ltd, had pleaded not guilty to two charges of paying wages below the minimum prescribed by the Industrial Council. He also pleaded not guilty to charges of failing to pay overtime wages, holiday pay and holiday bonuses.

Mr Reginald Betteridge, an Industrial Council inspector, said that according to the firm's wage register the accused had failed to pay more than R4 000 in wages to six former employees.

Although some of the employees had received attendance bonuses that brought their total income above the prescribed minimum, incentive bonus was not part of a man's living wage' under Industrial Council legislation.

## R50 SHORT

It was claimed that one employee had not been paid overtime pay of R225.09 and that two others had not received holiday pay and holiday bonuses totalling R121.51.

Inspector Betteridge said that Mr Graeme Hindley and Mr David Veldsman, who were employed at ACS to repair refrigerators and washing machines, had been paid

R60 a week for 23 weeks while the rate prescribed was R110 a week.

Walther said that Mr Hindley and Mr Veldsman were not in his employ but were self-employed by virtue of a contract of part ownership of the firm.

Mr Hindley and Mr Veldsman said that they had not signed any contract but had worked under the terms of Walther's proposal for a trial period in the hope of earning more.

After three months, they became dissatisfied when they continued to receive only their wage of R60 a week and no commission. On a number of occasions, they told Walther that they were no longer interested in the contract and they continued to work as his

employees under the same conditions as before.

Another employee, Mr A A J van Zyl, said that he had been forced to sign a contract whereby he was to take over the management of the electronics workshop at ACS. He said he was faced with the alternative of losing his job.

Mr F van Zyl, the magistrate, suggested to Walther that he discuss the possibility of settling the issue of payment of the overdue wages with Mr Betteridge. The court would be prepared to consider suggestions made on this basis. Judgment was reserved until December 10.

Walther was acquitted of a sixth charge.

Mr P Laubscher appeared for the State.

- Van der Merwe P.J.  
1976 Black Unemployment Problems in South Africa  
Pretoria: Bureau for Economic Policy and Analysis, Research Report No 6.  
1977 Unemployment Statistics.  
Pretoria: Bureau for Economic Policy and Analysis.  
Westcott, G.  
1977 Obstacles to agricultural development in the Transkei  
in (eds) F Wilson, A Kooy and D Hendrie, Farm Labour in South Africa.  
Cape Town: David Phillip

# Strikers at Siemens back after accord

By STEVEN FRIEDMAN  
Labour Reporter

A STRIKE by about 600 workers at the Siemens electrical factory at Rosslyn, near Pretoria, was settled yesterday.

The strike was the third to affect Rosslyn in the past few weeks. Two motor firms, Datsun-Nissan and BMW, were also hit by strikes recently.

On Monday, workers at Siemens struck in support of demands for a R1-an-hour wage increase.

But yesterday, workers returned to work after electing a committee of union shop stewards to represent them. The registered Electrical and Allied Workers Union of South Africa will now negotiate with management on the workers' demands.

According to the manager, Mr R Sanne, the workers "interrupted" work on Monday morning, demanding between 50c and R1 per hour wage increase.

Mr Sanne said the workers did not leave the premises during the strike and had returned to work later that day.

He added that there were different payment categories

for the workers, the lowest being between R1.25 and R1.50 an hour and the highest between R3.50 and R4, but would not comment further.

The union's general secretary, Mr Ben Nicholson, said the strike had been sparked by "the general mood in Rosslyn at the moment".

He said Siemens workers had compared their wages to those being paid by motor companies in the area and decided that they were lagging behind.

"They see the motor firms awarding large increases and they feel that they should receive them too," he said.

Earlier this year, negotiations between union representatives and East Cape motor firms culminated in an agreement which substantially raised motor wages.

Union sources believe the two Rosslyn motor strikes were prompted by dissatisfaction among workers at the plants because their pay was lagging behind that of Eastern Cape workers.

Rosslyn motor companies have now also raised wages substantially in the wake of strikes at their plants. The Sie-

mens strike appears to be the latest example of the "ripple" effect created by the increases.

Mr Nicholson said that his union, which represents 85% of the workforce at the plant, had set "a timetable" for negotiation on the pay issue which sparked the strike.

He would be negotiating on the issue and would then report back to a committee of union shop stewards.

Meanwhile, a strike by workers at Creamline Dairies in Pinetown, which affected milk supplies for thousands of holidaymakers in the Durban area, has been settled, according to a company spokesman.

The strike is the second to hit Creamline in the past few weeks. Workers at one of its depots at Florida struck earlier this month.

Sapa reports that the strike cut off milk deliveries to scores of hotels and tea rooms along the entire Natal coast and in the Durban metropolitan area.

It was sparked by worker complaints that they were being paid only a 25% bonus. They claimed that workers at other dairies were getting a 100% bonus.

**ESCOM PRODUCTIVITY**  
 FM 26/12/80  
**Current gains**  
 185

Escom senior general manager Dave van der Walt (writing in house journal Megawatt for December 1980) makes some strong claims for productivity gains over the last 20 years (see table)

For example, the number of kilowatt-hours sold per employee has nearly doubled, the amount of coal burnt per kilowatt-hour has been reduced by about a quarter even though the average calorific content of the coal has decreased, the amount of water used per kilowatt-hour has approximately halved, and the cumulative amount of capital installed per kilowatt-hour produced (as adjusted for inflation using the wholesale price index) has been reduced by more than 80% over the 20-year period. This reduction in the amount of capital per kilowatt-hour corresponds to an average reduction of about 3% per annum.

The over-all cost of generating and distributing electricity (as adjusted for inflation using the wholesale price index and excluding the capital development contributions) has been reduced by nearly a quarter during the last 20 years.

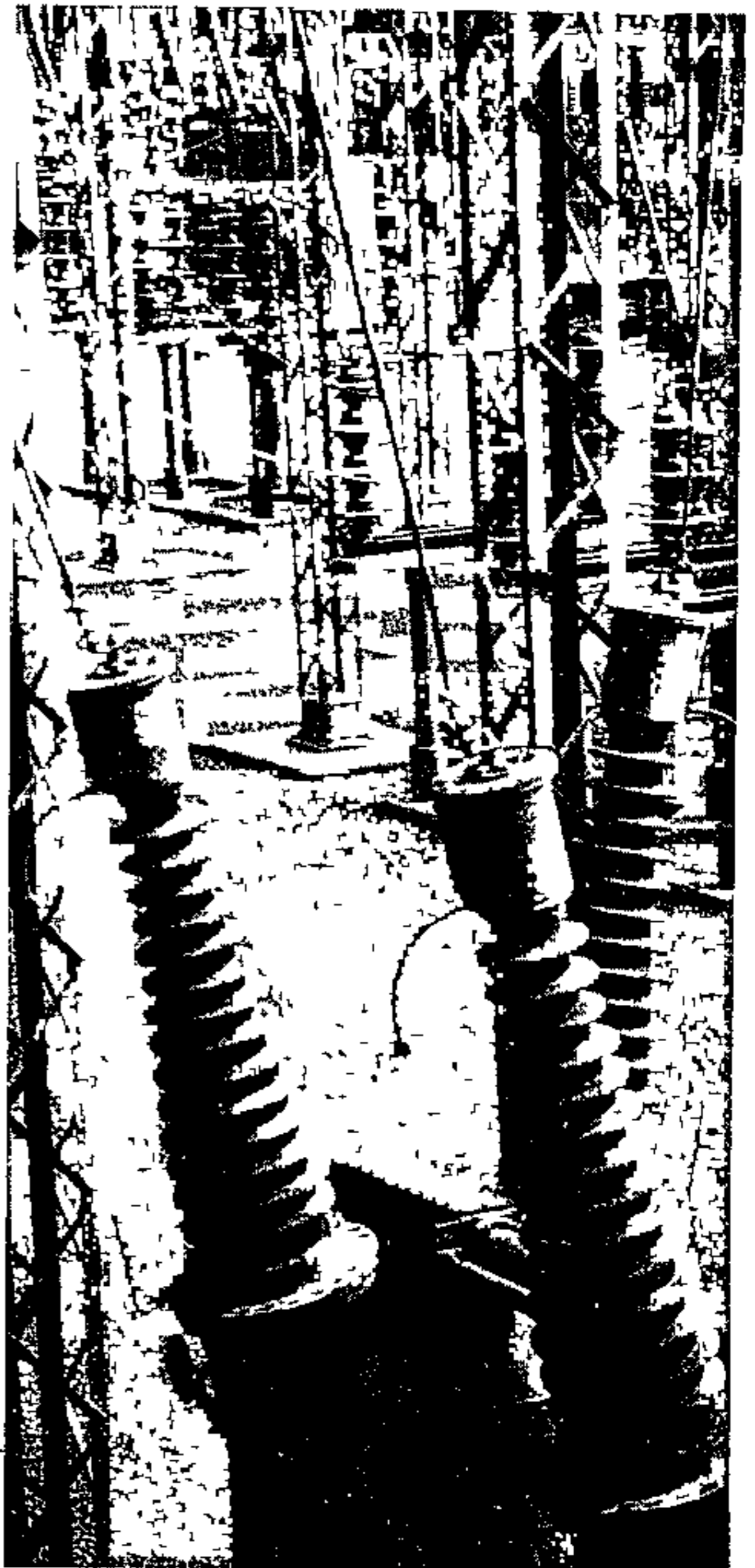
This achievement has gone side by side with a sense of responsibility towards optimum resource management. For example, Escom has actively encouraged coal mining companies to increase the coal recovery rate from as low as 30% to 90% and more — achievable where circumstances permit the use of open-cast methods.

Another important area (where Escom claims to have become a world leader) is the development of dry cooling tower technology, which can reduce the water consumption of a power station by about 75% to 80%.

Another example is the accident prevention programme implemented 12 years ago. The frequency of accidents causing lost time has over the last 10 years been reduced from 11,9 injuries per million man-hours worked to 2,9 injuries. The recent SA industrial average is 11,2 injuries per million man-hours.

Escom is currently implementing a productivity improvement programme to establish specific targets for further improvements and to monitor improvements as they are achieved. Van der Walt emphasises that the goal is "to work smarter rather than just working harder."

Escom is currently implementing a productivity improvement programme to establish specific targets for further improvements and to monitor improvements as they are achieved. Van der Walt emphasises that the goal is "to work smarter rather than just working harder."



Escom . . . slimming course

**ESCOM'S LEARNING CURVE**

Year	Real cumulative capital in commercial use, R per million kWh sold	Average number of employees per million kWh sold	Coal usage, kg/kWh sold	Water usage, litre/kWh sold
1960 . . .	33 900	0,89	0,79	4,67
1965 . . .	32 700	0,76	0,73	4,10
1970 . . .	33 400	0,64	0,62	3,48
1975 . . .	19 600	0,56	0,60	3,03
1979 . . .	18 200	0,53	0,62	2,96

Deflated with wholesale price index (base year 1970)  
 Source Escom.

# MANUFACTURING - ELECTRICITY

8 JAN. 1981

— 28 October 1981

(11)

S

Summary

if there was  
a change in the interest rate, they  
would probably be buying or selling bonds. Very  
unlikely that investment was interest inelastic. If money  
and investment were not equal it would affect the  
level of income, which would adjust AD to AS X  
On income a ~~small~~ increase would mean the  
level of investment, which in turn would increase AD  
to the level of AS. Any fluctuations in income would  
affect income or demand either saving or investment,  
causing a corresponding increase or decrease in AD in order  
to equate the economy.

As SA uses more foreign electricity

# Cabora power supply still cut

RDM  
2/1/81  
185

By SIMON WILLSON  
Industrial Reporter

**THE INCREASING** contribution of the Cabora Bassa hydroelectric project to South Africa's electricity supply is highlighted in figures which show that the quantity of foreign power in the national grid rose by 33% in 1979.

Electricity production figures issued by the Department of Statistics show that in 1979, the most recent year for which complete records are available, South Africa bought 10 356 GWh (gigawatt hours — a gigawatt is 1 000-million kilowatt hours or units) of foreign-generated electric power.

The 1979 total is 33% up on the amount of power bought in 1978 — 6 973 GWh — and pushes the proportion of foreign-generated power in the South African system up to 12%.

All but a negligible charge of the national grid's foreign power is generated at the R600-million Cabora Bassa dam on the Zambezi River in Mozambique, about 1 400 km north-east of Pretoria.

The power connection be-

tween the dam and the Electricity Supply Commission's Apollo receiving station near Pretoria has been broken for a month after suspected sabotage on high-tension pylons in Mozambique.

Escom has received no power from the dam since the break on December 9 last year, and the Lisbon-based Cabora Bassa administration company, Hidroelectrica Cabora Bassa (HCB), has not given Escom any estimated date of resumption of supply.

Escom used to insist in the mid-1970s that foreign power sources would never account for more than 8% of South Africa's power needs — that is, foreign sources would never exceed half South Africa's total power reserve capacity.

With the power lines to Cabora Bassa now out of commission, and with no immediate prospect of resumption of supply, 12% of the national grid's power supply is missing indefinitely.

After numerous technical, natural and strategic setbacks the dam's power supply to

South Africa became fully available nearly two years ago, and South Africa's power import figures are confirmation of the expansion of Cabora Bassa's supply potential to a point close to its maximum.

The figures show that the first small charges of power from Cabora Bassa to the South African grid were received in 1975 when the 25 GWh from the dam supplied 0,03% of South Africa's electricity.

The quantity of power imported from Cabora Bassa rose by 98% in 1976 when it supplied 1,7%.

In 1977 the dam was supplying 5,8% of the power in the grid and 8,9% in 1978. The dam supplied 10 356 GWh of the 85 733 GWh sold in South Africa in 1979.

The scheduled step-up in power supply to South Africa from the dam was interrupted by floods in the Zambezi, the colonial and post-colonial wars in Mozambique and the international political implications of electrical connections between Frelimo-ruled Mozambique and South Africa.

# TERROUR BLASTS GUT SA POWER

Argus 17/1/81

185

ARCUS AFRICA NEWS SERVICE

**JOHANNESBURG. —**  
Electricity supplies from the giant Cabora Bassa hydro - electric scheme in Mozambique have not been reaching South Africa for more than a month now because of sabotage by the anti-Frelimo Mozambique Resistance Movement (MRM).

The cut represents 10 percent of the total power supply available to Escom — the equivalent of virtually the entire output of the Koeberg nuclear plant when it goes into full operation.

Guerrillas of the MRM dynamited the line at Chimoi in central Mozambique more than a month ago and technicians have not been able to enter the area because of the security situation.

Escom officials have disclosed that although the electricity cut does not endanger supplies it does erode the 18 percent reserve normally allowed by Escom. Clearly this reserve will be eroded further when power demand increases in winter.

Technicians employed by the Portuguese/Mozambique consortium that runs the power station managed to visit the scene of the blasts in the most difficult security conditions and have estimated that it will take at least two weeks to repair the lines once security is back to normal. There are no indications when this will be.

South Africa takes about 1 450 megawatts from the scheme while Mozambique takes only three kilowatts on a

feeder line to Tete in the north.

However, the consortium and Mozambique are losing R149 000 a day in revenue because of the breakdown.

The Chimoto area, where the blasts took place, is generally considered the area worst hit by MRM guerrillas and the main road from Maputo to Beira is considered unsafe.

Although Escom officials are adamant that there is no cause for alarm and that, indeed, most people simply are not aware of the powercut, it is clearly not ideal to have a 10 percent cut in the country's electricity supplies.

RDM 19/1/81 (185) (200)

# Waste coal for power plan

By JOHN MULCAHY

TRANSVAAL coal producers and Escom have started discussions on the possibility of using coal discards — waste left behind from coal washing plants — to fuel power stations

According to the Chamber of Mines newsletter the coal discards accumulate at a rate of about 800 000 tons a month and are expected to increase to 1-million tons a month when South Africa's coal export programme reaches 44-million tons a year four to five years from now

It has been estimated that if

the coal could be channelled to a central point it would provide more than enough fuel to fire a power station with the capacity to meet the needs of a city the size of Johannesburg — which at peak periods uses at least 1 000 megawatts of electricity

Most discards are placed on dumps, which represent a potential environmental hazard as spontaneous combustion could result in their smouldering and giving off pollutants

Escom has expressed interest in the proposals and has confirmed that it is prepared to

examine the use of discards for electricity generation. Its main criteria would, however, be reliability and cost of supply

Mr R A Lee, chairman of the Transvaal Coal Owners Association, said it was encouraging that Escom and the coal producers had got together to discuss the possibility of using the discards

He said initial studies carried out by the TCOA indicated that more than enough discard was generated by collieries in the Witbank area to provide energy to run a power station of at least 1 800 megawatts

From the producers' point of view, Mr Lee said the feasibility of using the discard depended on the capital required to collect the material, upgrade it, deliver it to Escom — and the price Escom would be prepared to pay for the material to ensure a reasonable rate of return on the investment

"My belief is that something must be done about the discard and that this will come about in time. I think we are entering a position where it will be economic to use this material. However, we must recognise that it is a long-term project."

D H Pryce Lewis

year.

Osborn Prize  
For the best work in fourth

S A Read

General J B M Hertzog Prize  
For the best final year student.

D H Pryce Lewis

David Haddon Prize  
For the best student of  
Architecture (or Quantity  
Surveying) in the subject  
of Professional Practice.

Miss C Tredgold

Molly Gohl Memorial Prize  
For the best woman student  
in third year.

P A Rappoport

Helen Gardner Travel Prize  
For a student who has  
satisfactorily completed  
1st, 2nd and 3rd major courses.

P F Dunkley

Sixth Year

Cape Provincial Institute  
of Architects' Prize  
For the best student in :-

ARCHITECTURE

FINE ART & ARCHITECTURE



# Electricity project will cost Govt R40m

Own Correspondent  
PORT ELIZABETH — The latest estimate of the cost of bringing electricity to Port Elizabeth and Uitenhage's black townships is about R40-million

The Deputy Minister of Co-operation, Dr G de V Morrison, announced the revised estimate in a letter to Mr Theo Aronson, National Party MP for Walmer, this month

But while about R4-million of work is already in the pipeline, the bulk of the project is to be tackled over an extended period

Dr Morrison said the electrification scheme is dependent on the availability of funds

About 4 681 sites will benefit from the individual house wiring reticulation and street lighting programme now under way

The overall project will bring electricity to about 20 000 homes in the two areas

Other areas which will benefit this year or early next year are Salamantu Street in Kwa-Zakele, KwaFord, which is to get high-mast street lighting, Fordville and the White Location where 288 houses will be wired

# SIEMENS

## GIVES BOOST TO TRAINING OF BLACKS

ARGUS 6/2/81

63 185 176

**SIEMENS, the electrical giant, increased the number of black skilled workers by 155 percent and black apprentices by 450 percent in the 12 months to September.**

The volume of orders soared by 80 percent to 426-million and the staff of 6 500 was raised by 6 percent or 373 to handle the extra work, says the annual report.

The white labour market was too exhausted to provide the skilled workers needed and 'the large black labour reservoir came to the rescue'.

The minimum hourly pay was raised to 149c in direct and indirect income at September 30.

At that time an income based on 149c covered the average minimum standard of living plus 50 percent for a family of six, without the company's voluntary contributions for a household of four.

The chairman, Mr W B Coetzer, says in spite of the drastic effects of any high growth economy on its labour market, the company's staff turnover increased by a mere three points to 24 percent.

Even more satisfactory was the unaltered personnel turnover of the company's black men and women at 19 percent.

Siemens, one of the few overseas companies to disclose its turnover and profit figures, says excluding commission business, turnover rose by 11 percent to R234 million and taxed profit rose 20 percent to R7.9 million.

The profit was split equally between reserves and dividends which amounted to 15c a 50c share, a 22 percent rise in 1979.

The order intake reached R426 million including commission business, which boosted the turnover figure to R268-million, a rise of 18 percent.

Fifty-two percent of the R134 million shares are now owned by Siemens of Switzerland, which is wholly owned by Siemens of Germany, 16 percent by the Federale group and 16 percent by the Industrial Development Corporation.

# FORESH POLLU' FEAR

u  
e.

6

f

# FORE TION

Argus  
26/2/81

(185)

## Confidential plan to reopen Table Bay power station

By **Graham Ferreira,**  
Environment Reporter

PLANS are under way to bring the oil-fired Table Bay power station permanently back into commission and the Executive Committee of the City Council is to debate the matter soon under a confidential green paper

A councillor confirmed this, saying that he was opposed to the scheme but was unable to discuss it because it was confidential

The power station, which was closed seven years ago, was reopened last week amid protests which included censure by the city's Medical Officer of Health.

### Reason

A source said the reason for wanting the power station back in permanent use was that the grid being supplied by the Cabora Bassa scheme was experiencing difficulties

The electricity supply from Mozambique could not be relied on and it was felt that the city might be without sufficient power to cope with



DR R J COOGAN...  
power station an environmental disaster.

winter demands

The reason given for reopening the power station was that heavy fog last week had caused insulators on the line from the Steenbras system to short out, cutting the supply.

The City Electrical Engineer, Mr D C Palser, said he had several options, bringing the old station back into use, paying R500 000 to Escom for a back-up supply or cutting the supply to various parts of the city

### Best

The old power plant was being run at half power to supply 80 Mw

Soon after the station was reopened, complaints began to flow in because of the clouds of dense, black smoke issuing from one of the chimneys.

"I expected complaints from the public, but under the circumstances this was the best option," Mr Palser said

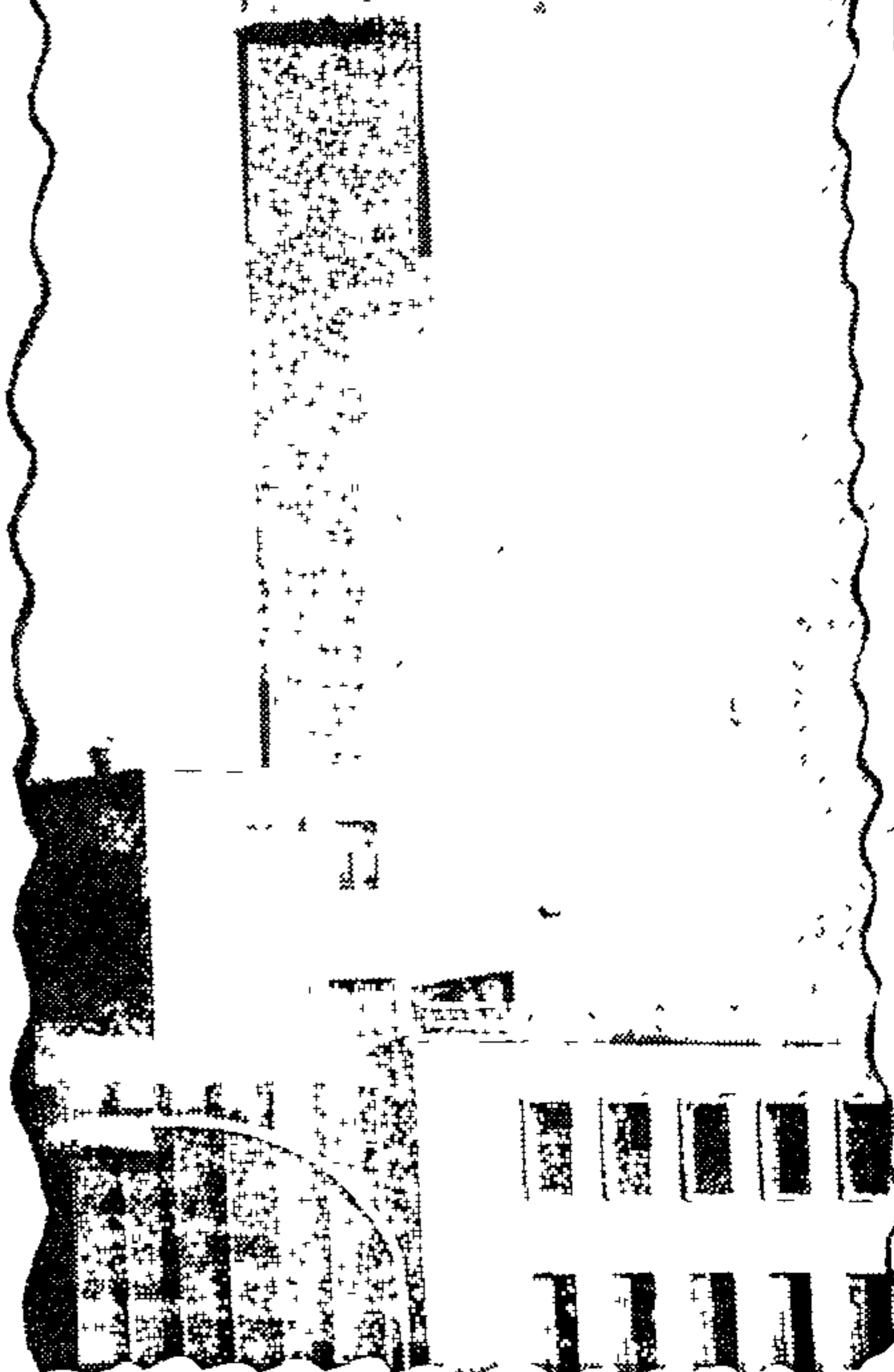
The city's Medical Officer of Health, Dr R J Coogan, described the power station as an environmental disaster. He said it rendered the city's clean air legislation null and void.

### Fallout

Seven years ago, when the power station was closed down, Mr A H Honikman, then chairman of the Works Committee, said the station was recognised as a symbol of environmental deterioration.

When the power station originally changed from coal to oil-burning, the sulphur dioxide content in the smoke caused an acid fallout which ate holes in women's stockings and car roofs with equal facility.

After complaints from many quarters, the filtering system was introduced and the acid level in the emissions was reduced



FLASHBACK to the bad old days of the Table Bay power station chimney belching smoke.

FACULTY

# Power cuts end as Cahora is restored

CT 28/2/81 Staff Reporter

185

NATIONWIDE power cuts by Escom because of a shortfall of power from the Eastern Transvaal and Cahora (formerly Cabora) Bassa ended just after 1 pm yesterday when full-load capacity was restored

Many areas, including Durbanville and Bellville, were left without power for up to three hours. Earlier a spokesman for Escom had said the power cuts were being rotated on an hourly basis, but it was possible that some areas would be affected for longer periods than others.

The cuts were an attempt to make up a total shortfall of 1 090 megawatts on the national grid. Of this 80 mw was required in the Western Cape, 600 mw on the Rand and the Free State and the remainder elsewhere.

The shortfall was due to technical problems on two 600 mw generating sets at the new Duvha power station in the Eastern Transvaal and the loss of supply from Cahora Bassa. Cahora Bassa began to feed power into the national grid at 12 57 pm after a long break.

The spokesman said standby gas turbines in Cape Town and East London had been brought into action to meet the shortfall. He thanked the municipalities of Cape Town, East London, Port Elizabeth, Bloemfontein, Pretoria and Johannesburg for helping out with auxiliary power. Cape Town contributed 25 mw to the national effort.

● Last week Escom warned consumers to use electricity sparingly during winter peak demand periods and said that because of exceptional growth, consumer demands might be difficult to meet.

# Nuclear fusion generator is operational

Science Reporter

TOKOLOSHE, the magnetic bottle built by South African physicists to hold a hot-as-hell genie, is fully operational

According to details released this week in an article in "Nuclear Active", journal of the Atomic Energy Board, Tokoloshe is regularly producing gas plasmas at temperatures up to five million degrees Centigrade and serious study of the machine is under way

Tokoloshe, a mischievous spirit in African folklore, was the name given to the Republic's first tokamak or fusion generator. It produces high temperatures inside restraining magnetic fields. The reason for the use of magnetic fields is that the temperatures



The first picture released by the Atomic Energy Board of South Africa's fusion energy research team, standing in front of Tokoloshe — the giant magnetic bottle now in operation on a long-term research programme. Back row, from left Dr D E Roberts, Dr J A M de Villiers, head of the Plasma Project Centre, from left Mr H A van Niekerk, Mr V Cardinal, Mr M Perrin. Front row, from left Mr J R O'Mahoney, engineer, Mr W F Brown and Mr H le Roux

are greater than any ever dealt with in a laboratory situation and cannot be contained by any known material

The operation of tokamak is aimed at "break-even", the point where energy liberated by the fusion process inside the machine is equal to that used up in heating the plasma. The goal is controlled thermonuclear fusion, a clean source of cheap energy which can be fuelled from materials as common as seawater

South Africa's tokamak is designed for research purposes only and is not intended as a serious contender in the worldwide fusion race. Most scientists believe that the commercial production of fusion energy is at least two decades away, but Atomic Energy Board policy is to stay abreast of developments so that uranium marketing and nuclear power strategy may be reassessed in time

Tokoloshe and all its supply systems were designed, fabricated and constructed in the Republic. According to the AEB journal, all systems have now been tested and debugged, and the experimental programme is under way

UJCT

*Argus*  
**Power station to 'aid Escom'**

185

~~260~~

By Audrey d'Angelo

TABLE BAY power station will have to be kept on standby for use in emergencies until Koeberg nuclear power station is commissioned in two years' time, the Town Clerk of Cape Town, Mr H G Heugh, said today.

He said the alternative would be a risk of power cuts at peak periods, because of the increased national demand for electricity and difficulties Escom was experiencing with the supply from Cabora Bassa.

nuclear power station is commissioned in about two years' time and the electricity supply position in the Western Cape thereby rendered more secure, the Table Bay power station must be preserved for use in an emergency.

Complaints flooded in from the public when the oil fired power station, which was shut down seven years ago, was brought into use last month and dense black smoke poured from one of its chimneys.

**POLLUTION**

Mr Heugh said it was readily admitted that, in conditions of still air, the power station contributed to the pollution 'sometimes visible over the centre of the city'.

The city's Medical Officer of Health, Dr R J Coogan, said the decision to use the power station again, was 'an environmental disaster' and rendered the city's clean air legislation null and void.

He said motor vehicle exhausts, which emitted nitrogen oxides and were 'chiefly responsible for the light grey haze one sees over the city' were a far greater pollution problem.

In a statement today Mr Heugh said the City Council would like to demolish the power station and dispose of the site.

**REQUEST**

But as a result of a request from Escom the council had, after full and careful consideration, decided to make the power station available to Escom to meet emergencies 'subject to no undue pollution being cause'.

Mr Heugh said the council would monitor the situation carefully and shut down the power station if too much pollution being caused.

'Although the council has not yet taken any decision on when the Table Bay power station will finally be closed down and demolished it has, on different occasions over a number of years, debated the future of this power station,' said Mr Heugh.

'During these debates it has been mentioned that until Escom's Koeberg

S.A. Indus Wk 3/3/81 265 (85)

# Escom a catalyst for greater production Fairy godmother

By Lynn Carlisle

FACED with the awesome task of at least trebling South Africa's electricity supply by the year 2000, Escom seems bound to provide ongoing opportunities which will significantly boost production in the general construction, electrical engineering, mechanical engineering, servicing and coal mining industries

"Escom must double its present generating capacity before 1990 and some R12 000-million will have to be spent to achieve this," says Escom public relations officer Boet Uys

With electricity now gaining very rapidly on other forms of energy, the need to increase from the present 17 400 MW to about 60 000 MW by then will seriously in-

fluence developments in the fields of capital investment, forward planning and manpower

South Africa already finds itself following the same pattern of electricity demand which post-war United States, Germany and Britain had to contend with, say top officials in Escom

But there is no shortage crisis looming on the horizon "We will still be fairly safe if the high 1980 growth rate continues in the future," says Uys

Escom has planned to be independent of supply from outside its borders — in spite of receiving 1 450 MW from Cabora Bassa hydro-electric scheme — and has under construction five coal-fired power stations, one pump storage scheme and one nuclear power station

"While there appears to be more feasibility for hydro-electric schemes, which will possibly incorporate pump storage projects, I can safely speculate that at the current growth and demand rate one more coal-fired power station will be called for," says Uys

Contracts for the giant Matimba coal-fired power station are expected to be announced within three months. It might ultimately have an output of 3 600 MW, like Duvha, Matla and possibly Tutuka and Lethabo, and cost about R1 800-million to construct

"Escom will have to expand ahead of the national economy if it is to provide sufficient supplies of electricity, but does not foresee having to burden the consumer additionally to finance its expansion," says Uys

Because Escom incurs about 70% of its capital expenditure — R1 375-million in 1979 — locally, it acts as a constant stimulus to the economy and provides work directly or indirectly to more than 140 000 people

"Even throughout the lean years Escom has awarded some of the biggest contracts and given construction and other industries quite a boost while they have acquired the skills to meet our high standards," says Uys

Escom now burns more than 44-million t of coal annually making it the biggest coal consumer locally

"This includes a lot of low grade coal for which very few uses could be found before we began improving our coal burning technology over the years," Uys adds



# Power failure hits Peninsula

CT 5/3/81

185

## Staff Reporter

A MASSIVE power failure last night blacked out the entire southern Peninsula for the second time yesterday

Power was restored to most residential areas in the Southern Suburbs and on the Cape Flats about an hour after they were plunged into darkness for a second time

This followed a 2½-hour power failure in the afternoon. Areas affected by both power cuts were Hout Bay, Wynberg, Claremont, Plumstead, Athlone, Lansdowne, Retreat, Grassy Park, Guguletu, Philippi, Fish Hoek and the whole of Mitchell's Plain

The Cape Times was last night flooded with calls from irate residents unable to get through to any of the City Council's emergency numbers. Most

people complained that they had been unable to cook dinner, prepare babies' feeds or venture on to the darkened streets

Cape Town's Electrical Engineer, Mr D C Palser, said a high-voltage fault at a feeder sub-station has caused the power cut about 4.30pm. The supply was switched to alternative circuits and restored by 7pm, but again went lost soon after 8.30pm. Power to all areas was finally restored at 9.45pm

Mr Palser said the fault presumably occurred at one of the two Eskom sub-stations supplementing the City Council's self-generated power supply. A spokesman for Eskom's power-failures division last night declined to comment and referred the Cape Times to the organization's headquarters

The earlier power failure delayed peak-hour trains to the southern suburbs and Cape Flats by up to 15 minutes while Bellville trains left five minutes behind schedule, according to a spokesman for the South African Railways

A spokesman for the traffic department said traffic lights throughout the southern suburbs broke down and traffic police-

men were stationed at major intersections to direct peak-hour traffic

The Wynberg fire brigade was called out to rescue an elderly man trapped in a lift in Stellenberg Flats, Protea Road, Claremont. As the firemen approached the lift, the power was restored and the lift descended

The manager of Kenilworth Centre, Mr R W Ing, said the centre switched to its stand-by generator and business was not been affected

A spokesman for a City elevator company said he received no emergency calls

However, steakhouses and restaurants throughout the southern suburbs did a brisk trade last night as clients flocked to have dinner. The manager of the Cherokee Spur in Wynberg, Mr Chris Parsley, said the power failure was a "blessing in disguise"

"Since nobody was able to cook supper, everybody simply rushed to the nearest steakhouse to have dinner"

The manager of the Acapulco Spur said he had a long queue of clients early last night. Hotel managements said they were not badly affected

# Power rate hike plan for some

KPM 7/3/81 (185) (266)

Municipal Reporter

JOHANNESBURG'S electricity department has recommended that the surcharge for all areas outside the municipal area, except Lenasia, be increased from 12,5% to 25%.

The proposal, in a report to the city's Health and Utilities committee, will appear before the city's management committee on March 16.

The electricity department said the average cost for each kWh of electricity bought from Escom and supplied by the council to consumers outside the municipal area of Johannesburg was 25% more than the average cost of all other

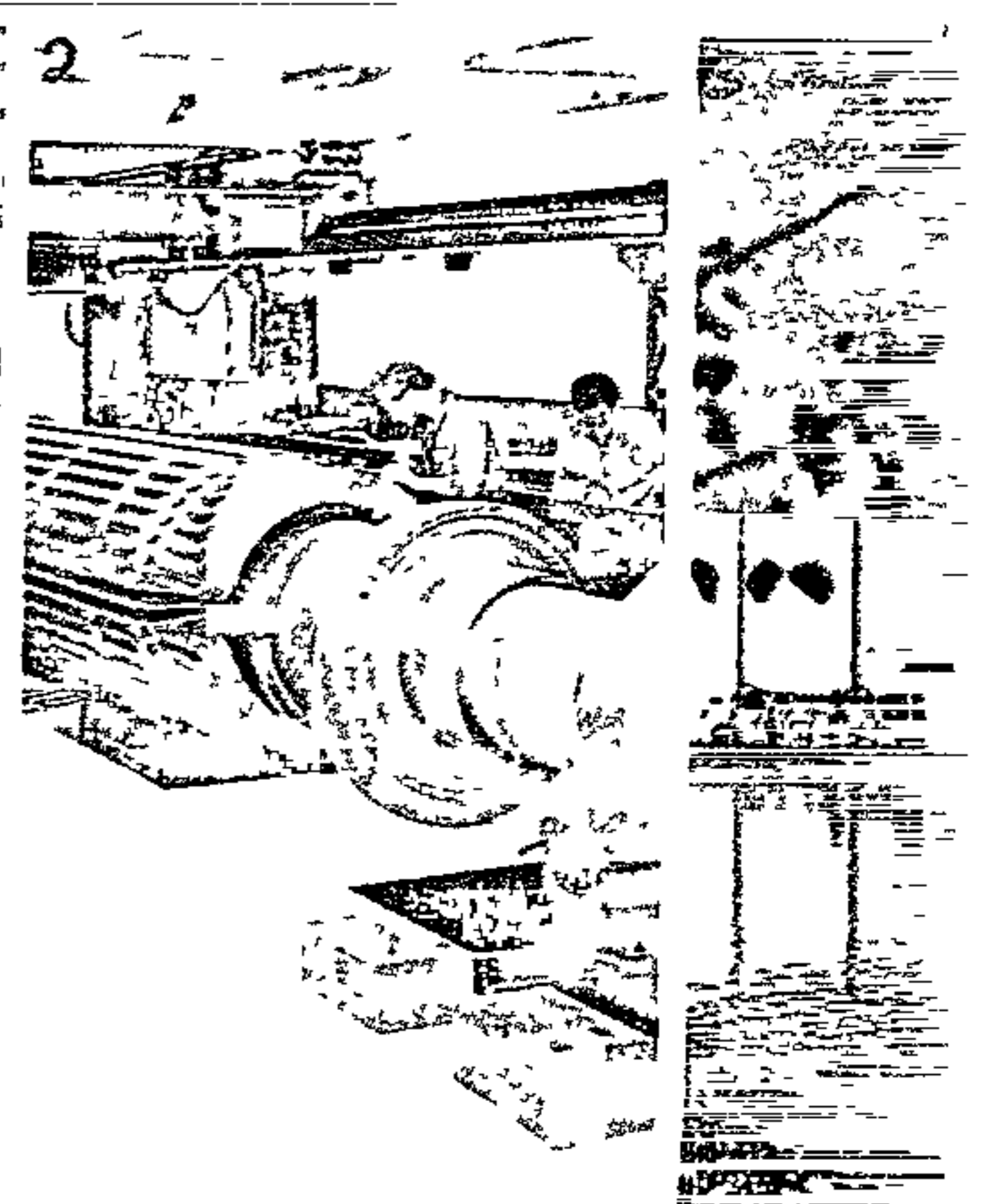
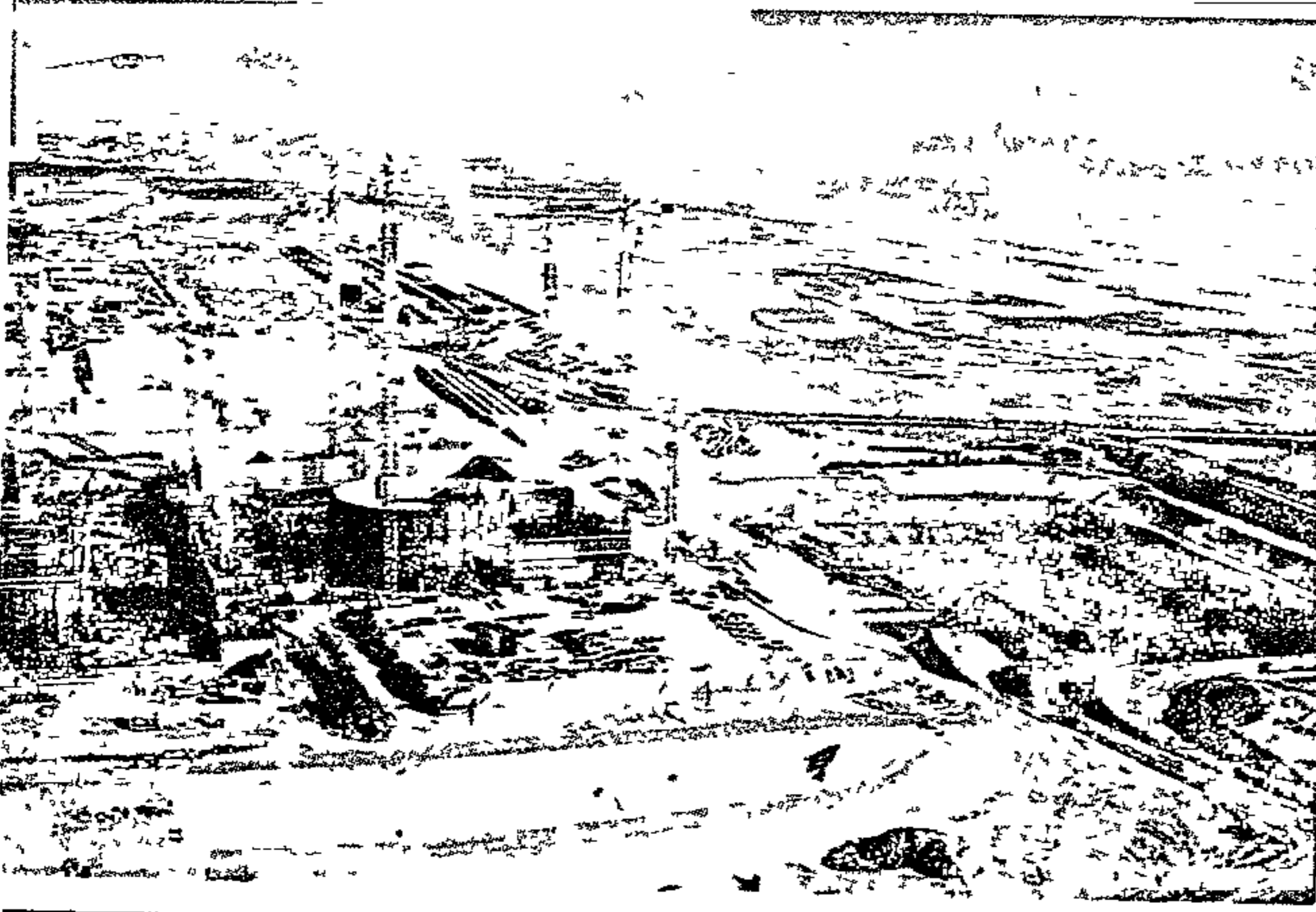
electricity

. In terms of the city council's existing tariff these consumers only paid a surcharge of 12,5%. This resulted in an annual loss to the council of about R425 000. A 25% surcharge was necessary to avoid the loss.

The electricity department, also said an anomolous situation existed in regard to the average consumer outside the municipal area who received electricity from the council.

Using 800kWh a month, he paid only R24,89 in charges while consumers in adjacent suburbs who were supplied directly by Escom paid R35,06 — 40,9% more.

# Nuclear power generation, gas turbine

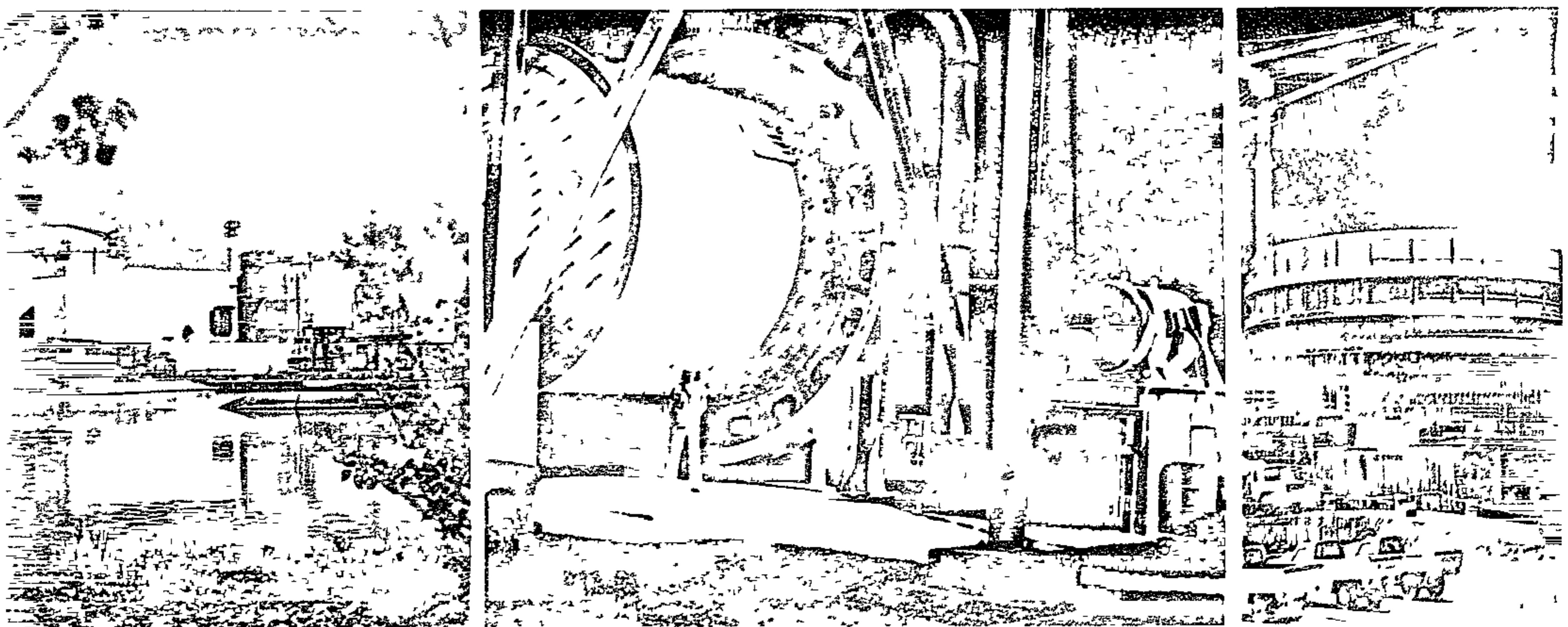


TRIAL WEEK

## activities

1. Progress on Koeberg site as at December 1978.
2. Winding of 600 MW generator rotor at Alsthom-Atlantique's Belfort works.
3. When completed, Koeberg will look similar to this French nuclear power station.
4. Stein Industrie tube mill grinding plant for coal/phosphate.
5. Site of Koeberg nuclear power station "at night".

# Electric power generation and Coal grinding



# Electric Power taken for granted

185  
SA Industrial We  
10/3/81

**IN ANY industrialised country, one of the resources most taken for granted and yet most likely to become unavailable without warning is electric power.**

During a power cut, it is the users of large computer installations, and associated equipment employing computerised techniques, that suffer most. These days the spread of organisations using the computer is extremely wide and banks, hospitals and airlines are among the most dependent on their efficient operations.

Throughout the past decade industrialised manufacturing concerns have also come to rely heavily on the computer for many on-line control processing applications. Equally at risk during power cuts are the organisations that look to the efficient operation of their businesses through systems such as word-processors, telex facilities and sophisticated PABX equipment.

All these organisations cannot tolerate any breakdown in their electrical supply, for the equipment supports the business only while it continues to receive an uninterrupted, stabilised voltage input.

It is fairly obvious that when the mains power is switched off all equipment receiving this supply can no longer operate unless an alternative private supply is available. This means that an auxiliary power supply, which will probably be a standby generator or battery must be provided.

If however, the equipment is a computer or it employs similar low-voltage techniques, it needs a controlled supply and only a fully uninterruptible power supply, which acts as a buffer between the source and the critical load, can ensure the necessary stability.

The power supply equipment must be capable of maintaining the input to within specified tolerances for voltage and frequency.

All manufacturers of computers and computerised equipment clearly define these limits. Although it is likely to be a power cut which has the most dramatic effect on any computer orientated business, day to day running efficiency is still determined by the

critical load receiving supply which is isolated from voltage surges or spikes.

At first sight it might appear advantageous to have a common standby which is used to drive all the various items of electrical equipment. However, if a closer look is taken at the problems which can arise from this arrangement — caused by the different levels of load required to drive lift and airconditioning equipment motors — it is clear that a computer cannot be operated directly from the same source without impairing its efficiency.

Another not quite obvious cause of overload can be due to the lighting system, when it incorporates a large number of fluorescent tubes.

### Solutions

With care it may be possible to satisfy the requirements at a reasonable cost through a single item of standby equipment. If however, a data processing centre, on-line computer control or other sensitive equipment is installed, this approach will not provide an efficient solution.

Where high voltage surge loads for motors are being intermittently demanded of the generator, it is bound to affect frequency stability, and consequently computer performance.

One possible solution is to increase the size of the generator, but this may not be too economical in terms of the space availability for the equipment.

If however the necessary space is available, then by installing a second generator, the voltage sensitive equipment can have its own supply.

With a fast regulator fitted, the stability of the supply will then be dependent upon the speed of response in matching the load requirements.

### Protection

In considering the two main types of independent power supplies — static inverter or rotary motor/alternator set — a glance at figures 1 and 2 will indicate the basic difference.

The important aspect for the user to understand is that the supply passes by way of an inverter system all the time, while with the rotary set it does not.

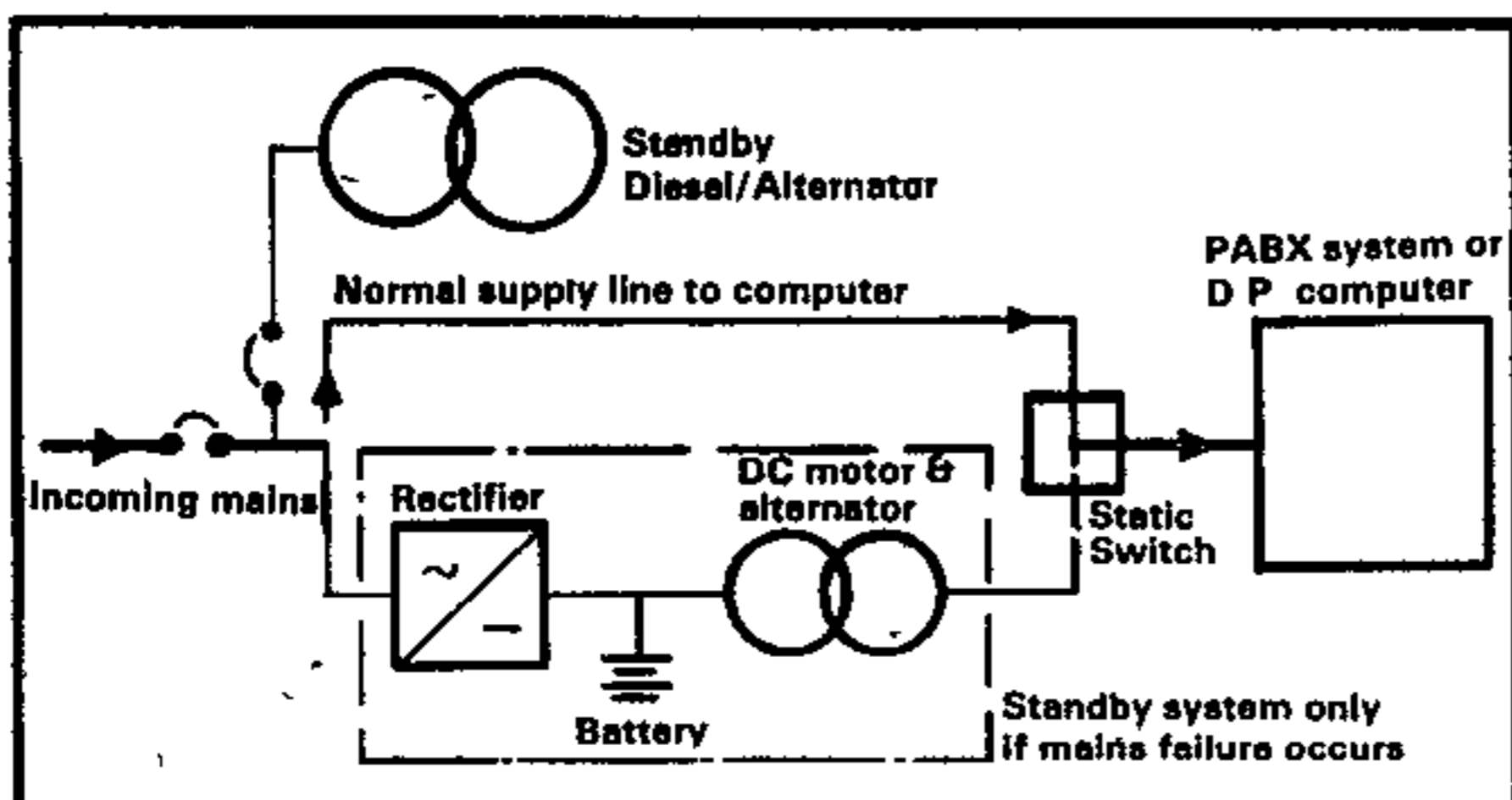
In the final analysis, only the end user can decide how much protection the equipment needs. If the business or manufacturing process is not fully dependent on an unbroken supply or one that has to be without voltage transients, then clearly the rotary set will meet these requirements. It will also offer a much lower price option.

On the other hand where the end users equipment has a laid down specification which is tightly defined as to voltage and frequency, then it is likely that a static inverter system provides the most acceptable solution.

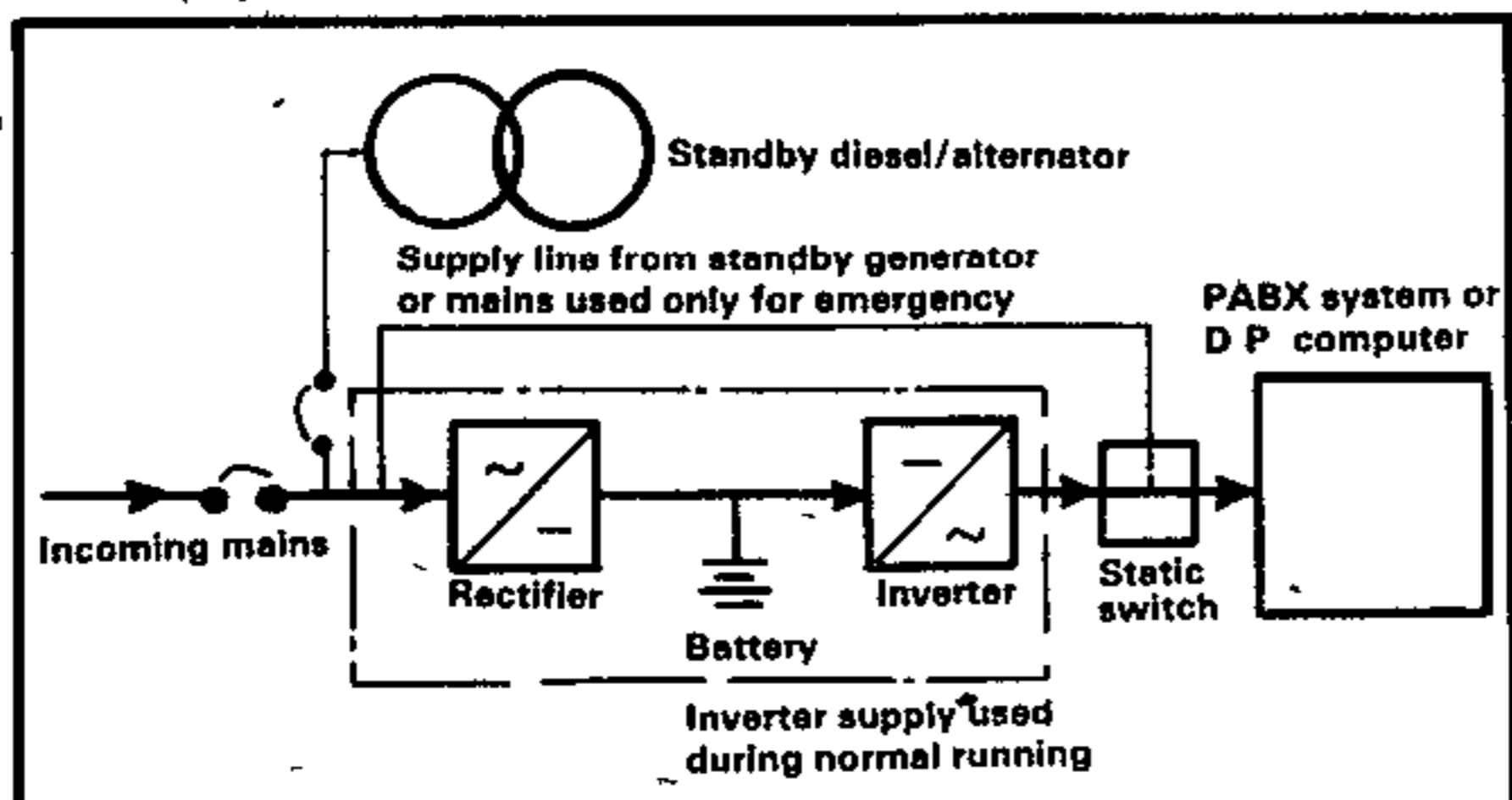
If the decision has been to purchase a manual start diesel and also a static inverter UPS, the battery will be expected to maintain the supply for up to one hour.

The cost of such a battery for a large computer would be approximately R20 000 00. Should the end-user require the battery to run for only 15 minutes, which is typical if an automatic start diesel is used, the battery supplied will cost about R10 000 00.

Further details can be obtained from Fulmen Africa (011) 365201



1 Configuration for a typical rotary standby power supply (note supply runs directly from the power source to the critical load)



2 A static inverter type uninterruptible power supply which takes the input from the mains or generator continuously

### Municipal Reporter

WHILE the row over pollution from the Table Bay power station continues, the City Council has received the final bill for its detailed five-year R93 000 air pollution survey — and it is already causing controversy.

The report, still under wraps and seen only by top officials and councillors, was compiled by pollution experts from the University of Cape Town, Professor R Dutkiewicz, Professor F Fuggle and Dr C Keen.

In a report to the council's executive yesterday, the Town Clerk, Mr H G Heugh, said the pollution survey had shown that sulphur dioxide — which is emitted by the Table Bay power station — was not a significant

# Row over <sup>Angus</sup> power 11/3/81 station 185 pollution

pollution problem in Cape Town

Mr Heugh added that Professor Fuggle and Dr Keen were reported to have commented in disparaging terms about the recommissioning of the power station and to have expressed concern about the loading of the air with sulphurous fumes.

### COMMENT

It will be surprising to say the least if this is so, having regard to the fact that the air pollution survey — to which they are signatories and for the production of which they were employed by the council — contains a categorical statement that pollution by sulphur dioxide is not a significant factor in Cape Town.

In fact, if they had had any comment to offer, it

would have been proper for them to convey this direct to the City Council which employed them and which has not yet had the opportunity to discuss their report with them.

The detailed pollution survey, in which several neighbouring municipalities were involved, has cost R93 000. About R6 000 in final costs will be recovered from the other municipalities which took part.

### FINAL ACCOUNT

The final account for the survey is R14 284 which includes R13 400 in consultancy fees.

The report of the survey is being studied by the council's officials, who will report back to council before the report is made public.

It has not yet been discussed by the full council,

CT (3/3/8)  
Rioting  
in Kriel  
compound

JOHANNESBURG — Buildings were damaged, cars set alight and a bar plundered when 300 workers at the Kriel power station in the Eastern Transvaal went on the rampage on Wednesday night.

Scores of riot police were called to the compound and teargas was used to disperse the angry mob. No shots were fired.

Brigadier J Smith, Divisional CI officer for the Eastern Transvaal, said yesterday that rioting began in the compound on Wednesday night and the mob stoned buildings and broke windows.

Expensive equipment was smashed. The bar that serves the employees in the compound was plundered and liquor was stolen. Other buildings were set on fire and two cars belonging to power station employees were set alight and destroyed.

The sleeping quarters in the compound were wrecked and damage estimated at R15 000 was caused to the premises.

A spokesman for Eskom said the rioting began about 8 15pm. He could not say what the cause was but said it was being investigated.

Brigadier Smith said no one was injured and that everything was quiet by morning. — Sapa

# Coal 'no solution' to pollution

Angus 13/3/81 (56) 135  
Consumer Reporter

IF Table Bay power station were converted back to burning coal it could be used without causing any pollution, says a former Western Cape chairman of the National Association for Clean Air, Mr G D Matchett

Mr Matchett said in an interview that carbon precipitators in the power station chimney would prevent the coal smoke from polluting the atmosphere

But the City Electrical Engineer Mr Denis Palsel said the precipitators would remove only grit from the smoke — the chimneys would still release sulphur dioxide gas into the atmosphere

Mr Palsel said it would be uneconomic to spend about R20 m on converting the 40-year-old power station back from burning oil to burning coal because it had only a limited life. There would also be a problem in delivering

coal now that the power station was surrounded by development. This was the main reason why the power station had been converted to burning oil

Table Bay power station was not in use at present. It was used only in emergencies, he said

If it were used all the time burning coal it would cause more pollution than if it were used only in emergencies burning oil, at present

OWN 14/3/81  
**Electrical  
workers  
pay hike**

Own Correspondent

CAPE TOWN — Electrical workers in the Cape have been awarded a 30% pay rise following mediation of a dispute with employers

The regional chairman of the Electrical Contractors Association, Mr Ralf Pinto, said the agreement reached with the employees' SA Electrical Workers' Association would come into effect as soon as it could be gazetted. It would take about six weeks.

A new category of labour has also been introduced in terms of the agreement intended to cut the cost of electrical work on housing schemes by allowing "systems installers" to do work previously done by more qualified electricians



CT 14/3/81 (51) (185) (377)

## Raise for electrical workers

### Industrial Reporter

ELECTRICAL workers in the Cape have been awarded a 30 percent pay rise following the resolution of a dispute with employers

The regional chairman of the Electrical Contractors' Association, Mr Ralf Pinto said the agreement reached with the employees' South African Electrical Workers' Association would come into effect as soon

as it could be gazetted, which would take about six weeks

The previous agreement expired last September

A new category of labour has also been introduced in terms of the agreement which is intended to cut the cost of electrical work on housing schemes by allowing "systems installers" to do work previously done by more qualified electricians

**CMGM**

3. Inbume  
wins

15/3/8)

R32-m

185

**power**

**contract**

CMGM (Pty), Ltd, one of the major subsidiaries of Group Five Engineering, has been awarded a R32-million contract for the first phase of the Tutuka power station near Standerton.

The contract entails civil engineering and building work for the first three units of 600 megawatts each

CMGM, which specialises in the reinforced concrete sector of the construction industry and is one of the leaders in this field in the country, is to construct the foundations for Tutuka's boilers and generators

The work will involve nearly 200 000 cubic metres of concrete, and will extend over a period of about four years.

RDM 20/3/81  
185 7/4

# Import protection appeal

By HAROLD FRIDJHON

A PLEA for a greater degree of flexibility in the import protection procedures is made by Mr Harry Oppenheimer in his AECI chairman's review

He says it is imperative that those sections of industry which have been built up under protective conditions should be given sufficient time to adapt to the changing economic climate. He hopes the authorities will look at this problem as a matter of urgency.

The need for a higher level of imports to help contain domestic inflation against the background of buoyant consumer demand and excess liquidity in the South African economy is fully accepted.

But the recessionary conditions in Europe and the US mean that many products in the fields of textiles, clothing, footwear and other fabricated plastic products can temporarily be imported into South Africa at low prices to the considerable disadvantage of the much smaller SA producers.

CT 25/3/81 (S) (185)

# Emergency trial at Koeberg

Staff Reporter

ESCOM will carry out its first full-scale emergency exercise, involving the co-operation of local authority services, police, army units and helicopters on the site of the Koeberg nuclear power station early today.

The four-hour exercise is expected to end about noon. A spokesman for Escom said ves-

terday that the exercise would be the first of many.

An official Escom statement described it as a training exercise undertaken in and around the Koeberg power station construction site.

It is part of a development of Koeberg emergency plans for the power station which must ultimately be approved by and demonstrated to the satisfac-

tion of the Atomic Energy Board, the statement said.

The first of several emergency planning exercises to be undertaken this year, it was aimed at testing communications and liaison with supporting emergency services from local authorities. Included would be fire brigade units, helicopters, army and police vehicles.

# Escom may move to low grade coal

By ADAM PAYNE

A MOVE in coal usage by Escom that could increase South Africa's reserves by hundreds of million of tons — and so allay some of the fears of many who doubt the wisdom of increasing the level of exports — is being considered by Escom with the great approval of the coal mining industry.

The next generation of power stations, to succeed those now being built, and possibly the expansion of one of the new stations now being built, may use low-grade coal with more than 30% ash, with modifications to boilers and plans to dispose of greater quantities of ash.

The significance of this move is apparent when the figures of the Petrick Report on coal reserves are studied. They show 92 000-million tons of mineable in situ reserves of which by far the greatest percentage is low-quality, high-ash coal.

About 46.5% of South Africa's reserves at the time of the report in 1976 were of low-grade coal containing 30% to 35% ash. This coal is at present

lying underground unexploited.

The breakdown of the remaining coal of higher grade was 10%-15% ash formed only 1.5% of reserves, 15%-20% ash formed 10.4% of reserves; 20%-25% ash formed 18.6% of reserves, and 25%-30% ash formed 23% of reserves.

Anglo American Coal Corporation disclosed in its annual report last week that Escom might double the size of the Lethabo power station, now scheduled to be 1 800 MW.

This 1 800 MW power station will be served by Amcoal's New Vaal colliery.

Escom has since the contract was awarded asked Amcoal to submit an extended offer to cover the coal supply for an additional 1 800 MW.

I am told that it is possible the second 1 800 MW could be generated with low-grade coal, including 30% ash coal.

This will be a first step in an important change in South African coal usage. At the moment there is negligible use of coal containing 30%-35% ash. The main exploitation of coal has

been from reserves of better-quality coal, even for power generation.

The Department of Minerals and Energy Affairs is finishing its report on coal reserves on which recommendations will be made for or against increasing exports.

This new report is expected to show much greater reserves than those listed in the Petrick Report. These greater reserves would be available by modern mining methods and the report is expected to give more details of different categories of coal and their availability.

The possibility of using lower-grade coals and the problems of doing so are now being investigated by Escom.

A further possibility is the creaming off of high-grade coals and using the discard material for power generation.

According to Engineering Week, Escom is expected to lower its quality specifications for coal in power stations.

The power stations are those that will be built after the completion to full capacity of

Matla, Duvha, Tutuka, Lethabo and Matimba.

Escom last year used 48 000 000 tons of coal with a calorific value of 22,34 megajoules/kg. It pays, according to Engineering Week, R8,14 a ton for its coal contracts tied to the expected 40-year lifespan of a power station, while foreign buyers are now paying \$42 a ton for higher-grade coal fob Richards Bay.

Apart from the move to use lower-grade coal in next generation power stations, talks are continuing between the TCOA and Escom on the possibility of coal discards being used for power generation.

South African coal mines are at present discarding an estimated 10-million tons a year of coal that is often left to smoulder in heaps, polluting the atmosphere and causing a potential fire hazard.

But to use such discards for generation would call for the building of a special power station and entail costly transport arrangements which might make the scheme uneconomic.

## REFERENCES

1. Constitution of the World Health Organization, New York, 1946.
2. Mahler, H. (1976) *Wld Hlth Org. Chron.* 31, 8.
3. Kriel, J.R. and Beuster, D.J. (1977) *S. Afr. Med. J.* 51, 167.
4. Van der Merwe, S. Opening Address "Health Services for Developing Communities", University of the North, October, 1976.
5. Roux, J.P. (1977) *S. Afr. Med. J.* 52, 686.
6. Wells, L.G. (1974) *Health Healing and Society*, p. 11, Ravan Press, Johannesburg.
7. King, M. (1966) *Medical care in developing Countries*, Oxford University Press, London.
8. Potts, M. (1976) *Equalities and inequalities in Health*, p. 147, edited by Carter C.O. and Peel, J., Academic Press, New York.
9. Bhatt, R.V. Soni, J.M., Patel, N.F. and Doctor, P.S. (1976) *Med. Educ.*, 10, 290.
10. Bourne D. and Beeton, G. Personal communication.
11. Edwards, C.C. (1974) *J. Med. Educ.*, 49, 19.
12. Ferguson, D.C.E. (1975) *Low-Cost Rural Health Care & Health Manpower Training: An annotated bibliography with special emphasis on developing countries*, edited by Shahid Akhtar, vol. 1, p. 11, International Development Research Centre, Ottawa, Canada, 1975.

CT 27/3/81

# E Cape nuclear power probe

Own Correspondent

PORT ELIZABETH — Escom is looking at the possibility of siting a nuclear power station in the Eastern Cape. But investigations are at an early stage.

Speaking from Johannesburg, the Escom public relations officer, Mr Boet Uys, said he could neither confirm nor deny that South Africa's second nuclear power station would be built in the Eastern Cape.

That a possible site was being considered, emerged from a meeting this week of the Coordinating Council for Nature Conservation in the Eastern Cape.

The area being considered stretches from Port Alfred to the Tsitsikamma River.

## Investigating sites

Mr Uys said Escom was always investigating sites for nuclear as well as coal power stations and bodies concerned with conservation as well as local authorities were consulted.

He said it was not possible to say whether a power station built in the Eastern Cape would be nuclear fuelled. He did, however, say that coal fired stations were normally built at the pithead.

Aspects that Escom was keeping in mind were that

- Estuaries, of which the Kowie, Kariega, Bushmans, Sundays, Swartkops, Gamtoos and Kromme are the most important, were sensitive to disturbance,

- Proclaimed marine reserves should be avoided at all costs,

- Enclosed bays, like estuaries, were sheltered waters which might fulfil an important nursery function and were more sensitive than enclosed coasts,

- Construction works in areas of large scale sand movement might interfere with transport systems,

- In areas of reduced water turbulence hot water might not be rapidly dissipated,

- Areas of scarce or unique vegetation should be avoided,

- Shifting dunes were extremely sensitive,

- Construction should not destroy the aesthetic value of an area.



By ALEC HOGG  
LONG-dated interest rates have taken a breather over the past fortnight, but one can expect sharp rises in the next two weeks ahead of the R80-million Escom issue.

The market has been talking of a 13,25% rate for the long tranche of the Escom issue — which comes to the market in the second half of April —, but recent nibbling by institutions has pushed the Escom rate down from a peak of 13,30% to 13,05/10%

Investors will want to receive 13,25% on the Escom issue, but secondary-market rates will have to be at least 20 points higher than the current levels to justify this rate

Expectations proved too strong for fundamentals last year — when the system was awash with liquidity, but rates still rose — and one can expect rates to be pushed to the level where institutions want them

Whereas attention is focused on the Escom and RSA issues, capital-market observers appear to have forgotten that there is a R150-million Land Bank loan coming to the market this week

Sources tell me the Land Bank is looking at a two-year and a three-year loan, and as the stock qualifies as a liquid asset, the rate on the three-year issue should be closed to 10%

This reflects how strongly rates have risen in the past six months as in September last year the Land Bank drew R150-million at 6,25% for three years

One can only speculate what rate the Land Bank will have to pay for the other R150-million issue, scheduled for August

In spite of the seemingly growing number of bulls, one must expect the rate to be at least 1,5% higher by then

The stimulus for further upward movements will be the

# Escom R80m heralds rise in rates

ADM 30/3/81

185

growth in money supply (still far from healthy) and corresponding fears about inflation followed by strong monetarist action by the authorities

Most observers believe Pretoria's determination to control the money supply will pay dividends, but this should increase the competition for funds among financial institutions — itself a major stimulant for rising interest rates

In addition, there has been a lot of talk lately that negative interest rates (below the inflation rate) are not conducive to healthy monetary discipline

This view is being listened to by Pretoria and the Minister of Finance, Mr Horwood, has long been a protagonist of real interest-rate returns to lessen the pensioner's burden

Some will argue that even at 13%, prime semi-gilts offer the best investment avenue for institutions, but the recent institutional buying in the equity market has given industrial shares a much firmer undertone and the outlook for the industrial property market is decidedly bullish

Taking all this into account, the long RSA rate should at least rise 1,25% to above 14% in the next 12 months

Secondary municipals, currently 13,8%, could be above 15,5%, and unless marketable securities tax is abolished, de-

ventures could be above 16%.

\*\*\*

**THE MONEY** market was quiet last week, with most of the action confined to the battle between banks and building societies for one-year money.

The societies, which face their crunch period over the next two months, are offering 14% plus on one-year fixed deposits of more than R250 000, and the recent rise in retail deposit rates will put them under more pressure

An interesting development was Trust Bank's announcement that rates on fixed deposits of over R20 000 are negotiable

This enables retail depositors to shop around for rates on amounts of more than R20 000, and heralds a new deal for the man in the street

The discount houses raised their call rate by 25-points to 8% last week and the Treasury bill rate rose eight points to 7,68%

The TB tender has been raised by R40-million to R60-million, which suggests that Pretoria wants to push short-term rates higher

Although the bankers' acceptance rate was steady at 9,75%, it should rise this week as the houses expect a monthend shortage of between R500-million and R600-million



# POWER FROM THE BERS

## ... and Escom might build more nuclear power stations

Finance Correspondent

185  
185  
S. Tribune  
12/4/81

THE first 250 Mw generating set of Escom's Drakensberg pumped storage power station, built at a cost of between R350 and R400 million, is being commissioned and is now linked into the National grid.

The testing process, says Boet Uys, head of Escom's public relations department, is a lengthy, costly one that includes saturating the water passages, testing the turbines at various speeds and correcting vibrations and finally running them under load in both their generating and pumping modes.

Power generated by the Drakensberg station is not cheap, he says. The station is designed to generate power only during periods of peak demand. It is not a base load station.

"Its advantage lies in the fact that it can be put into the grid very quickly, unlike a thermal station which takes hours to put into the

Tutuka power station being built near Standerton in the Eastern Transvaal as a 1 800 Mw power station that can be expanded at a later date of 3 600 Mw

If a hydro-electric power station is built on the Umzimvubu River its capacity would be five times as much as the present of planned capacity of the Drakensberg pumped storage system, which is due to be fully commissioned next year.

The possibilities of building more nuclear power stations in South Africa, in addition to the Koeberg power station being built in the Cape, are also being investigated by Escom. Uys said that all fac-

tors affecting the generation of electricity, such as economics, the environment, peak loads and the development of technology are being investigated as well as the possibility of building nuclear power stations.

There is a strong lobby outside of Escom that has, for years, been advocating that Escom start building nuclear power stations.

Tony Petersen, chairman of Rand Mines, can, for all practical purposes, be claimed to be the leader of this line of thought.

He has on numerous occasions expressed his vigorous belief in nuclear power stations and that the whole world will, sooner than it thinks, have to switch to nuclear power. He made a spirited

plea for more nuclear power stations in South Africa when he reopened the revamped Harmony gold mine in the Free State last year.

More recently he repeated the plea when he condemned the anti-nuclear lobby in West Germany. On that occasion he claimed nuclear power stations did not pollute the atmosphere, as did thermal power stations, and that they did not constitute a radiation hazard. "You are exposed to more radiation if you sleep next to your wife in a double bed for a night than if you spend a whole day working in a well-managed nuclear power station."

He also said that if the ingredients were ever there for a nuclear explosion as the result of mismanagement of a power station, it existed at Three Mile Island, the American nuclear power station that recently had

to be closed down because of mismanagement.

"So well did the nuclear engineers do their work, and so advanced is nuclear technology in power-generation, that that power station did not explode, in spite of the most gross mismanagement imaginable," he said.

He believes that within the next decade Escom should ensure that every third or fourth power station if built is a nuclear power station.

Escom is, however, full committed for the present with seven major power stations either already being built or about to be built there is not another electricity facility in the Western world, with the possible exception of the one in France, that is building more



Machine under test . . . . cutting power cuts

### Taxonomy of Mankind

### III The Concept of Race and the

16

of survey a Europeans We 9361 Haddon C V and S Huxley  
ASHLEY MONTAGU

Basically then, Joki Stuurman was the driving force behind the building of the clinic, and not the Zenzele women who claim to be responsible for it. Nor can one say that the village itself is particularly integrated or progressive. A shearer started in 1974 with 50 members. It is not

# Algoa Bay talks on siting of nuclear plant

**PORT ELIZABETH** — The possible siting of a nuclear power station in Algoa Bay will be discussed by the Greater Algoa Bay Planning Authority when it meets on May 7.

The matter was discussed by the executive of the Co-ordinating Council for Nature Conservation in the Eastern Cape at a meeting earlier this year at which a representative of the authority was present.

It was subsequently discussed by the planning authority's technical committee.

A spokesman for the committee said Escom had made no direct approach to it. Escom approached the Co-ordinating Council for comments on possible sites along the coast from Port Alfred to the Tsitsikamma River.

The spokesman stressed that Escom's discussions with the

council centred on whether there were any land use or town planning objections to a site in Algoa Bay. Environmental and other considerations had not been discussed.

The co-ordinating council has stated that from an environmental point of view, the coast between Seal Point and the Tsitsikamma River is the least sensitive.

Asked why Escom had not approached the Port Elizabeth City Council, the commission's public relations officer, Mr Boet Uys, said no decision had yet been taken on the construction of a power station in the East Cape, or the Port Elizabeth area.

A spokesman for the Atomic Energy Board said yesterday that Escom had advised it several years ago that consideration was being given to the possibility of building a nuclear

power plant in the Eastern Cape.

However, as far as the board was aware, no specific plans for such a station had yet been made, nor had any potentially suitable site been identified.

Escom required a licence from the board to use a site for the purposes of a nuclear installation and would, if it decided to proceed further in this matter, seek approval from the board before selecting a site.

Asked about the minimum distance required between an urban area and a nuclear site, he said the suitability of any particular site from a safety point of view was dependent on many factors, including the size and type of plant proposed.

It was therefore "not meaningful" to talk of a minimum distance until all the relevant factors had been identified and assessed.

for its finish and size. Nobody was paid to help build it; it was all built by voluntary labour. People in the area say that this was due to Nombula's advertising and co-ordination. While I was staying in Abalima I noticed that even after extensive advertising Mr Nambula personally goes round and collects people before every important meeting. It was obvious that many people who did then come would not have come otherwise.

At Umlambo, where SAVS students were involved in building a clinic, it was mainly through the effort of one man, Joki Stuurman, that the project succeeded. He made sure that people came to build, acted as foreman on the site to co-ordinate who worked where and that time was productively spent. He organised that different people bring food every day so that the work parties function as *illima*. When the students had left he went on working on the building, often with just one or two men. If materials ran short he would go to Idorophu to ask that the Hlubi Tribal Office provide them.

After the clinic was built he told me that the people who said Umlambo was "progressive" and that the villagers were different from those in other places did not know or understand what had gone on. He said that while people do want a clinic they do not believe that this clinic will belong to them; he had to go to every house and teach people before they accepted this. Every morning before building started he would go to people's houses and ask them to come and build. There were several strong young men who came to build every day and who were by far the most hardworking people on the site. Apart from 2 or 3 scholars they were migrants on holiday for December. Stuurman said that it is only the migrants who understand about progress and development, and that the only time you can get anything done is over Christmas, the rest of the people only come to work parties so they can get drunk.

It turned out that 2 of the school pupils had been staying with him during the building. He said that otherwise they would not have been able to get food while they were working for nothing.

S.A. Industrial Week 21/4/81  
1850

Ellisras the main beneficiary of billion-rand Grootgeluk project

# BUSHVELD SPARKS BOOM

REMOTE Ellisras in the north-western Bushveld is set to ride high on the coat tails of a multi-million rand Iscor expansion programme and the sparking off of construction at Escom's R2-billion Matimba power station



In an exclusive interview with Industrial Week following the inauguration of the R368-million Grootgeluk opencast coal mine, and opening of a 116 km railway line linking Ellisras to Thabazimbi, Iscor's divisional general manager (mining) Mike Deats says additional pit equipment — mainly conveyors, crushing, screening and ancillary equipment — and housing for those managing these facilities will be needed

"It will cost tens of millions of rands and the equipment will be acquired between now and 1990. Over the same period coal production from the open pit will soon yield 1,8-million t of coking coal. The 3,5-million t of steam coal will be increased annually by 4-million t of steam coal," says Deats. Some time after the coking coal pit reaches its bottom sufficient area will be exposed to commence a second min-

sioning of Matimba in 1986

"The beneficiation plant, with a capacity of 3 000 t an hour, is one of the largest in the world," says Dr de Villiers

Grootgeluk would give rise to an important growth point in the Waterberg district, comprising the towns of Ellisras, Vaalwater and Nylostroom. Oil companies, mining houses and other industries have acquired surface mineral rights on about 150 farms in the district

Local businessmen and residents say they expect there will soon be additional industrial growth over and above what has been disclosed

"It's true that coal reserves are tremendous with very thick seams and high tonnages per hectare, but we are not interested in mining steam coal. So we would welcome exploitation of this variety by the private sector," says Dr Tommy Muller, chairman of Iscor.

But Dr de Villiers, Dr Andrews Treurnicht, MP for Waterberg, and Dr At Stander, joint managing director for Sasol Two and Sasol Three, all discount local speculation of a boom to the boom, especially where a Sasol Four is concerned. "There's no water in the area," says Dr Stander



This explosion dislodged 375 000 t of coal at the Grootgeluk opencast mine which has started the boom in the remote bushveld town of Ellisras

by an involve-  
1 groups in the

ously defined  
scribed as one  
manifested a set  
Paper attempts  
the degree of  
s. Since social  
—has been the  
maintenance of  
en, violent, or  
and those of  
priority which  
ey. The mode  
conflict have  
ter the cultural  
de with racial  
in priority in  
il and contem-

onent. As the  
institutions are  
ties nor in the  
r the direction  
al societies are  
ished doctoral  
n Bekker. The  
of Cape Town,

# Threat to fuel for Koeberg

Argus 22/4/81  
185

## Argus Bureau

WASHINGTON — Koeberg power station could be seriously affected by an apparent deadlock between South Africa and the United States over the supply of enriched nuclear fuel.

The deadlock is that, on one hand, Escom is contracted to supply material to Doe's Oak Ridge, Tennessee, processing plant by May 31 — or be liable to a penalty of between R13-million and R63-million.

On the other hand, even if South Africa meets its contract to supply uranium for enrichment, the US 1978 Nuclear Non-proliferation Act would prevent the export of the enriched fuel to Koeberg.

## SAFEGUARDS

Under the Act, no enriched uranium can be exported to a 'non-nuclear country' like South Africa unless that State maintains International Atomic Energy Agency safeguards in all of its peaceful nuclear activities.

South Africa applies the IAEA safeguards to Koeberg and the Safari research reactors.

But it has balked at accepting yet unspecified safeguards for its nuclear fuel enrichment pilot plant — for fear of disclosing details of the secret enrichment process.

As things stand, if Escom does not supply the

## KOEBERG under construction.

feedsotck in time, it is liable to severe penalties.

If it does, it will not be able to use enriched uranium worth about R48-million.

Efforts are being made to break the deadlock.

However, the State Department confirmed today

(Continued on Page 3, col 1)

of all personnel serving rural interests of rural communities to s and join hands whether they be conserved and to amalgamate their dated body with one co-ordinated nces everything about the rural n only reinforce feelings of and inferiority. This is not is the universal lot of the you are a villager how everyone in us. When you (the users) so nstigated to form goes anywhere he gets it. He stands dumb and traiple on us" (10)

personnel, shopkeepers, civil servants and Church workers too have all contributed intentionally or unintentionally to keeping the poor ensnared in

Argus 22/4/81  
Koeberg 185

(Continued from page 1)

that 'the longstanding position of the United States Government has been, and continues to be, that we would be prepared to supply nuclear reactor fuel to South Africa if that country adhered to the Non-Proliferation Treaty and accepted IAEA safeguards on all its nuclear facilities'.

Which means that the Reagan administration has not departed from the Carter administration's policy in respect of nuclear 'co-operation' with South Africa.

Today's statement makes it clear that American action on applications for licensing exports of enriched uranium for Koeberg continues to depend on whether South Africa signs the NPT and accepts the IAEA safeguards.

Quite clearly, one of the objectives of the exercise is to pressure South Africa into signing the NPT and accepting the International Agency safeguards for all its nuclear installations — including the enrichment pilot plant.

In fact, no specific safeguards exist which could be applied to the enrichment pilot plant and South Africa has argued that it cannot agree to, in effect, buying a safeguard 'pig in a poke'.

The legislation which created this dilemma for South Africa was applied by the Carter administration. But what about the Reagan men?

## PEACEFUL

We asked the State Department under what conditions the United States would be willing to supply nuclear fuel to South Africa.

We were told 'Specifically we sought (South African) agreement to adhere to the NPT to accept safeguards on all their nuclear facilities.'

'We indicated to South Africa that resumption of peaceful nuclear relations with the US would depend on their co-operation.'

The spokesman added. 'We are now engaged in serious active diplomatic efforts towards that goal.'

Asked to comment on this today, the South African Minister of Mineral and Energy Affairs, Mr F W de Klerk said 'Negotiations are in process and there is discussion between contracting parties. Therefore, I have no comment to give.'

So long as no meaningful programme is launched at community level to combat malnutrition it can only be anticipated that the problem is going to be generated on even a wider scale. /In the rising cost of living

(23)

Community development is seen as many different things by many different people but perhaps Richard W. Poston's definition describes best what is needed to combat malnutrition

(24)

to some extent or at least cover the widespread

as it would require a complete about turn on policy and planning. It would require thorough re-educat-

Staffing:

- 1) Senior Medical Officer of Health - based at Headquarters - Administrative leader of preventive service.
- 2) Two Senior Medical Officers in charge of T.B. and Malaria/Bilharzia Control units, respectively.
- 3) Two Medical Officers doing Mother Child Health and Family Planning Services.

Bilharzia and Malaria Control Units

The Malaria Control Programme was started in 1945 with the advent of DDT and also the use of BHC as residual insecticides against vector mosquitoes *A funestus* and *A gambiae*. The residual spraying (Deltamethrin dispensable powder) in all homesteads in the

# SA can go it alone in N-fuel

Argus 23/4/85

**Argus Correspondent**

**JOHANNESBURG.** — South Africa will eventually be able to supply its own nuclear fuel for Koeberg power station.

This is clear from undertakings given by Dr Ampie Roux, chairman of Uranium Enrichment Corporation, and Escom, which will control the Koeberg plant.

Yesterday the Argus Washington correspondent, John d'Oliveira, reported that South Africa was deadlocked with the United States over the supply of enriched uranium for Koeberg

The deadlock is on a 1974 contract signed with the United States Department of Energy. In terms of this contract South Africa was to supply uranium to the United States for enrichment and in return was to get enriched fuel for Koeberg.

But in terms of the United States 1978 Nuclear Non-proliferation Act no enriched uranium can be exported to South Africa, a 'non-nuclear nation.'

**NEGOTIATIONS**

If South Africa's negotiations for enriched uranium from the United States broke down, it could produce its own fuel, Dr Roux told the SABC some time ago

But negotiations between South Africa and the United States over the contract are continuing, the Minister of Mineral and Energy Affairs, Mr F W de Klerk, said yesterday.

The United States has adopted the standpoint that South Africa must adhere to the non-proliferation treaty — obviously a move to get South Africa to sign the treaty and accept the international agency safeguards for all its nuclear installations.

South Africa accepts the principle of the safeguards, but banks at revealing details of her secret enrichment process

determine as to whether they are indigenous or imported.

Blood film examinations, mosquito identification, and most of the technical work involved in the Malaria Control Unit is done at the Health Office.

The Bilharzia Control Unit is mainly concerned with the spraying of rivers, canals, streams, and dams where vector snails Physoposis and Biomphalaria are found.

In rural areas the molluscicide Bayluscide is used for spraying whilst on the sugar estates Molluscicide Frescon is used and is

bought by the companies.

The treatment of positive cases of bilharzia is by the use of Biarcil which is done mainly at the Health Office under the supervision of the medical officer.

Health Education

Health Education is an important activity of Public Health Centres and Clinics. The Public Health Nursing Sister has been in charge of health education until August 1977 when the W.H.O. Health Education Specialist arrived in the country to create a Health Education Unit under the Ministry of Health.

This Unit under the Senior Medical Officer of Health is charged with developing and strengthening the health education services in the country by providing educational support to programmes

for enrolled nurses, Public Health orientation refresher courses for hospital nurses and in the training of Health Assistants.

In collaboration with Public Health and P.B.F.I. a seminar on family health was held for 35 public health nurses. In collaboration with the Home Economics Department of the Ministry of Agriculture and the University College of Botswana and Swaziland a workshop on planning and production of family life educational teaching aids was held for 38 participants. A week-long workshop on educational photography was held and two film strips on MCH/FP and on the use of latrines were developed.

59 schools were surveyed to find out the status of health education instruction in primary schools. The Unit was able to teach 300 teachers at the teacher training centre.

The health education unit continues to work very closely with the Curriculum Unit of the Ministry of Education.

In an attempt to co-ordinate the efforts of different agencies involved with schools, the establishment of a National School

By SIMON WILLSON  
Industrial Reporter

SPANISH contract workers who downed tools at Secunda on Wednesday met at a Hill-brow hotel yesterday, demanding better pay and conditions from the Madrid-based manpower company which employs them.

The Spanish company, Mannesmann Industria Iberica, has 111 Spaniards under six-month contracts at the Sasol I and Sasol II plants at Secunda.

Earlier this week the men demanded better pay and conditions from Mannesmann, and claimed at yesterday's meeting that Mannesmann had refused to listen to their grievances.

They claimed Mannesmann was withholding further pay and the men's airline tickets to return to Spain until the workers withdrew their demands.

The Mannesmann representative at the meeting, Mr Juan

ROM 24/4/81  
**Spanish Secunda  
workers strike  
over pay demand**

Buenestado, refused to answer questions from the Press, saying the matter was "too important" to discuss.

About 60 of the men are refusing to return to work and have resolved to stay at the hotel until either their work demands are met or they are repatriated to Spain.

Amid emotional outbursts, workers claimed yesterday they had been forcibly removed from Secunda by police acting at the request of the Mannesmann management.

The workers called in the counsellor of the Spanish embassy in Pretoria, Mr Rafael Linage, to mediate in the dispute which, they said, did not involve Sasol or the two plants' chief subcontractor, Fluor.

They asked him to arrange repatriation of the workers, but he said he could only refer their dispute to the Spanish ambassador, who was temporarily out of the country.

One of the workers, Mr Juan Castro, 35, a pipe-fitter from Madrid, came to work at Se-

cunda after doing similar contract work in Algeria and Libya.

He said yesterday he would definitely not return to work at Sasol unless the pay and conditions were improved, and would rather return to Spain.

At yesterday's three-hour meeting Mr Buenestado told the workers that unless they signed an agreement to withdraw their demands and return to work, they would forfeit any further pay and their airline tickets to Spain.

After a heated debate the workers refused to sign and the meeting broke up. It is expected to be reconvened today.

A police spokesman last night denied police had "forcibly removed" the workers from Secunda.

Five policemen, under the command of a police captain, stood by at the negotiations but had not interfered at all.

There is only one strike at the moment in the country. The only industrial strike is in the coal mines.

Committee was formed by the Union. The striking coalminers have already decided to go back to work. The strike in the coal mines is the only one in the country at the moment. The other strikes are in the transport and public services.

At the moment there are no strikes in the country. The only industrial strike is in the coal mines. The strike in the coal mines is the only one in the country at the moment.

In 1967 a Public Health Centre was started at the southern part of the country followed by one at the Macleayfield, and they have been increasing since at a rate of one every year. The Public Health Centres are essential services were built at the Government hospital.

- 1) Public Health Centres
- 2) Health Centres
- 3) Health Centres
- 4) Health Centres
- 5) Health Centres
- 6) Health Centres
- 7) Health Centres
- 8) Health Centres
- 9) Health Centres
- 10) Health Centres

- 1) National College of Public Health Services, Pretoria
- 2) Public Health Nursing Centre - Mrs. Verity Yabron (Junior)

Health Centres are essential services were built at the Government hospital. The Public Health Centres are essential services were built at the Government hospital.

Staffing for the Public Health Centres is as follows:

Health Centre	No. of Nurses	No. of Medical Supervisors
1	9	1
2	3	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1

# Use less power

Augus 28/4/81 (185)

## -Escom plea

Municipal Reporter

SECTIONS of towns and villages in the Cape are likely to be blacked out without warning as Escom struggles to meet the country's ever-increasing energy demands and is forced to shed power loads during peak periods of demand.

But Cape Town and the smaller surrounding municipalities which it supplies with power, are unlikely to be affected by load shedding.

Hardest hit are likely to be domestic consumers in small towns, as most local authorities will cut power to business and industrial areas only as a last resort.

Bigger municipalities such as Cape Town and Port Elizabeth have sophisticated automatic load shedding equipment and emergency stand-by power generating units.

Earlier this year Escom appealed to consumers to reduce electricity consumption during peak

periods — between 8 am and noon and between 5 and 9 pm — and warned that consumer demands were reaching levels which might be difficult to meet.

Escom expects demand on its national grid system to reach 15 000 megawatts between May and September.

Power consumption is rising in South Africa by an average of 9,3 percent a year in contrast to most overseas countries where the demand is dropping.

This is why consumers will be asked to voluntarily shed loads during peak periods.

Cape Town's City Electrical Engineer, Mr D C Palser, said, the city's automatic load shedding system would take care of any Escom request to shed peak loads.

'If necessary, our gas turbine emergency stand-by system will make up for the power we shed.

'If Escom wants us to cut back by 40 megawatts, our stand-by system could easily manage this amount.'

15/.....

students being allowed into medical school? It would be interesting to have information on this.

Let us consider the supply side further. If we take a very cynical and self-serving view of doctors we would expect that in addition to restricting the supply of their own services, they would attempt to segment the market and to reduce returns to substitute factors<sup>28</sup>. With few doctors, their wages will be high. Legal constraints prevent nurses from doing work set aside for doctors. And anyway if the wages of nurses are kept down there will be a shortage of competent nurses,<sup>29</sup> increasing further the demand (and so the earnings) of doctors. Research is needed in this area. It cannot be proved that doctors have acted in this immoral fashion, but it can at least be suggested that market forces have behaved very kindly to the medical profession.

The doctor is the joint supplier of a variety of scarce commodities<sup>30</sup>. The supply of doctors is relatively restricted and substitute services are strictly limited. Quacks are generally illegal. One of the few substitutes available is patent medicine. Consumption in this areas has risen rapidly for reasons which an economist finds easy to understand. If the doctor is expensive (let us be more specific - the cash price may be modest but congestion costs may be high; he may be off-hand and fail to give satisfactory service) we resort to the chemist. Three varieties of pills may do the trick. If that doesn't work we double the dosage. "The (chemist) is the physician of the poor in all cases, and of the rich when the distress or danger is not very great"<sup>31</sup>.

#### IV Conclusion

It is clear that the market for medicine does however have particular characteristics. On the supply side the availability of medical services is restricted. On the consumption side, demand tends to be relatively price inelastic. This emphasizes the fact that incomes differ (i.e., it emphasizes income inequalities) but the fundamental problem is not

16/.....

one of poverty since even affluent societies experience difficulties in allocating medical care. The problem cannot be approached from an equity or fairness standpoint, since in a world of scarcity this criterion has little meaning.

# Escom peers into darkness of SA's winter

Argus 29/4/81

85

Argus Correspondent  
MARITZBURG. — Suburbs in cities throughout South Africa are likely to be plunged into darkness without warning as Escom battles to meet the country's energy demand during the winter.  
A news bulletin from Escom in February warned that large-scale consumers would be asked to 'voluntarily' shed loads when required during peak-demand periods, and Maritzburg's electrical engineer, Mr Gordon Davies, has confirmed that several such requests have been received recently.

This load-shedding has amounted to between 20 and 40 percent of the city's total consumption and had resulted in predominantly domestic areas

being without power for an hour or two, he said

Escom gives the peak consumption times as between 8 am and noon and from 5 pm to 9 pm

Mr Davies said it was virtually impossible to switch out any of the five major sub-stations without affecting industrial or business consumers, so it had been necessary to send staff to domestic areas, where they remained until power could be restored

Mr E Wohlberg, regional manager of Escom, confirmed that the demand problems were not confined to Natal.

'It's very difficult to state how often load-shed-

ding will happen, but it's definitely going to happen, because of reserve capacity

'Also there are teething problems on new generating units,' said Mr Wohlberg.

A spokesman for Escom in Johannesburg said the situation arose after the depressed years of the mid-70s, when money was generally tight.

'We have about 18 months of fairly tight schedule ahead of us,' he said

● Cape Town and the smaller surrounding municipalities are unlikely to be affected, the City Electrical Engineer, Mr D C Palser, said yesterday.

as between different

health uses?

(ii) what resources should be allocated to health care in general?

The free market provides one particular distribution. There is no

reason to suppose that this is the "best" (though it may be the most efficient).



KDM  
1/5/81  
185  
181

# Probe into chimney collapse

Staff Reporter

AN OPEN inquiry into last year's Matla power station chimney collapse, which killed two people, will be held next week.

Mr Thomas Leff, chief inspector for the Witwatersrand and Vaal Triangle for the Department of Manpower Utilisation, said a confidential report would be made to the Minister and the Attorney-General.

The inquiry will be held on Tuesday at 9am at the small function hall, Escom recreation club, Kriel Township, and will be conducted by Mr David Pim, Chief Inspector of machinery for the Benoni area.

He will hear sworn evidence from relevant witnesses, and will table documents.

Mr Leff said the investigation was 'purely to determine whether there had been a contravention of the Factories Act'.

On-site inspections have already been conducted.

The Attorney-General would decide on the basis of the submitted evidence whether a culpable homicide charge should be laid, Mr Leff said.

In August last year a flue inside a 275m chimney collapsed, killing two men and injuring 28.

One man's body was recovered from under tons of rubble, nearly two months after the accident.

The chimney was designed by Ove Arup and Partners, and is being built by Futurus Construction. Its design is independently checked by Brunette, Kruger and Stoffberg, a firm of consulting engineers.

# We can supply the fuel, but who will remove the waste?

5/5/81 by BOB MOLOY  
880185

SOUTH AFRICA has the technical knowhow to supply the country's first nuclear power station with enriched uranium fuel at a competitive price in spite of threatened embargoes by overseas sources.

But nobody is saying when this will happen or who will carry the "hot potato" of wastes from the spent fuel.

That's the gist of a statement given to the SABIC at the weekend by Dr. Ample Roux, chairman of the Uranium Enrichment Corporation (Ucor), who made it clear that South Africa could go it alone if necessary and produce the 50 tons of

enriched uranium required annually to keep Koeberg operating.

He added that this could be achieved economically as soon as Ucor's production plant was completed. The plant could also supply the Atomic Energy Board's experimental reactor at Pelindaba. He gave no hint of a completion date and was not available for comment yesterday on where and how the spent wastes would be stored.

Mr. Boet Uys, Escom public relations officer, yesterday gave a blanket no comment to questions posed by the Cape Times on cost and availability of the fuel in time for the proposed commissioning of Koeberg

in December 1982.

At present South Africa is deadlocked with the United States in a Catch 22 situation over a 1974 contract with the US Department of Energy which binds the Republic to supply the US with raw uranium in return for enriched fuel. The catch arises from the terms of the US Non-clear Non-Proliferation Act of 1978 which says that no enriched uranium can be exported to a "non-nuclear nation" such as South Africa.

The Republic can only become acceptable as a receiver of enriched fuel if it applies International Atomic Energy Agency (IAEA) safeguards to all peaceful nuclear

activities. These safeguards are already applied to both Koeberg and the Pelindaba research reactor — but the as yet unspecified safeguards for the nuclear fuel plant have not been accepted as this might involve disclosure of the secret enrichment process.

According to a Washington source, the contract requires South Africa to supply material to a processing plant at Doe's Oak Ridge, Tennessee, by May 31 or face penalties of up to R63m. The US State Department has gone on record as saying that it would supply enriched fuel to South Africa if that country signs the Non-Proliferation Treaty

and accepts full-scope IAEA safeguards on all its nuclear facilities.

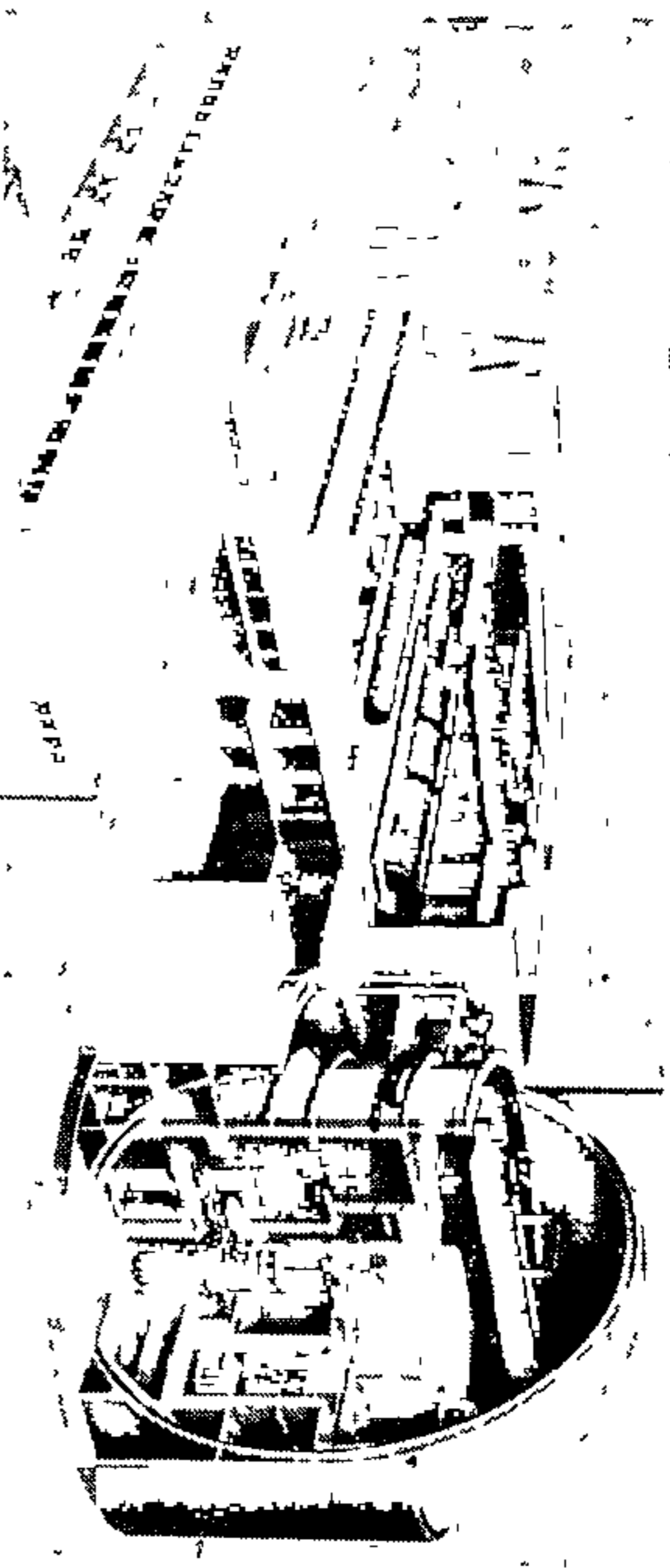
The irony is that no specific safeguards have yet been drawn up for South Africa's fuel enrichment plants. The Republic's attitude is that until it is placed fully in the picture it cannot accept the position blindfold. The enrichment process is a valuable commercial asset and could be a major profit-earner for any competing foreign company.

More importantly, from the point of view of conservationists, it is what will happen to the residual wastes if boycotts or embargoes force reprocessing of the spent fuel rods in

the Republic.

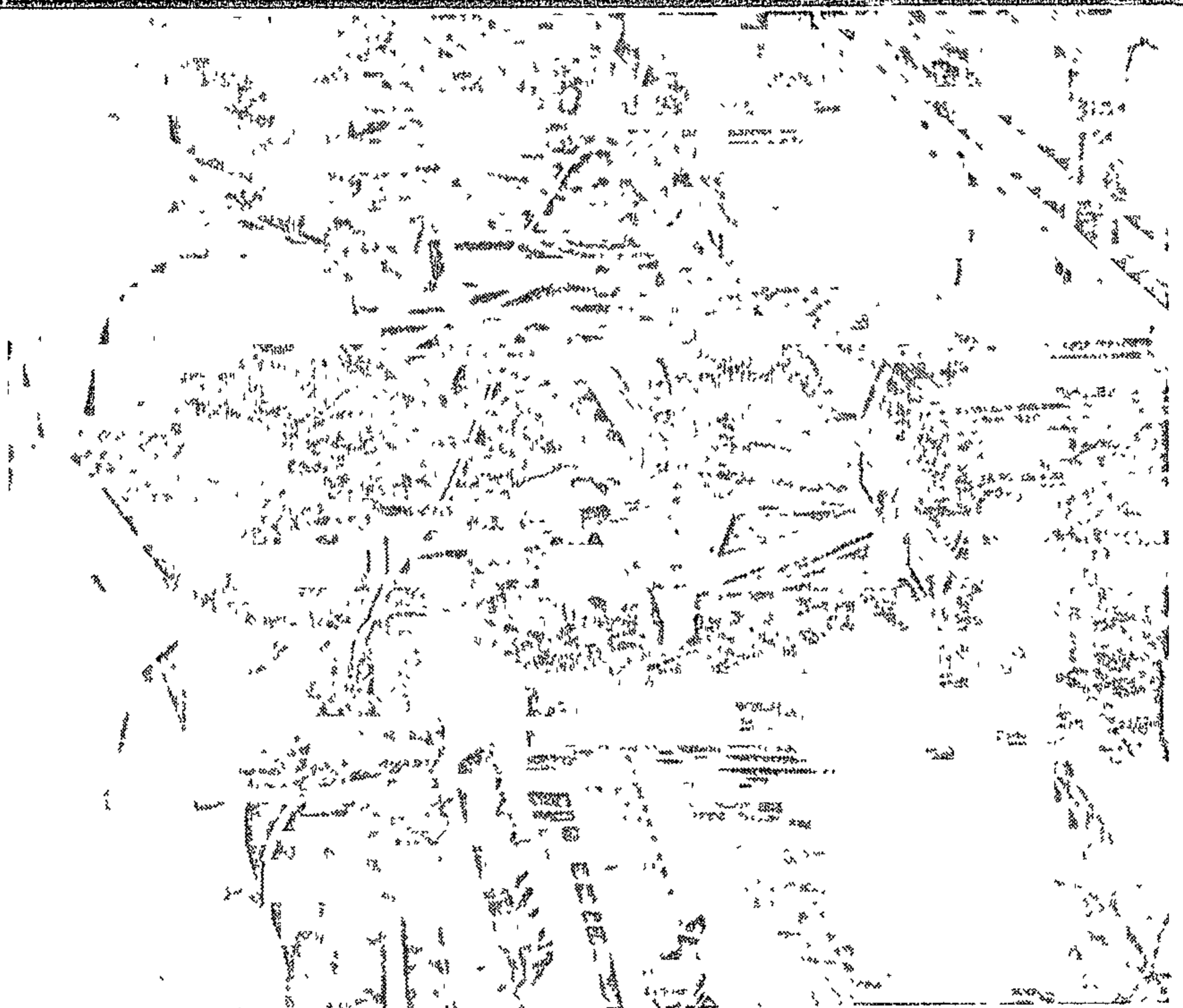
● In a report supplied to the Cape Town City Council in 1979 Escom said that it had contracts for enriched uranium covering the initial fuel loading and five reloadings of the two reactors.

The station would produce 11 tonnes of waste annually which, when placed in radiation proof containers, would weigh about 350 tonnes. All of this would be disposed of in South Africa. Spent fuel elements (which contain high-level wastes) would be stored underwater on site until sent for reprocessing.



This diagram shows a typical nuclear power station layout. The reactor core lies in the upright cylindrical object, centre of the dome. This generates heat to power steam turbines, left of the dome. The turbines turn giant alternators, producing electrical energy.

FINANCE



WORKERS on one of the assembly lines at SATV's Dimbaza factory

# SATV SETS UP IN CISKEI

MR Keith L Mennell has been appointed group products manager of Langeberg Co-operative Ltd

MR Donald Swanepoel has been appointed director of the Trust Building Society

SATV, the East London-based manufacturers of Telefunken television sets and Pioneer hi-fi equipment which is part of the Federale Volksbelegging group has expanded its manufacturing operation in the Ciskei

In conjunction with the Ciskeian National Development Corporation, the company has set up a R45 000 sub-assembly plant at Dimbaza

The Ciskei company, operating as Crama Industries came on stream last August and provided 140 new job opportunities

**SPACE PROBLEM**

Plans had already been approved for a R100 000 expansion programme this year to meet new product demands, said Mr Winfrid Winkler general manager

Mr Winkler said, having been pressed for space at the East London factory,

the Ciskei offered the best option for expansion

With close cooperation from the CNDC officials, the new factory in Dimbaza was completed in the shortest possible time, he added

The employees are mostly matriculated women

'Assembling intricate electrical components, some of which are minute items, as proven worldwide, needs the fine delicate touch of a woman's fingers,' said Mr Winkler

By the end of the year the company expects to have some 300 people employed. The factory is highly labour-intensive

**PORTABLES**

The company is also introducing a range of six new portable radios for I.M and F.M/AM.

These include multiband radios, recording units

with a stereo recorder at the top of the line. The stereo model will retail for about R140, with other portable models retailing for R20 or more

Mr Winkler said there was a big promising market in Southern Africa for portable radios as the country imported more than a million units

The Ciskei manufactured units would be very competitive, price- and quality-wise

By Audrey d'Angelo  
IN CERTAIN conditions the smoke from the Table Bay power station would constitute a health hazard because of heavy concentrations of sulphur dioxide in some areas, Professor R. K. Dutkiewicz, said today.

Professor Dutkiewicz, professor of mechanical engineering and energy research at the University of Cape Town whose report on air pollution in Cape Town is being considered by the City Council, said that whether or not the Table Bay power station was a health hazard was no clear-cut issue.

#### EMERGENCY

The professor was commenting on a dispute which has arisen between Cape Town's Medical Officer of Health, Dr. J. Coogan, and the city's Electrical Engineer, Mr. Denis Palser.

Dr. Coogan feels strongly that the power station is a health hazard and in a report to the Amenities and Health Committee he advised that it should be operated only in conditions of dire emergency.

He said fumes from the oil fired power station were 400 times more toxic than those from a coal fired power station.

But the city's Electrical Engineer, Mr. Palser, thinks there has been an unjustifiable and overly emotive reaction to the operation of the Table Bay power station.

Pointing out that there was no intention to use it full time, he told the committee it would be used only to prevent power cuts or to avoid the necessity of buying additional power from Eskom 'at considerable cost, possibly running into millions of rands'.

He added that whenever the station was operated, due account would be taken of public health and safety.

Asked to comment today Professor Dutkiewicz said that in certain weather when pollution from the

power station would be dispersed by wind, it would be safe to operate it.

The only way for the council to find out if it was a health hazard at any given time would be to run it and measure the extent of pollution.

#### EXHAUST FUMES

Mr. Palser in his report, said the consultants stated that sulphur dioxide was not a major air pollutant in Cape Town and the exhaust fumes from motor

vehicles were a greater health hazard.

Dr. Coogan, on the other hand, said that for most of the time when pollution was being measured, the Table Bay power station had not been in use and, furthermore, the consultants had been informed that it would be phased out.

Professor Dutkiewicz said his investigation had not taken into account whether or not the power station would be phased out but had merely measured sulphur dioxide levels in the air.

# Power station smoke may be a health hazard

185  
APR 6/5/81

# MoH calls for demolition of power station

Staff Reporter

THE City medical officer of health, Dr R J Coogan, has come out strongly against any move to reopen the Table Bay power station "except in circumstances so grave that all normal peacetime considerations have to be foregone"

In a 13-page report to the Amenities and Health Committee this week on the recently-tabled air-pollution survey of Greater Cape Town, Dr Coogan called for demolition of the station and its replacement by a gas turbine

It had been overtaken by 40 years of urban growth, was surrounded by the air intakes of high-rise buildings and produced "a smoke 400 percent more toxic" than a coal-burning installation, said Dr Coogan

His views clash with those of the City Electrical Engineer, Mr D C Palser, who in his report claimed "an unjustifiably and overly emotive reaction to operation of the Table Bay power station" The station was not the only air-pollution danger nor was it the main one and should be retained for emergency use, Mr Palser said

Asked to comment on this, Dr Coogan told the Cape Times it was fallacious to argue that because sulphur-dioxide levels in

the City had fallen, the station could be safely operated

"The real effect of running a heavy fuel oil-burning station in a built-up area is that the toxic gases can fall in the form of a plume over limited districts at a time, causing toxic levels far above the safety levels mentioned," Dr Coogan said

## Chest conditions

Patients suffering from chest conditions such as bronchitis, asthma, heart and other disorders could suffer severely, and there was also the affect on eyes, skin, mucous membranes and clothing damage

"I would rather put it that callous and cynical indifference to the probable effects on people is more likely to lead to an emotive response from members of the public who will be affected"

In a point-by-point rejection

→ → → →  
To page 2

A

CT 19/1 1850 5/8  
6/5  
A  
From page 1

of arguments for retention of the station, Dr Coogan said

- It was "deliberately untrue" to say there was only occasional emission of black smoke for a few minutes when the station was run up from cold. Observation by air pollution control staff found that black smoke was emitted "for almost three-quarters of the entire period"

- It was misleading to infer that white smoke was less objectionable, as it was then that emission of sulphur dioxide and all other products of heavy fuel oil combustion were at their most concentrated

- It was a "red herring" for the Electrical Engineer to say that psmog (photochemical smog) was the greater health hazard for two reasons — the extent of psmog had yet to be investigated, thus no conclusions could be drawn at this stage, and while elements of psmog were produced by cars, some were also produced "in great volume and in high concentrations" in the plume of a heavy fuel oil station such as Table Bay

- The survey showed that present production of sulphur dioxide from all sources in Cape Town was about 40 tons a day. The proposal to run the Table Bay station at 49 tons a day meant that the City Council would be causing more pollution in the central area of the City than all other sources combined

- There were two gas turbines at Athlone and one on the Foreshore. Escom also had three gas turbines in Cape Town at Acacia Park. Thus, Cape Town's potential contribution of emergency generating plant to any shortage on the national grid was "very substantial" without the need to operate Table Bay at all

- The Electrical Engineer's report stated that an additive was injected along with the fuel oil to reduce sulphur-dioxide emissions. Consultation with "top management" of Shell and Caltex had confirmed that there was no additive which could reduce the sulphur content of heavy fuel oil

- The licence for this station was due to expire in 1983. "I recommend the City Council give immediate consideration to the Electrical Engineer's proposal for a third gas turbine. Table Bay power station could then be demolished"

# 'Bars omitted from Matla chimney'

By CHRIS MARAIS

VARIOUS metal bars and spot welding work had been omitted from concrete supports holding the brickwork lining of Matla Power Station's "death flue", a spokesman for the designers, Messrs Ove Arup and Partners, said yesterday

"But" said Mr Clifford MacMillan, Ove Arup director, subsequent tests carried out showed that there was still more than adequate strength and ductility in the corbels (concrete supports) even with this bar missing"

Mr MacMillan was giving evidence at the Department of Manpower Utilisation's court of inquiry at Kriel in the Eastern Transvaal yesterday. The inquiry is trying to establish whether last August's disaster at Matla — in which two people were killed and seven injured — was caused by some factor which infringed any part of the Factories Act

A civil engineer's preliminary report had stated earlier that the missing metal work in the corbels could have contributed to the collapse of Flue No 6 of the 275m high Chimney 2

The engineer, Dr Konstandt Brunette, also stated that Flue No 6 had been "pinched" at three strategically placed positions at mid-slab due to a construction error

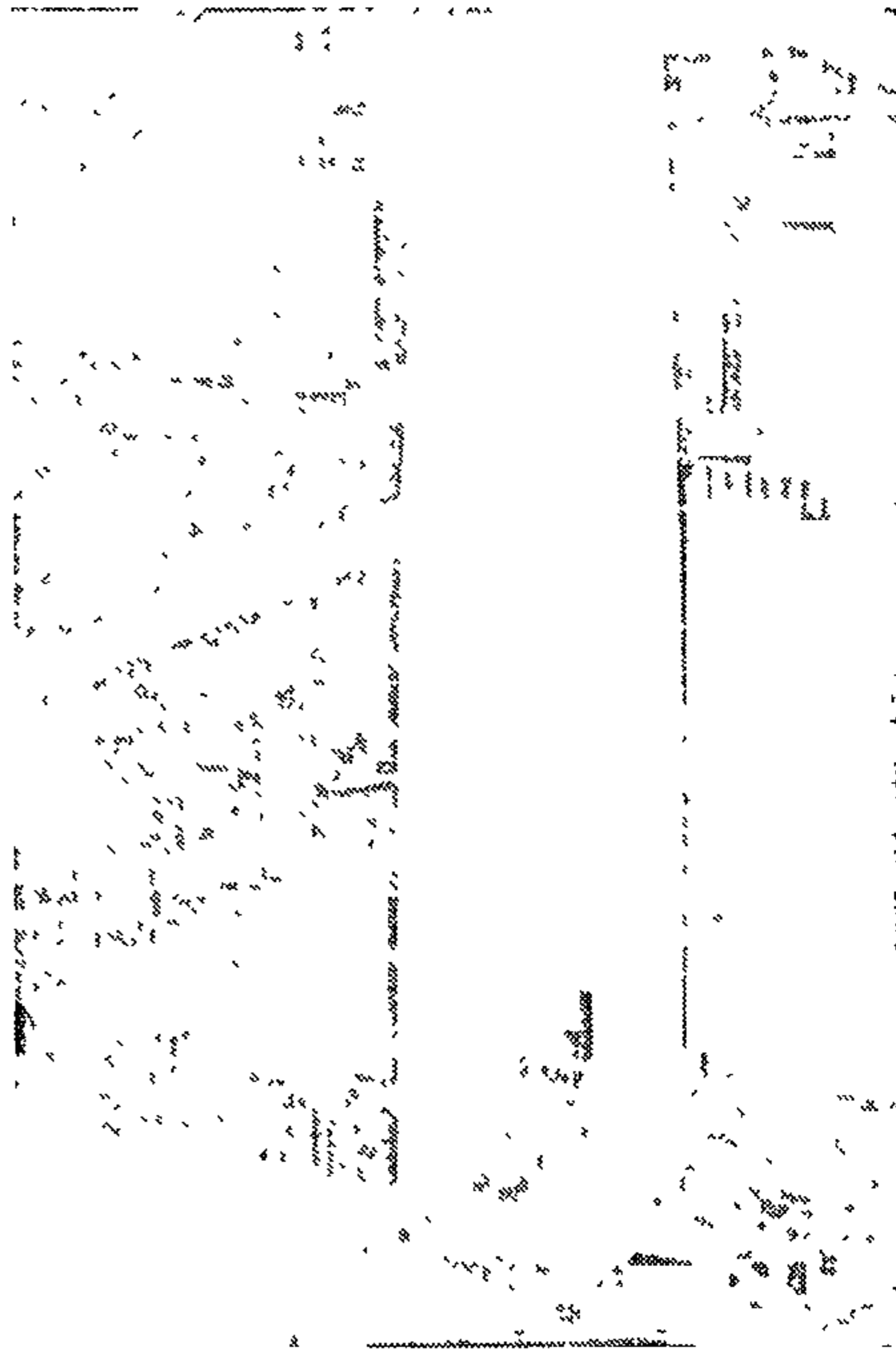
"This defect was known to the site personnel but they attached minor importance to this — the designers also considered it to be of minor significance," Dr Brunette had said

"The pinching has been raised as a contributor to increasing stresses in Flue No 6," said Mr MacMillan. "We disagree, and believe that later evidence contradicts the opinion that significant pinching existed"

"At the time of Dr Brunette's report, verbal evidence was that the bearings of No 4 and 5 flues were creaking at mid-slab, and those of No 6 not. This was interpreted to mean that the Flue No 6 bearings were not free to move because of the pinching"

"Subsequently, during high winds, I was on mid-slab when creaking near Flue No 5 was heard. The creaking was positively traced to a concrete defect rubbing against Flue No 5"

"The creaking is therefore



Matla Power Station's Chimney No 2 showing the collapsed flue. This picture was taken by the "Mail" hours after the collapse last year

not associated with pinching and not with bearings moving free. There would thus seem to be no evidence to suggest that any pinching of Flue No 6 occurred"

Mr "Gerry" O'Leary, site agent for the builders — Futurus Construction — said he had taken visitors to the top of the chimney hours before the flue collapsed at 12.45pm on August 27 last year

"My goodness!" exclaimed Mr David Pym, chairman of the enquiry

"I never detected anything suspicious at that stage," said Mr O'Leary

The Matla site is run by Eskom. Ove Arup did the design of Chimney No 2. Futurus, on contract from Eskom, built the chimney

Earlier evidence from Dr Brunette's preliminary report suggested that there may have been faulty mixes of cement to slag in some parts of the flue that collapsed

"My understanding of the contract document is that it is quite clearly the contractor's duty to keep records on all tests of concrete carried out on site," said Mr MacMillan

"The responsibility for providing concrete without defects and in accordance with the specifications was clearly the contractor's in terms of the contract," Mr MacMillan said. "It is not possible to say that any one, however experienced, would necessarily have identified the defects of a hidden nature"

# 'Bars omitted from Matla chimney'

By CHRIS MARAIS

VARIOUS metal bars and spot welding work had been omitted from concrete supports holding the brickwork lining of Matla Power Station's "death flue", a spokesman for the designers, Messrs Ove Arup and Partners, said yesterday

"But," said Mr Clifford MacMillan, Ove Arup director, "subsequent tests carried out showed that there was still more than adequate strength and ductility in the corbels (concrete supports) even with this bar missing"

Mr MacMillan was giving evidence at the Department of Manpower Utilisation's court of inquiry at Kriel in the Eastern Transvaal yesterday. The inquiry is trying to establish whether last August's disaster at Matla — in which two people were killed and seven injured — was caused by some factor which infringed any part of the Factories Act

A civil engineer's preliminary report had stated earlier that the missing metal work in the corbels could have contributed to the collapse of Flue No 6 of the 275m high Chimney 2

The engineer, Dr Konstandt Brunette, also stated that Flue No 6 had been "pinched" at three strategically placed positions at mid-slab due to a construction error

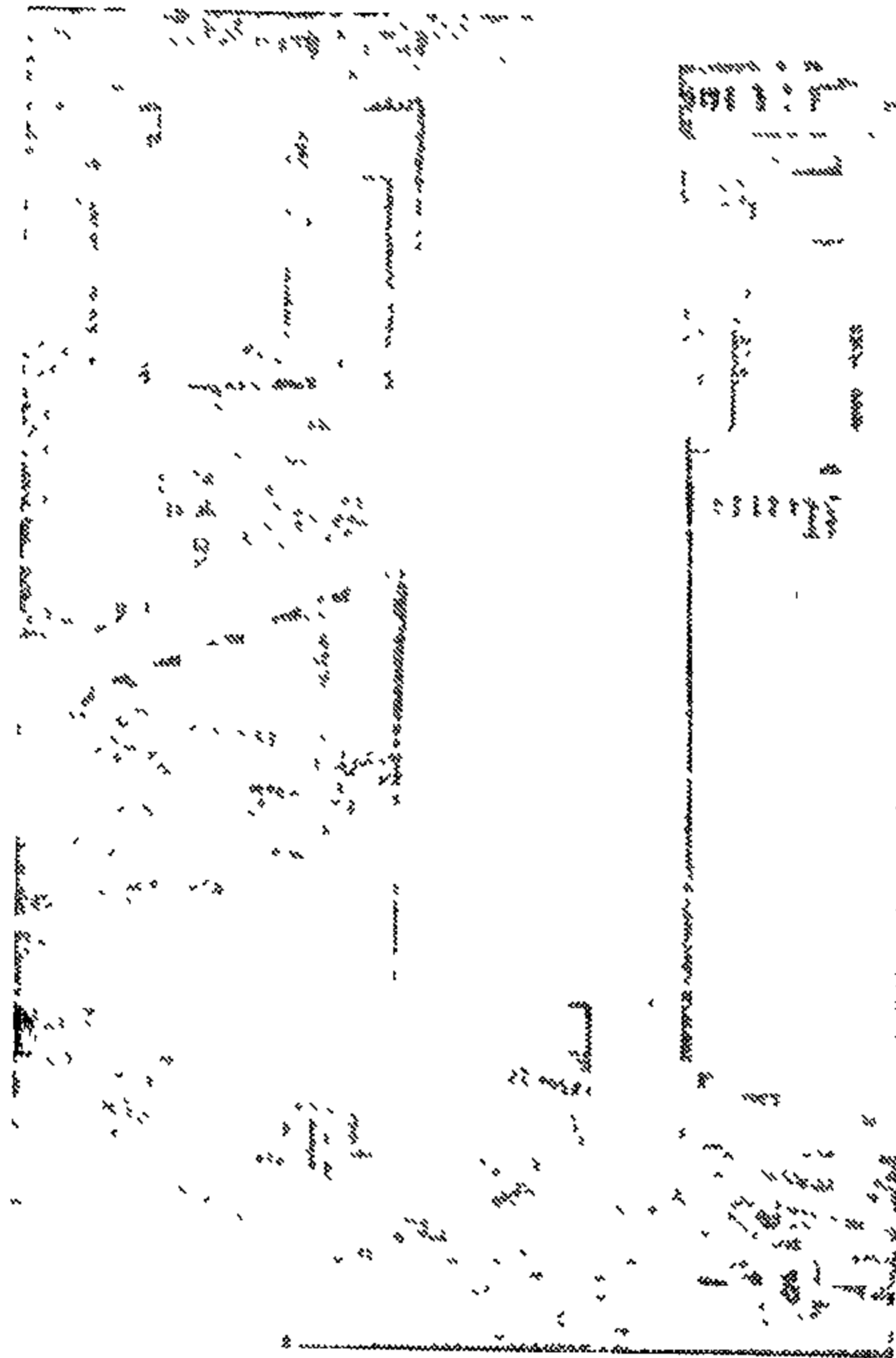
"This defect was known to the site personnel but they attached minor importance to this — the designers also considered it to be of minor significance," Dr Brunette had said

"The pinching has been raised as a contributor to increasing stresses in Flue No 6," said Mr MacMillan. "We disagree, and believe that later evidence contradicts the opinion that significant pinching existed"

"At the time of Dr Brunette's report, verbal evidence was that the bearings of No 4 and 5 flues were creaking at mid-slab, and those of No 6 not. This was interpreted to mean that the Flue No 6 bearings were not free to move because of the pinching"

"Subsequently, during high winds, I was on mid-slab when creaking near Flue No 5 was heard. The creaking was positively traced to a concrete defect rubbing against Flue No 5"

"The creaking is therefore



Matla Power Station's Chimney No 2, showing the collapsed flue. This picture was taken by the "Mail" hours after the collapse last year

not associated with pinching and not with bearings moving free. There would thus seem to be no evidence to suggest that any pinching of Flue No 6 occurred"

Mr "Gerry" O'Leary, site agent for the builders — Futurus Construction — said he had taken visitors to the top of the chimney hours before the flue collapsed at 12.45pm on August 27 last year

"My goodness!" exclaimed Mr David Pym, chairman of the enquiry

"I never detected anything suspicious at that stage," said Mr O'Leary

The Matla site is run by Escom. Ove Arup did the design of Chimney No 2. Futurus, on contract from Escom, built the chimney

Earlier evidence from Dr Brunette's preliminary report suggested that there may have been faulty mixes of cement to slag in some parts of the flue that collapsed

"My understanding of the contract document is that it is quite clearly the contractor's duty to keep records on all tests of concrete carried out on site," said Mr MacMillan

"The responsibility for providing concrete without defects and in accordance with the specifications was clearly the contractor's in terms of the contract," Mr MacMillan said. "It is not possible to say that any one, however experienced, would necessarily have identified the defects of a hidden nature"

ORDER FORM

Order Form

For publications obtainable from the Centre for Intergroup Studies, c/o University of Cape Town, Rondebosch, Republic of South Africa, 7700

For publications obtainable from the Centre for Intergroup Studies, c/o University of Cape Town, Rondebosch, Republic of South Africa, 7700

Name and Address: .....  
.....  
.....  
.....

Name and Address: .....  
.....  
.....  
.....

Date: ..... Signature: .....

..... Signature: .....

Cheque/Postal Order/Cash for R .....

Order/Cash for R .....

OCCASIONAL PAPERS

- No. 1 Afrikaner Nationalism by Professor J Degenaar (R1,00 post free)
- 2 District Six: A Factual Report. Available in English and Afrikaans (gratis)

- ..... Nationalism by Professor J Degenaar (post free)
- Six: A Factual Report. Available in English and Afrikaans (gratis)

A REVIEW OF THE FIRST TEN YEARS of the Centre for Intergroup Studies (gratis)

FIRST TEN YEARS of the Centre for Intergroup Studies (gratis)

IN OORSIG VAN DIE EERSTE TIEN JAAR van die Sentrum vir Intergroepstudies (gratis)

EERSTE TIEN JAAR van die Sentrum vir Intergroepstudies (gratis)

THIRTEENTH ANNUAL REPORT 1980 (gratis)

AL REPORT 1980 (gratis)

REPRINTS/HERDRUKKE (gratis)

KKE (gratis)

- No. 14 Brand, Politics and African Trade Unionism in Rhodesia since Federation.
- 17 Groenewald, Sosiale Afstand by Afrikaans-sprekendes: Verdere Toeligting met 'n Steekproef van Studente.
- 18 Van der Horst, Women as an Economic Force in Southern Africa.

- No. 14 Brand, Politics and African Trade Unionism in Rhodesia since Federation.
- 17 Groenewald, Sosiale Afstand by Afrikaans-sprekendes: Verdere Toeligting met 'n Steekproef van Studente.
- 18 Van der Horst, Women as an Economic Force in Southern Africa.

PLEASE CIRCLE ITEMS REQUIRED

PLEASE CIRCLE ITEMS REQUIRED



CT 14/5/81  
185 188 177

# Artisans fear for jobs in new pay agreement

Staff Reporter

ARTISANS have called a meeting to discuss a new wage agreement which they fear will have the effect of "phasing them out in the long run"

The agreement will leave workers in the electrical contracting industry with substantial increases. As part of the agreement, the electrical unions have accepted two new types of workers — conduit installers and systems installers.

According to the Electrical Workers' Action Committee whose members belong to the Electrical and Allied Trade Union but are opposed to the agreement negotiated by that union, the two new types of workers will do work formerly done by licensed artisans, but at a lower rate of pay.

The Action Committee said this opened the door for skilled work to be done at unskilled rates of pay. Licensed electricians said they feared for their jobs.

They believed they would be the first to go if there was a slump. They said the agreement would allow further exploitation of the unskilled worker.

The secretary of the Electrical and Allied Trade Union, Mr Cyril Shield, said that although the union was not satisfied with the agreement, he did not believe it would result in licensed artisans being "phased out".

"The artisan will always be

needed to work on individual homes. The work done by the conduit installer and the systems installer will be of a repetitive nature. The fittings are prepared off-site and all they have to do will be to put the pipes together."

Mr Shield disagreed that unskilled workers would be further exploited and said the agreement would "force bosses to recognize work done by these workers".

The meeting to discuss the agreement will be held at the Methodist Church Hall, Klipfontein Road, Hazendal, at 8 pm today.

# Coal export decision soon

RDM 16/5/81  
185

By JOHN MULCAHY  
Mining Editor

**THE GOVERNMENT** will decide on further coal export allocations within the next three months

The Minister of Mineral and Energy Affairs, Mr F W de Klerk, said yesterday he was aware of the importance the coal-mining industry placed on additional exports and new allocations would be made public as soon as possible to avoid further uncertainty

Opening the R188-million Matla coal mine near Kriel in the Eastern Transvaal, Mr De Klerk said he realised an additional quota — if granted — would require expanded production capacity and infrastructure, neither of which could be established overnight

A decision on exports could be made only after careful consideration

He said it was evident that the electricity generating sector would remain the largest coal consumer in the foreseeable future. Taking cognisance of the potential and probable contribution of nuclear energy and hydro-electricity, it had been estimated that SA coal demand for electricity generation would increase at an average annual growth rate of 5,9% a year from 1979 to 2020

Coal consumption for electricity generation during 1979 accounted for nearly 64% of the total coal consumption. Escom alone burned 48-million tons, or nearly 60% of consumption

"It is expected that electricity generation will be responsible for 64% by the year 2000 and 69% by the year 2020 of total domestic coal demand"

From 1979 to 1985 demand for coal for the manufacture of synthetic fuels and chemicals was expected to increase at an average rate of 34% a year

"This staggering growth rate is obviously the result of the construction and commissioning of Sasol II and III

From 1985 to 2020, this demand was estimated to be 4% a year, showing an increased and continued reliance on coal for petroleum products

Mr De Klerk said the results of a study undertaken by his department showed that there were mineable in situ reserves of bituminous coal of about 110 000-million tons. The mineable or exploitable tonnage available using current economic mining methods was estimated at 51 000 million tons

Dr Wim De Villiers, managing director of General Mining Union Corporation, said that

the mineable reserves at Matla were calculated at 734-million tons if bord and pillar methods using continuous miners were employed. However if higher extraction methods were applied in future the mineable reserves using pillar extraction and longwall could be increased by 150-million to 200 million tons

He said the Matla Power Station's maximum requirements were about 400-million to 450-million tons. He was convinced that the surplus and additional coal from higher extraction rates could easily be sold on the metallurgical and export markets which would more than compensate for the higher capital expenditure

# The shacks of 'Silver City' are the new home of a community

S. Times  
17/5/81 By BEVIS FAIRBROTHER

THE lives of a small, closely knit black community which has occupied neat, white cottages on the outskirts of Grahamstown for about 30 years have been thrown into turmoil.

In the past year five families living near the old municipal power station

- Lost their jobs when the power station closed to make way for Escom.

- Had their dogs shot en masse.

- Were told that they will have to quit their homes to make way for industry

Three families have already been moved out and have been crowded into tin shacks in a township nicknamed "Silver City"

An epileptic's family was told to leave one of the shacks to make way for one of the evicted families

But, with a shortage of about 4 000 houses in Grahamstown, there was nowhere to go

They moved back into the shack, and this week the Sunday Times found 12 people living in the two-rooms

Two families were still living in the old power station cottages, expecting to be kicked out at any time

Through an interpreter, Mrs Winnie Mkhosini told how the community had been disrupted

## Shooting

The men of the community worked at the municipal power station until it closed down to make way for Escom power last year

They found other work, but continued living in the cottages

Then the old power station was leased to Mr Chris Odendaal of Grahamstown

One day Mr Odendaal arrived at the cottages and shot six dogs

Mr and Mrs John Wilsworth, who run the SPCA near the cottages, told of the shooting

"Some of the dogs were shot in their sleep in front of the children," Mrs Wilsworth said

One of the community told her afterwards that a little girl had thought a man had come to take a photograph of her puppy.

She brought it out to show him and he shot it in her arms

Mrs Wilsworth said two wounded dogs fled and were not seen again.

But the community refused to take any action over the shooting.

"I believe they are too scared because of the uncertainty of their future. They don't want to cause trouble," Mr Wilsworth said

Mr Odendaal said he shot the dogs because they had killed six sheep on his nearby property.

He denied that there were



The cottages near the old power station which have to make way for industry



The "Silver City" shacks, where the power station community has moved to

any puppies and that two dogs ran away.

"I shot six of them and all six were taken away," he said

An allegation that he shot one in a child's arms was "ridiculous"

He said he did what any other farmer would have done if dogs killed his animals

Now the community has been split up because the Grahamstown city council "urgently" needs the land.

The town clerk, Mr A D Lofting, said that industry was vital to the town and to the many who were without work

He could not say what industry would take over the land as plans had not been completed

"But we are desperately trying to get them through. It should be in the near future"

The Eastern Cape Administration Board's regional manager, Mr Dennis Bush, and the chief director, Mr Louis Koch, were not available for comment

Other department officials refused to comment

# LIGHTING INDUSTRY IN BID TO SAVE ENERGY

S. Tribune 17/5/81

(185)

## Finance Reporter

AS South Africa's power costs stand poised to soar along with the country's rising inflation rate, the lighting industry is investing millions in research and development of new energy saving technology

Lighting director of SA Philips, Mike Edgar, says the biggest growth area of the lighting market currently is industrial lighting, followed by security lighting and domestic lighting. All market segments are

already energy oriented and the company that supplies an energy solution is going to land the contracts.

Critical of the lighting industry as a whole, Edgar's description of the R120 million a year industry is "fat and lazy" and ready to be taken on.

He says power costs in Europe are currently double the costs in South Africa, but he warns that local costs are likely to catch up.

# POWER CUTS

Industry will lose thousands if Escom is forced to cut the supply

S. Tribune  
24/5/81 Tribune Reporter

CUTS in the Escom power supply this winter could result in severe financial losses for the manufacturing industry.

Roland Freakes, executive director of the Natal Chamber of Industries, warned this week that if Escom resorted to power cuts it would have to be done on a highly selective and controlled basis if it was not to have serious consequences for the manufacturing industry.

"In certain industries, power cuts of only a few hours can cost the manufacturer tens of thousands of rands in lost materials, cleaning and restarting.

"Any programme of load shedding will have to identify industries which are vulnerable to severe loss and every effort will have to be made to ensure that their power supplies are maintained," he said.

Mr Freakes said it was unfortunate that the country should, at this stage, be faced with a possible shortage of electrical power.

"Projections of economic growth require that Escom doubles its supply capacity every eight to 10 years.

"Moreover there is a long lead time of between eight to 14 years between planning and the coming into operation of a new plant."

Mr Freakes added that there was no doubt that the unexpected economic growth in the last year, coupled with interruptions from Cabora Bassa, had placed Escom in "something of a quandary".

Those are the two major reasons why Escom has warned consumers to expect supply cuts this winter — especially in the early morning and late evening.

Jan Roux, public relations officer for Escom, said: "The growth in the demand for electricity over the last three years has been very high. This of course coincides with the exceptional growth in the South African economy.

"Coupled with this has been the frequent interruptions of supplies from Cabora Bassa since April this year after the two lines coming down from Mozambique were sabotaged by a far right wing group operating in the country."

Mr Roux would not say for how long Escom would be unable to generate sufficient capacity to meet the country's demand.

"We are harnessing all our plants. Even obsolete plants are being used again and we are speeding up the construction of new power stations.

"It takes eight to 14 years to build a power station so one has to plan very far in advance. With the growth that occurred in the last three years we are now bringing in capacity that was forecast in the early seventies."

He denied that Escom had been caught napping.

"When exceptional growth occurs it's too late to speed up your supply. There was no indication of the growth that occurred in the last three years," he said.

He said it was hoped that power lines from Cabora Bassa would be back in commission soon and emphasised that the Mozambican Government would not try to delay repairs because it was losing valuable revenue.

Major consumers such as the mining industry would not be adversely affected by the cuts, he added.

"We have introduced, in conjunction with municipalities and other major consumers, a programme of voluntary load shedding.

"When we have a shortage of capacity we have a list of areas and consumers who could do without electricity for a short while on a rotation basis," he said.

# Soweto boost for Gallo

Deputy Financial Editor

THE electrification of Soweto should provide "a major boost" for the music and home appliance industries, says Mr Tony Bloom, chairman of Gallo, in his annual report.

Mr Bloom says the electrification of Soweto "will undoubtedly be a precedent for other areas" and sees this as one reason for exciting long-term growth for his company.

Mr Bloom is also hopeful for Gallo's new "single" tape cassette, counting on it to "open up new markets. And contribute to profits almost immediately".

Gallo intends to make its presence felt in the booming video market.

"Prospects for the group are encouraging"

Last year sales on an annualised basis grew 136%, and earnings a share 41%

These figures do not include acquisition RPM, which has warranted that it will add 8c a share to earnings this year, and include MFP for only six of the nine months on which Gallo reported last year.

MFP, Mr Bloom says, will give Gallo improved access to large volume retailers.

Mr Bloom contends that Gallo's dividend cover of 2 is adequate "given the group's strong balance sheet and its modest anticipated future capital requirements".

183  
RDM  
30/5/81

# Rural electrification <sup>S Times 31/5/81</sup> boosting cable industry <sup>(185)</sup>

By Jan de Beer

THE highly cyclical cable industry is enjoying one of its most prosperous phases, with strong demand from the Post Office as well as electrification of rural and black areas, keeping cable plants busy throughout South Africa.

Mr B J Pyke, managing director of Abdare Cables in Port Elizabeth, told Business Times this week that perhaps the biggest growth in the industry at present was in overhead conductor cables.

"This is in line with Escom's countrywide expansion. Turn-

over for this sector of the industry is now eight times as high as in 1979, with electrification of rural areas gradually replacing diesel power," Mr Pyke said.

Steady growth was also taking place in Post Office cable orders, particularly for telephone installation in black areas.

"It appears as if telephone installation has virtually reached saturation point in white residential areas."

The R400-million South African cable industry usually feels the full effects of an economic uplift only about six months after the rest of the country, so that, even if there are likely to be more cutbacks in spending, there is still a need for increased production capacity.

Abdare Cables, for example, is spending a substantial amount on various sectors of its operations, including the modernising of plant and machinery.

African Cables, on the other hand, recently installed a new continuous aluminum extrusion press to meet growing demand for underground cables that previously had to be imported.

African Cables general manager Peter Muller said that the traditional South African method of electricity distribution — overhead lines — was now fast being replaced by underground cables.

"Reasons include environmental constraints as well as difficulty in obtaining servitudes. It is also essential to use underground cables near airports and large petrochemical complexes such as Secunda," he said.

Factors causing concern to the cable industry are the continuing dumping of cheap imports from the Far East and the critical shortage of skilled labour.

# Mobil oils for Koeberg

MOBIL OIL SOUTH AFRICA (PTY) LTD will supply the lubricating oils and greases for South Africa's first nuclear power station at Koeberg having been awarded the tender by Eskom.

In making this announcement Mobil's sales director, Mr J A "Tony" Killecullen, stated that the contract was for 10 years.

Mobil's experience and expertise in the field of nuclear power station lubrication is well known. In the United States 42 nuclear power plants, producing some 31 616 megawatts of power — on completion the Koeberg nuclear power station will be able to generate 1 844 megawatts of power — are lubricated by this company.

In France where the expansion of nuclear energy has been dramatic with an increase from 4.23 percent of the total generated power in 1969 to 20 percent in 1980 and projected 70 percent in 1990 Mobil's achievements have been even more spectacular with nine of the existing and new stations having been awarded to them. This equates to nearly 70 percent of the total plant built and under construction.

Mr Killecullen stated that Mobil's research activities in the nuclear energy sector dated back to the 1950's when the industrialization of nuclear energy started.

The research was carried out in the Industrial Research Laboratories in Plainsboro, USA, and at the reactor in Harwell, Britain.



# Concern at Koelberg as concrete beam shows cracks

Star 12/6/81 (1985)

Own Correspondent  
CAPE TOWN -- The lower support beam of the Koelberg nuclear power station, Cape Town, has developed cracks in the concrete, and an Eskom source said the defect was being monitored by both overseas and local scientists.

This came to light after persistent rumours of a structural defect in the nuclear power station's foundation had circulated through engineering and environmental circles during the past week. The source said the lower beam had developed cracks some time ago, and

was being monitored by top structural experts. "We take everything seriously in matters such as this."

The structure which has fractured is a concrete batten 2 m thick, 90 m wide and 150 m long. This structure rests on

6 m of cement which in turn rests on bedrock. "If the situation deteriorates, we will certainly do something about it," said the source. But at present the cracks are being carefully monitored to make sure they are not widening or lengthening.

The whole structure is strengthened with steel rods, and was described as "an extremely robust construction". Some months ago cracks appeared in the dome concrete of the super-structure. These cracks were repaired.

The construction of the beam which cracked was undertaken with great care. Special granite sand was brought from the West coast to avoid using the notorious Malmesbury shale-based sand which causes cracks in concrete structures. It seems unlikely that

work will be interrupted on the nuclear plant, scheduled to go into operation in December 1982. But should the cracks in the support beam get worse, some remedial action would have to be taken. At this stage it is unclear whether the cracks go right through the concrete or not. Referring to the recent attack on the Iraqi nuclear power plant, a spokesman for Koelberg said he could not say whether the Cape plant could withstand a military attack. The spokesman explained that the type of nuclear reactor destroyed by the Israeli raid was a much smaller plant than Koelberg.

# Escom deficit R98-m after record sales

18/6/81  
 (JF) (2619)

harvest a  
 those who  
 has a rig  
 regards a  
 Fisher, 1  
 And  
 "The  
 that the  
 is the a  
 whites.  
 mostly,  
 at high  
 of Ameri  
 pace of  
 rare to  
 able abc  
 the Mexi  
 harvest,

Escom incurred a deficit of R98-million in 1980 in spite of sustained growth in the demand for electricity which boosted sales 8,6 percent to a record 87 539 - million units, the chairman, Mr Jan H Smith, reports in his annual review.

Total revenue rose from R1 529-million in 1979 to R1 772-million. Total charges against revenue increased from R1 512-million to R1 870 million.

The deficit of R98-million was slightly higher than the amount budgeted for and offset the accumulated surplus of R80-million at the end of 1979.

This left an accumulated deficit of R18-million at the end of last December.

**PRICE AND COST**  
 The average price of electricity increased by 6,6 percent to 2,024c a kwh but the average cost a kwh rose 13,9 percent to 2,136c per kwh last year.

Mr Smith says that sales grew by 10 percent during the first half of 1980 but the growth rate slowed in the second half when the recession in certain overseas countries began to affect electricity-intensive industries serving export markets.

However, the net effect was an increase in sales higher than long-range forecasts had indicated. Mr Smith says that the

Escom system generally stood up well to the demands made upon it during 1980.

"But towards the end of the year the combined effect of an exceptionally high demand economy, frequent interruptions in power imports from Cabora Bassa and our acute shortage of skilled manpower, became noticeable on the Escom system.

**REMEDIES**  
 "The situation was not unforeseen and remedies have been applied which, we believe, will reduce the impact of a temporary constraint in electricity supplies"

He says "The situation does, however, highlight a number of factors

● Escom's expansion programme is a continuous process and the con-

struction of its powerstations and their financing should be free from short-term economic events. Expansion should thus not be slowed down or accelerated as dictated by short-term economic criteria.

● Events last year clearly illustrated that electricity supply in the country should not be overdependent on imported energy.

● The country must come to terms with the implications of the manpower shortage.

Mr Smith says that without suitably qualified manpower, Escom will not be able to reach its objectives even though sufficient capacity and adequate financing for expansion may be available — Mervyn Harris.

the county. In Patterson, many seniors students, are critical, often publicly, Vietnam, of the urban crisis, or of the slow other wide national issues, but it is very Anglo who is critical of, or even knowledgeable on their father's or friends' farms. Somehow ng in the fields, or the annual toil for the features of the landscape, never examined.

A few residents--school teachers, a housewife, an editor--are aware of the injustices and deprivations, but lack any effective organisation to make their views heard; also, they are subject to considerable sanctions from public opinion, for any outspoken critic must be prepared for critical social ostracism. It is not that local white society is particularly evil or unthinking; it affects contemporary American values, but in a small rural community it is easier to see what is happening, and to see the gulf between the grower completing a new \$100,000 ranch home, and the Mexican family who live in a one-roomed cabin, less than two miles

r  
he

e  
ley's

# Electricity demand mushrooms

CT 19/6/81  
185  
27/8

Staff Reporter

THE demand for electricity in South Africa was growing at an average of 8,8 percent a year, almost doubling the installed generating capacity to 34 000 MW by the end of the decade, according to the chairman of Escom, Mr Jan H Smith

In his annual review released yesterday, he said that by the second half of the next decade the country would have an installed capacity equal to that now available in England and Wales

He also pointed out that Escom's demand for electricity generation equipment has made a large impact on overseas economies

"In the electricity supply industry alone our requirements are among the highest in the world. This means that a number of overseas companies are finding South Africa the most lucrative market available to them today"

Record electricity sales of 87 539-million units last year brought the commission revenue of R1 772-million, 8,6 percent ahead of the previous year

During the first half of 1980 sales had grown by 10 percent. In the second half of the year, although the boom continued unabated, this growth rate slowed "somewhat" when the recession

overseas began to affect local electricity-intensive industries serving the export market

Escom had stood up well to demand last year, Mr Smith believed, but in the final months the combined effect of an exceptionally high demand for power, frequent interruptions in supply from Cahora Bassa, and an acute shortage of skilled manpower had become noticeable

Present constraints on electricity supply could be attributed partly to the cautious economic thinking which emerged in the late 1960s, the oil crisis in the early 1970s and the recession of the mid 1970s, all of which led to delays on Escom projects

Future growth in electricity demand would flow from three main factors

- The country would become increasingly industrialized and more electricity-intensive

- The swing from oil-based energy sources to electricity would continue with the estimated 20 percent contribution of electricity to total net energy usage rising to 40 percent before the end of the century

- The electrification of black areas would result in more economic growth and this would cause a more electricity-intensive lifestyle

# Fall-out

won't <sup>stop</sup> 23/6/81  
even be ~~noticed~~ (185)

By Bob Davis

The new R2 000 million Lethabo power station near Vereeniging will belch 40 to 50 tons of fine ash, two tons of sulphur dioxide and 360 tons of carbon dioxide into the atmosphere each day.

"But" said Escom environmentalist, Mr David Strydom, "people won't even notice it."

Because of the tall—250 to 300 m — anti-pollution chimneys designed for the power station, the pollution fall out area will have a radius of about 100 km.

## STRINGENT

Mr Strydom said the fine ash and gases were about half-a percent of the total quantities the station would produce each day from burning 35 000 tons of coal.

The ash particles were so fine that one would need a microscope to see them. The sulphur dioxide would add about 0,25 of a particle per thousand-million particles to the atmosphere — a proportion that was regarded as negligible.

The stringent control on fall-out was made possible by precipitator efficiency of 99,5 percent.

"We held an investigation at the Komati power station where farmers complained about dust," Mr Strydom said. "We installed precipitators and now they have a problem of insufficient alkaline matter in the soil."

## NOT NOXIOUS

Not only was the fall-out invisible Mr Strydom said but it was also not noxious. "People lived with much higher levels in the areas of the Taabos and Highveld power stations and there was no evidence of health problems."

# Does SA really rely on Cahora Bassa?

Star 24/6/81

185

2/81

By Bob Davis

Just how dependent is South Africa on power from Cahora Bassa, a source which has proved to be unreliable?

Escom received a full contractual load from the Mozambique power station for the first time on June 23 1979 but it was partially interrupted almost a year later on June 23

The commission was advised that the causes were military activities and flood damage.

The flow was restored on September 25 1980, but in November and December respectively, the two supply lines to the South African grid were damaged and the power stopped flowing altogether.

## Sabotage

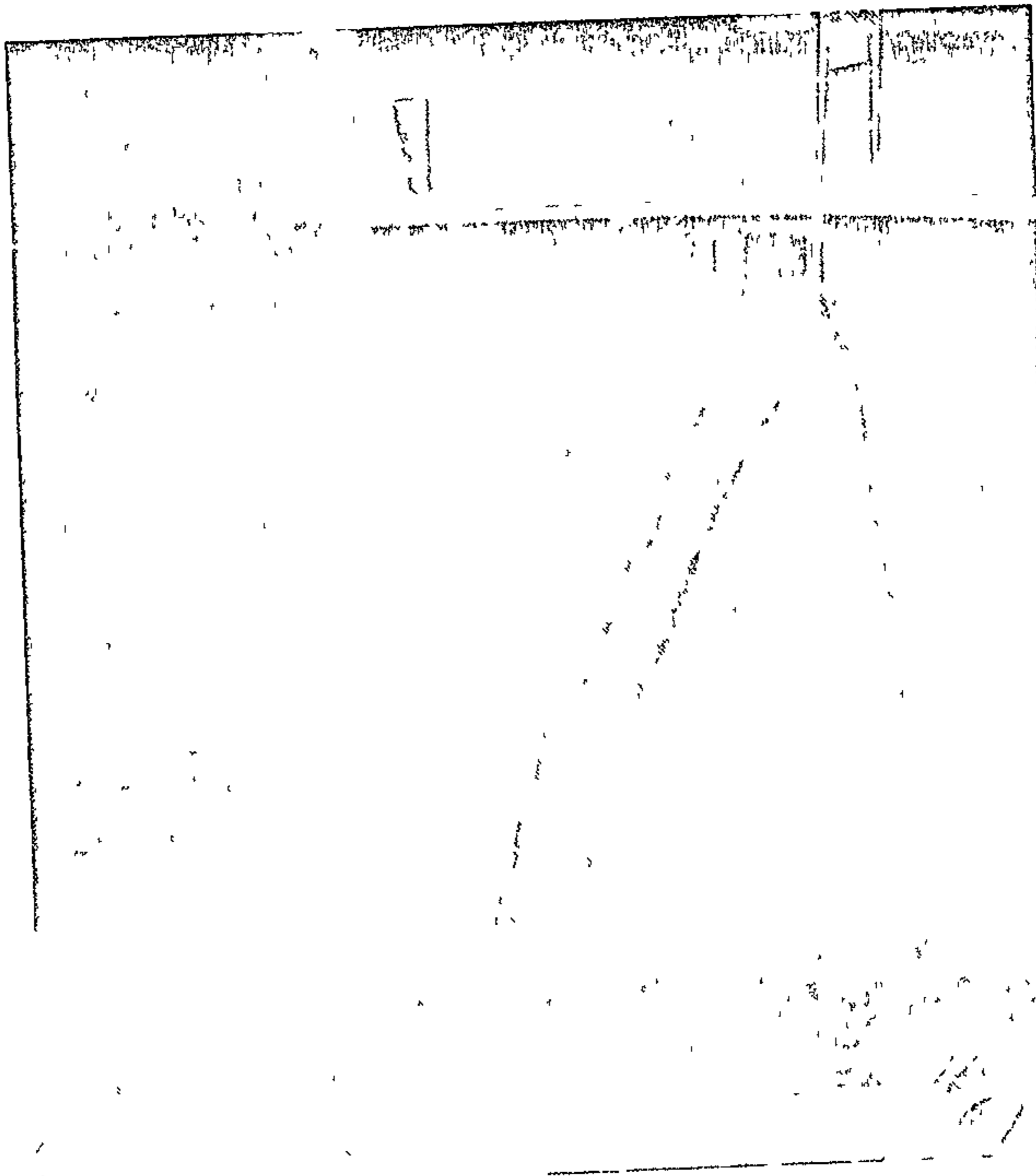
Sabotage was suspected but the flow was partially restored in February this year, only to be stopped again on April 3, at the beginning of winter when demand historically reaches peak.

Last week Escom confirmed that the cold snap in the first ten days of June had indeed resulted in a high electricity flow which was not far off its 17 500 Mw total capacity.

And Escom warned that further record peaks were expected during this winter which would severely tax the supply.

## Policy

Mr Jan Smith, Escom's chairman, told The Star, however, that it was — and had always been — policy to be independent of imported electrical power.



Cahora overflows . . . but who needs the overflow power?

27 11.05, 29.68 satisfactory, 45 23 not satisfactory

TEST SET OPER S-TI C-1111 27 11.05 29.68 satisfactory, 45 23 not satisfactory

FORM I

(39)

6-1111 2 111

1-111 2-111

27 11.05 29.68 satisfactory, 45 23 not satisfactory

(40)

plying 12 percent of South Africa's total consumption when it came on stream in 1979 but if it was fully operational now, it would have supplied only 8 percent.

### Unreliable

The reduction in reliance on the imported power was achieved by stepping up internal capacity at the Kriel, Matla and Duvha power stations.

Escom engineers said internal capacity would be further increased when more generators at Matla and Duvha come on stream in September and a second 250 Mw turbine at the Drakensberg pumped storage scheme added its output to the national grid.

Meanwhile, the output was being stepped up at older, less economical power stations to cope with a short-term contingency.

An engineer said in some cases coal had to be taken by train to the older power stations because there were no adjacent coalfields.

### Independent

The conclusion was that South Africa could cope without a supply from Cabora Bassa and that independence on the foreign supply was on the decline.

Meanwhile, Escom sources said, the contract for a supply of electricity to South Africa had been suspended at the request of Hydroelectrica de Cabora Bassa, the company operating the power station on behalf of the Portuguese Government.

No one was willing to venture a guess at a restoration date or to comment on the long-term future of the Cabora Bassa power station.

(5)

TABLE 1 SHOWING THE DISTRIBUTION OF MEDICAL INSURANCE FOR WHITES

MEDICAL ASSISTANCE SCHEMES

	Number of Schemes	Members	Dependents	Total Covered
Medical Aid	200	544 714	845 400	1 390 114
Medical Benefit	72	109 985	221 077	331 062
Industrial Council Schemes	30	144 649	034 093	278 742
Other	4	142 713	372 673	515 386
	306	942 061	1 573 243	2 515 304

Source: Statistical Report by the Chairman of the Central Council of Medical Schemes, April 1972 (unpublished).

If the white employees in the police, prison services and defence force who receive medical assistance are included, more than 70% of the white population are covered by medical assistance schemes, whereas at the end of 1970 only 180 746 Blacks with 54 205 dependents (1 e. 234 951 altogether) were covered by the above listed schemes.

Patients who do not belong to medical aid or medical benefit schemes are either entirely private patients (this is unlikely with the population group of workers which we are dealing with) or indigent patients. The latter use provincial hospital facilities and local authorities and state department services free or at a nominal charge. Fees for private patients (usually in the higher earning bracket) are 25-50% higher than medical aid fees, depending on the nature of the treatment. 5% of whites are classified as entirely private patients and 15% as indigent patients.

In 1974 there were 77 friendly societies established in terms of industrial agreements. There were 400 privately administered friendly societies. Some of these were not solely medical scheme societies however. 261 of these administered medical benefits and 95 sick pay.

(6)

TABLE 2

BENEFITS PAID - ALL FRIENDLY SOCIETIES

Type of society	Types of Benefits			Total
	Medical	Sick pay	Other	
Privately administered societies	1974	1973	1974	R1 315
				R1 441
				R102 951

**Escom cuts off power**

Parts of Natal, Transvaal and the Cape which receive power from the Kriel power station were blacked out yesterday. The Natal black-out caused widespread industrial slow-downs and caused security problems at several businesses. It was the biggest Escom load-shedding in Natal's history.

An Escom spokesman said three of the six 500 Mw generators at Kriel were being serviced and the commission had to cut power selectively.

In the eastern Transvaal power was cut for almost two hours from just before five o'clock.

The power cuts to the northern, eastern and western Cape began a few minutes after six for 30 minutes at a time.

The spokesman said it was not certain that the three generators would be back in commission today or even tomorrow but Escom engineers were working around the clock to complete essential maintenance work.

where Industrial Councils exist. which we will be concentrating on

Industrial Council Medical Schemes

Industrial Councils have been formed in certain industries under the Industrial Conciliation Act (Act No 28 of 1956). The Industrial Councils, which are formed by representatives of the registered trade unions and employers' association in an industry, publish agreements relating to the wages and working conditions in that particular industry. Parties to Industrial Council agreements can only include trade unions that have been registered. As Africans do not belong to registered trades unions, they cannot be agents on the industrial council. These agreements can be extended to Africans workers in the industry if this is recommended by the Bantu Labour Board.

# 'Load-shedding' causes power cut

NM 25/6/81

Mercury Reporter

25/6/81

THE nationwide power cut on Tuesday night was the fourth of its kind this year, the public relations spokesman for Escom in Johannesburg, Mr Boet Uys, said yesterday

He emphasised that large areas of the country were without electricity from 4.51 p.m. to 6.40 p.m. not because of a power failure but because of a load-shedding programme. This was necessary because nationwide demand exceeded generating capacity

Mr Uys said 167 megawatts of electricity were shed in Natal because the demand for electricity could not be met

and the load-shedding affected the Rand, Free State and Cape northern, eastern and western regions

He denied the blackout was the result of three generators failing at the Kriel station in the Eastern Transvaal.

Mr Doug Bohler, principal operations engineer for Escom in Natal, confirmed that this was the biggest load-shedding programme in the history of Natal

Large sections of Durban, Pietermaritzburg, Ladysmith, Pinetown, Richards Bay, New Germany, Newcastle, and Kloof were without electricity while the whole of Estcourt, Mooi River, Colenso, Greytown and Howick were affected

There were reports that Warner Beach was without power from 5 p.m. to 10 p.m.

14.

of the Transvaal Chamber of Mines, indicated that ventilation was poor. This consideration was held by the Transvaal Miners' Association (T.M.A.) which went to great lengths to present a petition to the Colonial Secretary himself. (85) But the recommendation that mechanical aids should not be adopted by the mining industry. In half the mines had introduced mechanical 'speeding up' remained the rule of the day. (86) Rarely observed, a response which to attempts by mineowners to reduce workers' wages. (88)

Mineowners privately admitted that they introduced mechanical aids 'purely 'economics' preferring instead to improve natural means because it was cheaper. (89) Samuel Evans, Chairman of Crown Mines, be worked for 'blood' was probably indicative of the mineowners at the time. (90) It was in 1907 and the subsequent Anglo-Boer War Regulations Commission of 1907, which silicosis, and made its final report in 1910, that government and management alike were to be held responsible for the prevention of dust. (91)

Regulations Commission considered the figures from silicosis to be so serious (included in the final report) that the immediate drafting of new and improved regulations was presented in 1908.

The role of the mineowners in controlling costs and efficiency were always uppermost in the minds of the officials. In 1902 a competition for the best designed water device for allaying dust. T. Wolhuter of the Wolhuter Goldmining Company, won the first prize of £500 for his atomiser. The design was later to be replaced by a water-fed drill, the design for which prize in the same competition. In 1903 the judges had not been swayed by the arguments of the mineowners as certain writers have suggested. (92)

Regulations Commission considered the figures from silicosis to be so serious (included in the final report) that the immediate drafting of new and improved regulations was presented in 1908.

The role of the mineowners in controlling costs and efficiency were always uppermost in the minds of the officials. In 1902 a competition for the best designed water device for allaying dust. T. Wolhuter of the Wolhuter Goldmining Company, won the first prize of £500 for his atomiser. The design was later to be replaced by a water-fed drill, the design for which prize in the same competition. In 1903 the judges had not been swayed by the arguments of the mineowners as certain writers have suggested. (92)

13.

Of prime importance was their conviction that the cause of silicosis was dust in microscopic particles (the exact size of which had not yet been investigated) inhaled continuously. This point was emphasised again and again by all the doctors who gave evidence. They were convinced of the gravity of the disease, and the toll it took of young men's lives. Impressively they were also able to convince the commissioners that, although rock-drillers were the most severely affected, other mining occupations, such as blasting, tramming and lashing - in fact, all underground occupations where there were any dust concentrations - could expose miners to the disease. (78) Even when the commissioners tried to underplay dust as the exciting cause, the doctors remained unconvinced. (79) The doctors were correct in their assessment of the cause of the disease. But their assumptions about the damaging mechanism of the dust particles in the lung tissue were totally inaccurate, because they attributed the toxicity of the silica particles to their angularity, hardness and sharpness. (80)

The doctors, <sup>did not in any way</sup> attempt to play down the gravity of the situation or, <sup>to</sup> underestimate the mortality figures, and in every possible way they indicated the necessity for introducing preventive measures in mining techniques. Doctors saw the need for effective ventilation. As early as 1902 they realised that exposure to certain gases - nitrous oxide had not yet been isolated as the sole one - could inhibit the defence mechanisms of the upper respiratory tract. (81)

On the basis of the evidence no attempt was made by the RMPCC in 1903 to minimise the alarming situation, and strong measures were advocated - but in general terms - for the improvement of mining conditions, especially with regard to the allaying of dust. Probably in response to the commissioners' report, new mining regulations were issued in 1904 and 1905, requiring the use of water sprays or jets in conjunction with drills and the blasting regulation taken over from the South African Republic's law of 1898 (already mentioned), the damping of broken ground and the wearing of respirators. (82) On the whole these regulations remained a dead letter. They were ignored by miners and mine management alike, and concerned people considered them 'perfunctory'. (83) The reports of experiments and surveys in connection with ventilation, undertaken under the auspices



# Mozambique power to SA down by 78%

RDM  
2/7/81  
185

By SIMON WILLSON  
Industrial Reporter

POWER from Cabora Bassa to the South African national grid during the first five months of the year was running at only 22,5% of last year's level during the same period.

And the power being generated within South Africa to replace it is coming from uneconomic power stations, and is pushing up generating costs to a significant extent for the Electricity Supply Commission (Escom)

shown

Department of Statistics figures show that power has only been received — and at severely reduced levels — from Cabora Bassa during February, March and April this year

In January, May and June, no power was received at all

nt in the

Sabotage to transmission lines running south from the giant hydroelectric project in Mozambique interrupted the power supply during April, and the link has not been restored since

nt in the

The power received from the dam in February was 40,3% of the amount received the previous February, and March's power was 64,7% of that transmitted 12 months before

nt in the

But the final interruption in April occurred when only 11,8% of the previous April's power had been transmitted, and that was the last contribution the national grid received from the dam

In 1980, a total of 9 575 gigawatt hours (gWh) came to South Africa from Mozambique, and Cabora Bassa power contributed about 10% of South Africa's power

If the transmission lines

from the dam remain cut for the rest of the year, as now seems likely, a total of only 1 099 gWh will have been delivered this year.

Escom has put into operation contingency plans to cope with the missing supply earlier this year

The situation was anticipated in the latest Escom annual report

"The reliability of electricity supply from Cabora Bassa during the year (1980) was poor. This supply is being hampered by damage to transmission lines on the Mozambique side of the border and the unsettled conditions there have made it difficult for maintenance and repair work to be carried out," the report said

"Contingency plans, involving the rescheduling of planned maintenance, have been prepared to meet the demand if little or no supply is received from Cabora Bassa"

These contingency plans are in operation and are already increasing the generation costs of the power now in the national grid

The Escom annual report said replacement generation for missing Cabora Bassa power during 1980 contributed to the larger-than-expected deficit, of R98-million, which the commission incurred over the course of the year

The contingency plans revolve mainly around running obsolete and uneconomic power stations to make up the power shortfall, which has become more serious as the cold snaps of the winter have led to intermittent and sudden increases in domestic electricity demand

PLANNING  
REGIONAL  
& URBAN

For the best student in each of the courses of Building Economics I, II and III in the third, fourth &

LTA Prizes

P R Swift

For the student obtaining the highest marks in Professional Practice.

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student in any year of study.

Bell-John Prize

(Continued)

QUANTITY  
SURVEYING

RDM 2/7/81  
185  
184

# Blasts push up the power price

By SIMON WILLSON  
Industrial Reporter

1980  
But this year the line has stayed cut after the last supply interruption in April and the trickle of power to the Escom grid has stopped completely

generating extra electricity at obsolete and uneconomic power stations

SABOTAGE on the power lines between the Cabora Bassa dam in Mozambique and the South African national electricity grid will contribute directly to the next electricity price rise

The interruptions in the power supply from Cabora Bassa, which normally contributes about 10% of South Africa's electricity, began last year and were one of the reasons for Escom's R98-million deficit in

Instead of the 900-odd gigawatt hours (gWh) of power Escom received every month from Cabora Bassa at this time last year, the contribution from the dam in April was a meagre 116gWh

To compensate for the loss of 10% of its power, Escom is

This is costing it much more than the power supply from Cabora Bassa

If, as now seems likely, the power lines to South Africa from Cabora Bassa stay cut for the rest of the year, the amount of power received from the dam in 1981 will be only 11.5% of the amount received last year.

See page 14

M P Morkel

For the student who has shown greatest promise at the end of the first year.  
Student Planners Award

URBAN &  
REGIONAL  
PLANNING

K Strong

For the second best student in the subject of Building Construction.

C W von Düring

For the best student in the subject of Building Construction.  
S A Brick Association Prizes

III: No award

II: A R Low Keen

I: N D G Sessions

For the best student in each of the courses of Building Economics I, II and III in the third, fourth & fifth years respectively.

LTA Prizes

P R Switt

For the student obtaining the highest marks in Professional Practice.

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student in any year of study.  
Bell-John Prize

QUANTITY  
SURVEYING  
(Continued)

# Cabora Bassa: guttering candle of hope

RPN 4/2/81

185

By CHRIS FREIMOND  
Southern Africa Bureau

THESE years ago, Cabora Bassa promised to be the economic saviour of Mozambique and to supply South Africa with a significant share of its power needs. After a faltering start, the project is still sputtering along the road of unfulfilled potential, and the question is 'Is Africa's most ambitious hydro-electric scheme also its most costly white elephant?'

Cabora Bassa power supplied to South Africa under contract in 1979, two years behind schedule. It has been erratic ever since and is now cut, contributing to serious power cuts in parts of the country.

The contract has been suspended "for the time being" according to Escom.

The envisaged economic development in Mozambique stemming from the massive development has not materialised. The R435-million-plus scheme was financed jointly by South Africa, Portugal, Germany and France.

South Africa's share was described yesterday as "minimal" by a former senior executive who was closely linked to the

development.

But its expenses included a R100-million sub-station near Pretoria to convert the current and feed it into the national grid, a 1400km power line from the dam to Pretoria, and Government loans of at least R40-million to the controlling corporation.

For all this, the scheme can only supply about 8% of the country's electricity needs.

The power feed is being cut by the anti-Frelimo Mozambique Resistance Movement (MRM).

The MRM's low-intensity guerrilla war activity makes it impossible for Frelimo forces to protect workmen while they repair to the damaged lines in the remote Tete bush.

Did South Africa make a mistake by investing in Cabora Bassa? Opinions differ.

The former executive, who asked not to be named, said "It still supplies the cheapest electricity in the world, and has given relatively few problems in the past two years when one considers that the current is fed over 1400 km."

A development economist at Natal University, Professor Gavin Masdorff, said he had been "unhappy" about the confidence of South African politicians in the future of Cabora Bassa.

during its development.

"I believed it was only a matter of time before Mozambique gained independence. Cabora Bassa was a risky political venture, and in my opinion our politicians misread Southern African political developments."

"I don't want to be categorical on the 'white elephant' aspect, but Cabora Bassa has certainly been a great disappointment so far," he said.

The director of the Africa Institute in Pretoria, Dr Erich Leisner, said he was unaware of any significant economic development in Mozambique attributable to Cabora Bassa.

It was impossible to predict when uninterrupted power supplies to South Africa would resume.

However, in the long term, Cabora Bassa and similar cross-border development projects would have to be made to work in the interests of the whole region.

By the turn of the century South Africa could face a major water shortage which could be alleviated by imports from neighbouring states. Those states in turn would need the development potential offered by hydro-electric schemes and income derived from sales of resources to South Africa, he said.

Bell-John Pr  
For the best  
in any year

P C Key

The Committee  
Cape Chapter  
Surveyors' P

For the student  
the highest in  
Professional

P R Swift

LTA Prizes

For the best  
the courses of  
II and III in  
fifth years re

I : N D G

II : A R L

III: No award

S A Brick Ass

For the best  
subject of Bui

C W von During

For the second  
subject of Bui

K Strong

Student Planner

For the student  
greatest promise  
of the first year

M P Morkel

QUANTITY  
SURVEYING  
(Continued)

URBAN &  
REGIONAL  
PLANNING

# Koeberg is 'at best uneconomic'

CT 4/7/81 (53) (185)

By BOB MOLLOY

THE Koeberg nuclear power station was "at best an uneconomic and certainly a risky investment for South Africa" and this would become clearer with time, according to visiting United States energy expert, Mr Jim Harding.

Mr Harding, an economist employed as energy projects director for Friends of the Earth (FOE) Inc, and formerly special adviser to the chairman of the California Energy Commission, said in an interview yesterday that Wall Street bankers were now advising energy supply companies against building more nuclear plants.

"The nuclear power industry in the United States is close to death, not for political but for economic reasons. Costs have been argued ever since the nuclear debate began. At one time nuclear proponents talked of producing electricity so cheaply it wouldn't even be worth metering, now our surveys show that coal plants are 50-60 percent cheaper to build and operate," Mr Harding said.

The survey had covered 47 nuclear plants and 137 coal plants, it ignored problem plants such as Three Mile Island, was evaluated only on capital and fuel costs, and did not take decommissioning costs into account.

## Position

There was no reason to suppose that the position in South Africa would be any different.

"A lot of the costs don't get added up when presenting the bill to the consumer. Examples are waste disposal, which comes out of taxes, evacuation and monitoring costs which often are added to local rates, and of course the cost of decommissioning which could be as much as the original cost of building."

"Future costs tended to be discounted. In the case of nuclear power stations we were simply pushing the decommissioning and waste disposal costs onto the next generation and robbing our children."

"They will pay for the errors and get none of the benefits," said Mr Harding.

The nuclear issue had come to a head with the problem of Three Mile Island. This plant was an "economic disaster" which had not been acknowledged by the owning company.

"To do so would drive them into bankruptcy. An indication of the way things are is the fact that the company's stock is worth only 20 percent of book value and there is now very little 'insider' stock held."

The anti-nuclear protest in South Africa was today similar to the American position.



Mr Jim Harding

in 1973 when the same government body was responsible for both the development of nuclear power and public safety, a situation which Mr Harding viewed as "a case of having the fox in the henhouse."

Asked to comment on reports of accidental damage and other construction problems in the building of Koeberg, Mr Harding said the incidents were "standard for nuclear plants."

## Coal plant

"The difference is that in a coal plant when such things cause a breakdown you have a temporary power stoppage. In a nuclear plant you have a catastrophic accident."

The money spent on Koe-

berg could have been more sensibly invested in alternative energy options and on improving the efficiency of present energy use. This would have stimulated local industry, created employment and saved on foreign exchange. It would also have averted the present position where the Republic was dependent on the political goodwill of its nuclear fuel suppliers.

"To say that South Africa is capable of producing its own fuel enrichment process means that you are negating the economics of your original premise for having a nuclear power station in the first place," Mr Harding said.

Asked if there had been any progress in the anti-nuclear campaign, he pointed out that nuclear power proponents had initially planned for at least 1,000 nuclear plants in the United States by the year 2000, with a possibility of 1,800 and a minimum of 800. "We have 74 at present and at most there will be 150. That in itself is an astonishing achievement."

## Attitude change

There had been an attitude change in California and utilities were looking at renewable energy sources and going for smaller plants. A 300-megawatt wind energy source would be ready by 1990, a goal which "dwarfed" the expectations of the mid-seventies.

History would judge the nuclear proponents "rather harshly." Most had assuaged their consciences over the manufacture of nuclear weapons with promises of cheap energy which they could never fulfill. "At best, they have been guilty of childish zeal in promoting their cause," Mr Harding said.

● Nuclear power will be the focus of a debate at the University of Cape Town on Monday at which Mr Harding will be the guest speaker. The debate forms part of a two-day congress on energy to which a number of overseas speakers have been invited. The congress has been organized by the International Association of Commerce and Economic Students (AIESEC).

# US expert's bleak view on Koeberg

RDM 6/7/81

185



## Own Correspondent

CAPE TOWN — A visiting United States energy expert, Mr Jim Harding, says the Koeberg nuclear power station is "at best an uneconomic and certainly a risky investment for South Africa" and that this will become clearer with time

Mr Harding, an economist, is Energy Projects Director of Friends of the Earth (FOE) Inc, and formerly special adviser to the chairman of the California Energy Commission

He said in an interview in Cape Town that Wall Street bankers were now advising energy supply companies against building more nuclear plants

"The nuclear power industry in the US is close to death, not for political but for economic reasons. Costs have been argued ever since the nuclear debate began

"At one time nuclear proponents talked of producing electricity so cheaply it wouldn't be even be worth metering. Now our surveys show that coal plants are 50% to 60% cheaper

to build and operate," Mr Harding said

One survey had covered 47 nuclear plants and 137 coal plants, ignoring problem plants such as Three Mile Island. The plants were evaluated only on capital and fuel costs, and did not take decommissioning costs into account

There was no reason to suppose the position in South Africa would be any different

"A lot of the costs don't get added up when presenting the bill to the consumer. Examples are waste disposal, which comes out of taxes, evacuation and monitoring costs, which often are added to local rates, and of course the cost of decommissioning, which could be as much as the original cost of building."

Future costs tended to be discounted. In the case of nuclear power stations people were simply pushing the decommissioning and waste disposal costs on to the next generation

The nuclear issue had come to a head with the problem of

Three Mile Island. This plant was an "economic disaster"

Asked to comment on reports of accidental damage and other construction problems in the building of Koeberg, Mr Harding said the incidents were "standard for nuclear plants"

"The difference is that in a coal plant, when such things cause a breakdown you have a temporary power stoppage. In a nuclear plant you have a catastrophic accident"

The money spent on Koeberg could have been more sensibly invested in alternative energy options and on improving the efficiency of present energy use, he said

This would have stimulated local industry, created employment and saved foreign exchange. It would also have averted the present position, in which South Africa was dependent on the political goodwill of its nuclear fuel suppliers

"To say that South Africa is capable of producing its own fuel enrichment process means that you are negating the economics of your original prem-

ise for having a nuclear power station in the first place," Mr Harding said

Asked if there had been any progress in the anti-nuclear campaign, he pointed out that nuclear power proponents had initially planned for at least 1 000 nuclear plants in the US by the year 2000, with a possibility of 1 800 and a minimum of 800

"We have 74 at present and at most there will be 150. That in itself is an astonishing achievement"

There had been a change of attitude in California and utilities were looking at renewable energy sources and going for smaller plants. A 300Mw wind energy source would be ready by 1990, a goal which "dwarfed" the expectations of the mid-70s

Mr Harding predicted history would judge the nuclear proponents "rather harshly"

Most had assuaged their consciences over the manufacture of nuclear weapons with promises of cheap energy which they could never fulfil

S A Brick Association Prizes

III: No award

II: A R Low Keen

I: N D G Sessions

For the best student in each of the courses of Building Economics I, II and III in the third, fourth & fifth years respectively.

LTA Prizes

P R Swift

Professional Practice.

For the student obtaining the highest marks in

For the student obtaining

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student in any year of study.

Bell-John Prize

(Continued)

QUANTITY SURVEYING

Industrial Health and Industrial Sector - There are a wide variety of mines and factories, etc., in S.A. and S.W.A., but not always many of the same kind. Industries should unite in seeking to improve industrial health (e.g. Bygghalsan in construction industry in Sweden whose aims and objects were to promote health and safety practices, provide industries with training and information, treatment and rehabilitation. It was financed by a levy on employers; in the U.K. where the law provides that industries organise among themselves for safety of workers.) Commission asserts that it is indisputable that joint efforts by industries themselves and by white trade unions can go a long way to preventing occupational diseases and can assist the Government with proposed legislation on it.

CHAPTER XII - Industrial Health Hazards and the Public

Not only industrial workers on the shop floor can be affected by occupational disease: Paragraph (d) of the terms of reference relates to measures for protection of public from dangers other than environmental pollution arising from industrial activity. These include toxic gases, dust clouds from quarries, brickfields, etc. During building and transportation, dust can be scattered over a wide area. Commission does not consider source control to be sufficient. It recommends that the

Speaking with him in favour of nuclear energy was Dr C Whittle, assistant director of the Institute of Energy Analysis in the United States.

Speaking against were Dr A Abramovitz, associate professor of psychology of UCT and Mr J

Transvaal in my lifetime,' Dr Hugo added. He was taking part in a panel discussion at a two-day conference on energy organised by the International Association of Commerce and Economic Students (Alesec) at the University of Cape Town.

Harding, energy project director of the Friends of the Earth in the United States.

Dr Hugo said European statistics showed that the cost of electricity generated by nuclear energy was significantly lower than that derived from coal and oil and the nuclear industry was the safest in the world.

Mr Harding, referring to the position in the United States, said: 'Nuclear energy is simply not economically competitive with all the fossil sources of energy.'

Nuclear power competed with a 'rather small' electrical energy market and here one had to bear in mind that oil - which nuclear energy had to replace - accounted for only about 10 percent of total electrical power in the United States.

The public was entitled to receive, 'a neutral objective assessment of probabilities and magnitude of all possible risks' from society's professional risk assessors.

Even 'Koeberg Alert' would then no longer serve its present function and could eventually disband,' he said.

Apart from the insurance impediment, Koeberg would deserve support if a way could be found of sharing the atom equitably (economically) with all sectors of South Africa's population, Dr Abramovitz concluded.

Dr Whittle said: 'A nuclear plant is safer than driving a car or flying in an aeroplane.'

Dr Abramovitz said the central issue was whether nuclear power in South Africa served to uphold the basic principles of the free market philosophy.

Management should supply industrial health equipment (ear muffs, etc.) - mark off danger zone on shop floor with necessary notices. Need for education of management and workers - - advice, training, publicity, joint committees and research.

Good example in Britain's management drew up health policy binding on worker and employer. (Management must appoint sufficient health staff.

spreading or being transmitted to families or fellow workers. Pre-employment examination necessary to establish where occupational disease is contracted to ensure fairness towards bodies liable for contributions for compensation.

Management should ensure that places of work are suitable - working conditions e.g. temperature, light and space and reasonable hours.

Management should supply industrial health equipment (ear muffs, etc.) - mark off danger zone on shop floor with necessary notices. Need for education of management and workers - - advice, training, publicity, joint committees and research.

Good example in Britain's management drew up health policy binding on worker and employer. (Management must appoint sufficient health staff.

Co-operation of workers must be sought - but not by freely imposing demands.

1872 coal miners have had right to appoint representatives to inspect the premises on behalf. This was extended to all miners by Mines and Quarries Act 1934.

representatives are appointed by paid Unions and have the right to inspect the premises at least once a month. Commission suggests why such rights should

Dr Whittle said: 'A nuclear plant is safer than driving a car or flying in an aeroplane.'

Even 'Koeberg Alert' would then no longer serve its present function and could eventually disband,' he said.

Apart from the insurance impediment, Koeberg would deserve support if a way could be found of sharing the atom equitably (economically) with all sectors of South Africa's population, Dr Abramovitz concluded.

**Koeberg not for prestige - A-Board**

Apur 7/7/81

185

KOEBERG nuclear power station was not being built for prestige purposes but because it was an economic proposition for the Western Cape, the deputy president of South Africa's Atomic Energy Board, Dr J P Hugo, said yesterday.

I have grave doubts as to whether I will see a nuclear power plant in the

Mr Harding, referring to the position in the United States, said: 'Nuclear energy is simply not economically competitive with all the fossil sources of energy.'

Dr Whittle said: 'A nuclear plant is safer than driving a car or flying in an aeroplane.'

Even 'Koeberg Alert' would then no longer serve its present function and could eventually disband,' he said.

Apart from the insurance impediment, Koeberg would deserve support if a way could be found of sharing the atom equitably (economically) with all sectors of South Africa's population, Dr Abramovitz concluded.

The equivalent would have been a coal-fired plant with similar capacity in the Transvaal, which would have necessitated triple transmission lines to the Western Cape.

Speaking with him in favour of nuclear energy was Dr C Whittle, assistant director of the Institute of Energy Analysis in the United States.

Harding, energy project director of the Friends of the Earth in the United States.

Nuclear power competed with a 'rather small' electrical energy market and here one had to bear in mind that oil - which nuclear energy had to replace - accounted for only about 10 percent of total electrical power in the United States.

The public was entitled to receive, 'a neutral objective assessment of probabilities and magnitude of all possible risks' from society's professional risk assessors.

Apart from the insurance impediment, Koeberg would deserve support if a way could be found of sharing the atom equitably (economically) with all sectors of South Africa's population, Dr Abramovitz concluded.

legislation

estimated in

it provided

are pending

improvement

of the

transmission

lines to

the Western

Cape.

Dr J P Hugo,

said yesterday.

The equivalent

would have been

a coal-fired

plant with similar

capacity in the

Transvaal, which

would have necessitated

triple transmission

lines to the

Western Cape.

Dr J P Hugo,

said yesterday.

The equivalent

would have been

a coal-fired

plant with similar

capacity in the

star 7/7/81

# Koeberg not safe enough, says expert

185

Own Correspondent

CAPE TOWN — The threat posed by Koeberg has been spelt out by a visiting American nuclear scientist, who said the power station was not safe enough. It was probably unnecessary and its eventual waste disposal could prove dangerous.

Mr Jim Harding, former adviser to the California Energy Commission, said the reactor was safer than the one at Three Mile Island but less safe than those of the latest design.

He said the design did not rule out the possibility of electrical fire.

This could lead to incorrect instrument readings and the computer would

be unable to control the situation.

"One of the biggest problems with this design (the Koeberg type) is corrosion of the tubes in steam generators," said Mr Harding.

This could lead to a cooling accident if in an emergency flooding of the reactor core was stalled.

He said, another unsatisfactory characteristic of Koeberg was its short life-span of seven to eight years.

"The operators are being almost blindly optimistic in assuming that they can ship the fuel abroad for reprocessing or permanent waste storage without a hitch," he said.

For the best final year student.  
General J B M Hertzog Prize

D H Pryce Lewis

For the best student of Architecture (or Quantity Surveying) in the subject of Professional Practice.

David Haddon Prize

Miss C Tredgold

For the best woman student in third year.  
Molly Gohl Memorial Prize

P A Rappoport

For a student who has satisfactorily completed 1st, 2nd and 3rd major courses.  
Helen Gardner Travel Prize

P F Dunkley

Sixth Year

For the best student in :-  
of Architects' Prize  
Cape Provincial Institute

ARCHITECTURE

ROM-10/7/81  
185  
24

# Bonn to back Matimba power

By ADAM PAYNE

GERMAN tenderers for Escom's Matimba power station near Ellisras in the north-western Transvaal are expecting to receive Bonn Government backing in their tenders.

Escom has put out for tenders for turbo-generating plant in the R1 800-million station, which will use middlings coal from Iscor's Grootegeluk coking coal mine.

More than 1-million tons of middlings coal has already been stockpiled for the Matimba station.

In the past Escom has bought turbo-generating plants from suppliers in Britain, Germany, Japan, the US and France.

According to a Bonn report, as the South African project goes beyond the 50-million marks (R18-million) limit set for Government export guarantees, normally granted or re-validated by an inter-ministerial warranty commission, the Bonn Cabinet had to discuss

applications

The German suppliers are likely to get the Government guarantees they applied for.

The Grootegeluk mine, according to estimates in the coal mining industry, will produce extremely costly coking coal for Iscor, because of high capital and infrastructure costs.

The middlings coal, produced with the coking coal, had to find a market which Escom is providing.

The power station will have three 600MW generators, the first of which is scheduled to come on stream by 1987-88.

URBAN &  
REGIONAL  
PLANNING

Bell-John Prize  
For the best all-round student  
in any year of study.

P C Key

The Committee of the Western  
Cape Chapter of Quantity  
Surveyors' Prize  
For the student obtaining  
the highest marks in  
Professional Practice.  
P R Swift

LTA Prizes  
For the best student in each of  
the courses of Building Economics I,  
II and III in the third, fourth &  
fifth years respectively.

I : N D G Sessions  
II : A R Low Keen  
III : No award

S A Brick Association Prizes  
For the best student in the  
subject of Building Construction.  
C W von Düring

For the  
subject  
K Stro  
Student

QUANTITY  
SURVEYING  
(Continued)



# Bonn expected to approve tenders for Escom plant

JOHANNESBURG — German tenderers for Escom's Matimba power station near Ellisras in the north-western Transvaal are expecting to receive Bonn Government backing in their tenders

Escom has put out for tenders for turbo-generating plant in the R1 800 million station, which will use middlings coal from Iscor's Grootegeluk coking coal mine

More than 1-million tons of middlings coal has already been stockpiled for the Matimba station

In the past Escom has bought turbo-generating plants from suppliers in Britain, Germany, Japan, the US and France

According to a Bonn report, as the South African project goes beyond the 50-million marks (R18 million)

limit set for government export guarantees normally granted or rejected by an inter-ministerial warranty commission, the Bonn cabinet had to discuss applications

The German suppliers are likely to get the government guarantees they applied for.

The Grootegeluk mine, according to estimates in the coal mining industry, will produce extremely costly coking coal for Iscor, because of high capital and infrastructure costs

The middlings coal, produced with the coking coal, had to find a market which Escom is providing

The power station will have three 600 mw generators, the first of which is scheduled to come on stream by 1987-88

# Power cuts leave nation shivering

RDM 11/7/81 185

Staff Reporter

THERE were nationwide power cuts yesterday as the Electricity Supply Commission (Escom) battled to meet the rising demands of a country shivering in the grip of midwinter.

The cuts — which started about 7am yesterday — were caused by very heavy demand aggravated by "serious technical problems" at the Eastern Transvaal stations of Matla, Duvha, Kriel and Arnot, an Escom spokesman said yesterday.

He said the commission had been forced to "borrow" power from various municipalities to supplement its own supply, which was about 1 000 megawatts short of demand.

Escom tried to rotate the

power shedding so as to give all parts of the country an equal amount of power in comparison to their needs. Some areas were without power from 7am to 11am yesterday, while others were disconnected between 11am and 2pm, the spokesman said.

Meanwhile Sapa reports that Escom's peak-hour power cuts have become a daily inconvenience for harassed industrialists and shivering domestic consumers in Natal.

Natal will probably experience regular power cuts throughout the cold weather, Escom's Regional Engineer in Natal, Mr Edgar Wohlberg, said yesterday.

Power was again switched off shortly after 7am yesterday

at centres throughout Natal as factories geared up for the day.

Mr Wohlberg said Durban, Maritzburg, Ladysmith and Richard's Bay were the main areas affected — this time because of problems at the Matla and Duvha power stations in the Eastern Transvaal.

In addition, major industries — such as Alusaf and Iscor — were again warned to reduce consumption.

The chief executive of the Durban Chamber of Industries, Mr Roland Freakes, said yesterday that the blackouts were costing industrialists tens-of-thousands of rands.

And the general manager of the giant Iscor plant at Richard's Bay, Mr C J van Vuuren, said the forced reductions were

"playing hell with his budget." He said that although Iscor had a good relationship with Escom and was generally forewarned the continuing loss of power had caused a drop in production and was forcing major re-scheduling of work.

Mr Van Vuuren said he could not hazard a guess as to how much this was costing Iscor.

The effect would be felt by local customers who could expect delays in delivery. At this stage export customers would not be affected as Iscor had a large buffer stockpile, he said.

The managing director of Alusaf, Mr D E van Vuuren, said that production was being affected but he did not expect problems with supply at this stage.

For the second best student in the

C W von Düring

subject of Building Construction.

For the best student in the

S A Brick Association Prizes

III: No award

II: A R Low Keen

I: N D G Sessions

fifth years respectively.

II and III in the third, fourth &

the courses of Building Economics I,

For the best student in each of

LTA Prizes

P R Swift

Professional Practice.

the highest marks in

For the student obtaining

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

in any year of study.

For the best all-round student

Bell-John Prize

(Continued)

SURVEYING

QUANTITY

# Escom hit by big winter switch-on

Escom is struggling to keep up with the demand for electricity because of the cold weather.

With electricity consumption soaring, yesterday there were nation-wide power cuts. Natal has been particularly hard-hit by the cuts, and Escom says the province will probably experience power cuts throughout the cold weather.

Efforts have been made to cause as little inconvenience as possible through the cuts, but some industrialists have been hard-hit.

It is not known whether the power cuts will continue this weekend, this depends on how great the demand is.

Fine, mild weather is expected for the Witwatersrand this weekend.

But a spokesman for the Weather Bureau in Pretoria warned that temperatures could drop because of a "cold frontal system" moving up-country.

"It is not yet clear if this system will affect the Transvaal this weekend," said the spokesman.

The minimum temperature recorded at Jan Smuts today was 5,8 deg C, the highest this week.

The Cape is in for a cold weekend, with snow expected over the southwest.

rd  
has shown  
the end

Construction.  
student in the

Construction.  
in the  
Prizes

ins

ively.

For the best student in each of  
the courses of Building Economics I,  
II and III in the third, fourth &  
LTA Prizes

P R Swift

Professional Practice.

the highest marks in

For the student obtaining

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student  
Bell-John Prize  
in any year of study.

PLANNING  
REGIONAL  
URBAN &

QUANTITY  
SURVEYING  
(Continued)

# Escom

# 'caught' by boom

NY 11/7/80

185 (circled) (circled)

- 32 -

## Mercury Reporter

SOUTH AFRICA'S economic boom over the last three years has caught the Electricity Supply Commission napping, resulting in the power cuts which are becoming a part of living through the winter months

This is the opinion of Mr Roland Freakes, executive director of the Durban Chamber of Commerce

Mr Freakes said this week that Escom would obviously have difficulty meeting the demand for electricity for some years to come. They had not planned for the upsurge in demand which the country's growth had created.

Escom's public relations officer Mr C J Uys said that nowhere in the world was it possible to guarantee an uninterrupted power supply. He said the cold weather was increasing the load on the already overburdened supply.

At present Escom had a generating capacity of 17 500 Mw, more than adequate to cope with the country's anticipated peak demand of 15 000 Mw this winter, but informed sources said the teething technical problems with new equipment was responsible for the recent series of power cuts.

Escom officials remarked that they had been operating on reserve margins below the accepted international standards. Monthly averages of between 14 and 17 percent of reserve power were now the case.

These officials noted that in 1978 some thought Escom over-ambitious in plans for expansion at that time.

Meanwhile industry and commerce are now suffering from the periodic withdrawal of electricity supply.

Yesterday again many centres in Natal were totally sapped of electricity for periods of up to two hours, leaving

home-owners disgruntled over cold breakfasts and others panicky about being trapped in lifts

A spokesman for the Durban Electricity Department said yesterday that as far as possible load-shedding was restricted to residential areas, but almost invariably some industrial and commercial concerns would also be affected because the load was shed in zones, and small areas could not be isolated.

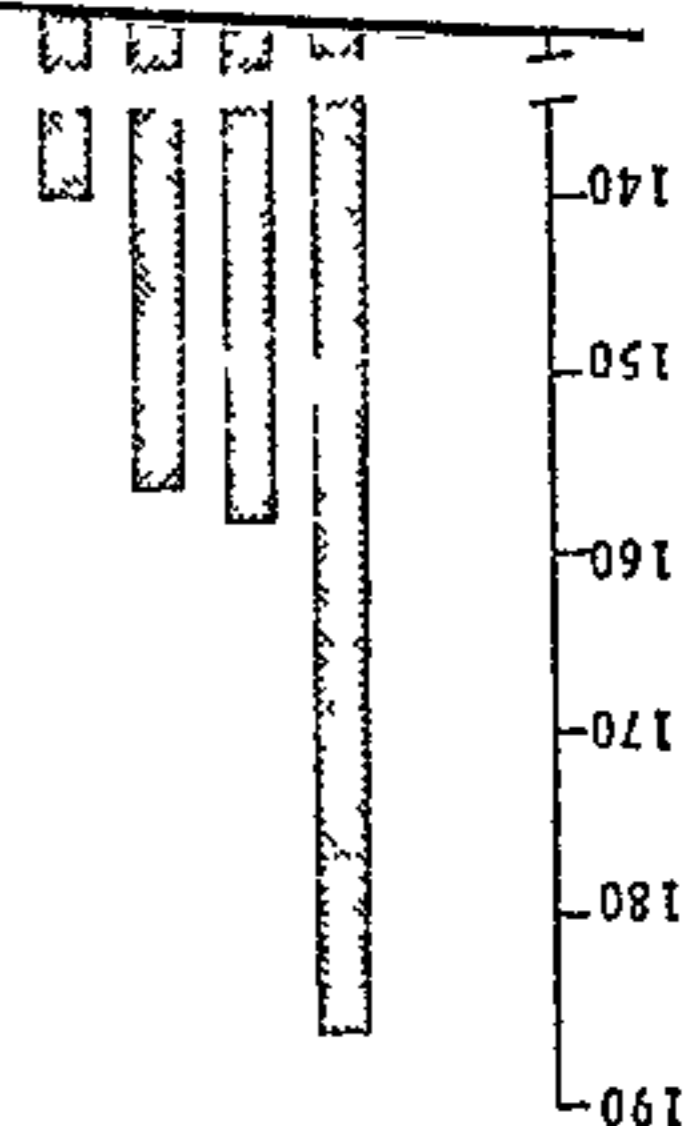
Mr Uys said warnings were issued over Radio Port Natal before power was cut off, interrupting programmes if necessary. An official from Radio Port Natal confirmed this.

A regular power cut system could not be implemented because it was impossible to pre-determine how many kilowatts would have to be shed every time a power cut was necessary, a spokesman from Escom's Regional Office told the Mercury. He added that the possibility of power cuts was greater from Wednesday to Friday, and any regular system would be unfair for people living in areas that had a greater chance of being affected.

Mr Ken Hobson, general manager of the Durban Chamber of Commerce, said yesterday he was very concerned about the power cuts. They were creating problems in commerce for a number of reasons. Security systems did not function, tills could not operate and computer systems broke down every time a power cut occurred.

Mr Hobson said the chamber was having a congress at Richards Bay next month where the issue would be discussed, and that he would be meeting the Natal regional manager for Escom and the Durban City Engineer at the end of this month to discuss the problem.

COLOURED  
WHITE



MORTALITY RATE/1000

Fig 4 Age Specific Mortality Rates/1000 White and Coloured, 1970 - 1970

Most people would accept that it is a fundamental right to engage in contracts - marriage contracts, work contracts, etc. In the absence of these contracts, implied or formal, the world either becomes random or we resort to the coercive power of the State<sup>10</sup>.

Why are certain goods classified as necessities?

The problem seems to arise because of a divergence between willingness to pay and willingness to accept compensation<sup>11</sup>. In general goods are exchanged in the market because of an overlap between someone's willingness to pay for a good and someone else's willingness to accept compensation to abandon a claim on that good. The existence of property rights is thus a necessary condition for market transactions to occur. In the case of a perfectly competitive market this overlap

in trade is one of the advantages of a free market, the freedom not to is equally important.

It can be argued that a similar circumstance arises in the case of medical care. Health is a unique good. In the case of illness we have little choice but to enter the market. Our willingness to pay (which may well be limited by a budget constraint) is a good deal less than our willingness to accept compensation, which may be infinite.

The two cases are superficially similar, but are they in fact the same? We assumed that the little old lady had a right to the house - it was her property. It is less obvious that anybody has right to health. The question of rights must be raised here because the income effect depends upon it. If we accept the proposition that

# More power cuts on way, warns Escom

By Mike Peirson, Finance Editor

BE prepared for more power cuts this week.

Despite the fact that it is working around the clock to prevent the cuts, Escom says many areas may be without electricity for long periods.

Demand on the nationwide network could increase during the week if the cold spell persists.

During the past week unexpected and serious technical problems arose in generating sets at several power stations. Consequently shortages arose countrywide on Friday.

Escom hopes the position will improve after September when the high demands for electricity should decrease.

But the winter of 1982 may see the same supply shortages.

Escom points out that despite the short-term steps it has taken to try to balance output and demand, the only long-term solution is more power stations.

An unfortunate side-effect of the shortage of electricity is that old and uneconomic power stations are being operated which will lead to higher operating costs.

of illness that person  
cept compensation is  
we do not accept this  
erion we should use.  
o defining obligations.  
that someone else  
sued that "society"

considerable sentimental value to her (she has lived in that house for forty years, her husband died in that house, her children were born there, etc.). As far as she is concerned the house is worth more to her than its market value.

Her willingness to accept compensation is a good deal greater than her willingness to pay which is limited by her small income (technically this is equivalent to saying that there is an income effect). This falls into the category of unique or especially treasured goods - there is no market for them. The fact that she owns the house means that she has the right to decide not to sell it to any potential purchaser. It is often forgotten that though the freedom to engage

has the obligation to supply it - but this is simply misleading. The burden of the obligation falls in some measure on various individuals in society.

Do we have a right to health? One possible approach to this question is the familiar 'Good Samaritan' case. Consider a variation of it. Wolraad Woltemade is a South African folk hero of the eighteenth century. Riding his horse along the beach one day he observed, a ship wrecked close in shore. He rode his horse into the surf several times and saved a few of the passengers. History records that on his last journey he and his horse drowned.

# Jo'burg saved from power cuts by emergency turbines

8/10/13/7/81

185

While the rest of South Africa faces widespread power cuts, emergency generating equipment in Johannesburg has saved the city from supply interruptions.

Escom's electricity supply nightmare comes after technical problems at four major power stations in the Eastern Transvaal — Arnot, Duvha, Matla and Kriel.

In addition terrorists have sabotaged the power line from Cabora Bassa to South Africa, cutting off an important supply of 1 300 megawatts (Mw).

As a result Escom's potential capacity of 18 800 Mw, including Cabora Bassa, has been cut to about 15 000 Mw, a spokesman for Escom said today.

As peak demand this winter has exceeded 15 000 Mw, Escom has had to interrupt supply in rotation around the country in order to cope.

Johannesburg's City Electrical Engineer, Mr Wessel Barnard, said the city had escaped the ef-

fect of the power cuts thanks to recently bought emergency gas turbine generators.

Mr Barnard said Johannesburg bought a quarter of its power from Escom and generated the balance.

He said because of its supply problems, Escom had had to reduce its supply undertaking of 430 Mw to Johannesburg, which has experienced a record peak demand of 1 210 Mw this winter.

Mr Barnard said Johannesburg had used its five emergency generators to compensate for Escom disruptions.

Escom paid Johannesburg for this aid because the emergency machines ran on expensive diesel fuel.

He estimated the emergency plant, which cost R30-million, would be paid off in three years thanks to the saving in Escom power.

The Star's Durban Correspondent reports that the continuing Escom power cuts have reported-

ly led to shop looting and massive industrial production losses.

The cuts have cost a Natal company an estimated R100 000 in a week.

The works manager of SA Nylon Spinners, Mr Mike Bryan, said that when a power cut blacked out the company's continuous process plant, at Hammarsdale a week ago, the subsequent heat loss caused polyester in the process of production to solidify.

As the plant was in full production, the estimated loss was R50 000.

On Friday, after the firm made an urgent appeal to Escom for some kind of forewarning, it was told of the morning power cut 30 minutes in advance.

Although it was possible to begin to shut down the plant it was impossible to save the raw material.

The estimated loss was again up to R50 000.

Escom's headquarters in Johannesburg said at the weekend more power cuts were forecast on a large scale for the week.

URBA  
REGI  
PLAN

I : N D G Sessions

For the best student in each of the courses of Building Economics I, II and III in the third, fourth & fifth years respectively.

LTA Prizes

P R Swift

Professional Practice.

For the student obtaining the highest marks in

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student in any year of study.

Bell-John Prize

(Continued)

QUANTITY  
SURVEYING

# Power cuts will hit canners

14 Aug 1978 (185)

CANNERS in the Western Cape fear serious production losses because of Electricity Supply Commission power cuts

Spokesmen for major factories say losses were not too severe during three cuts last week, as most were not in full production or were having their annual shut-down.

Escom said in a statement from its head office in the Transvaal yesterday that intermittent nationwide power cuts could be expected till late next year.

## CAUSES

Power cuts over the past few weeks have been attributed to factors such as the cutting back of Escom's expansion programme in the early '70s and the intermittent supply from Cabora Bassa, which stopped totally in April

Some municipalities in the Western and Southern Cape have sent circulars to consumers warning that there will be frequent cuts this winter

The factory engineer for Gants Foods at The Strand, Mr J L van Deventer, said today the three factories were hit by the power cuts last week, which stopped production for up to an hour.

## HAZARDS

The steam and air compression in boilers containing up to 2 400 cans were turned off, which meant the cans could be dented or burst

Three hundred staff members were laid off for the closed period, and it took up to two hours to get the plants in full production again

Mr van Deventer said Gants had asked Escom whether it could be forewarned of pending cuts

Escom's regional manager in the Western Cape, Mr G F Hellstrom, said it was impossible to notify all consumers, as short notice was usually received from the Transvaal that part of the load

'itself negotiate' with Escom about any problems

There had been problems this week, but he refused to comment further

The factory manager of Ashton Canning, Mr J K Brooks, said the company was not in production at present, but when it was it suffered thousands of rands in losses as a result of cuts

The only problem with the recent cuts had been a delay in labelling cans, and this on occasion had caused 'the boat to be missed'

the legal owner the animal  
he wants for the animal  
There is a snag, however  
The captain has no  
place to keep the horse  
but is willing to give it to  
anyone who will give it  
lots of tender loving care.

# Power cut problems could persist until 1982 — Escom

RDM 14/7/81

185

## Staff Reporter

SOUTH AFRICA can expect intermittent nationwide power cuts until late 1982, an Escom spokesman said yesterday.

The commission's public relations officer, Mr C J Uys, said Escom was working around the clock to try to prevent serious power shortages.

The power cuts experienced nationwide recently were, he said, anticipated by Escom last year and a February statement asked for private and industrial reductions in electricity consumption at peak periods in winter.

Power cuts in most parts of the country over the past few weeks have been attributed to a number of factors — not least the cutting back of Escom's expansion programme in the early Seventies.

Escom said last week that the shortage of generating capacity was foreseen several years ago and the commission warned then that unless generating capacity was increased the quality of supply would not be of an acceptable standard and power cuts would follow.

Expansion was curtailed in keeping with the economic climate in the late Sixties. Public

opinion was also against expansion and, despite Escom protests, the expansion programme was curtailed.

Four years elapsed after construction started at Duvha, Matla, Drakensberg and Koeberg power stations before more orders were placed for power stations. This delay, resisted by Escom, coupled to the long lead time before the first turbo generator of a major power station was in operation, had aggravated the problem of electricity shortages now occurring.

The backlog was eased by commissioning several generating sets ahead of schedule. Maintenance and repair programmes were reorganised with private contractors.

Even uneconomic and old plant was kept in service. Generating sets were pushed to their limits, and the high demand growth forecast by Escom was realised.

Yesterday Escom said the imbalance between generating capacity and national demand could widen next week. This would mean load-shedding which would leave many areas without electricity.

Last week unexpected techni-

cal problems arose in generating sets at several power stations and serious shortages arose countrywide on Friday.

"An unfortunate consequence is that to meet demand old and uneconomic power stations are being operated, which leads to higher operating costs," Mr Uys said.

He hoped the position would improve after winter, but next winter could see a recurrence of the problems being experienced at present.

Despite the urgent short-term steps taken by Escom to try to meet demand, he said, the long-term solution to support economic development could only be achieved with more power stations.

Mr Uys said the situation, with three new power stations operating to some degree, did not seem to be easing.

He forecast that even with four operational, increased demand would cause problems at peak periods.

The new power stations at Matla, Duvha and Drakensberg are half operational and Koeberg will start to generate power towards the end of next year.

Escom reported no power cuts yesterday.

PLANNING  
REGIONAL  
URBAN &

For the best student in each of the courses of Building Economics I, II and III in the third, fourth & fifth years respectively.

LTA Prizes

P R Swift

For the student obtaining the highest marks in Professional Practice.

Surveyors' Prize

Cape Chapter of Quantity

The Committee of the Western

P C Key

For the best all-round student in any year of study.

Bell-John Prize

(Continued)

QUANTITY  
SURVEYING



# Escom power 'bank' critically low

18/11/85

By Bob Davis

The Escom power "bank" is dangerously low. It is 12 percent below the internationally acceptable margin between demand and supply.

The country is now paying the penalty for a period during which no orders for new power stations were placed because of economic gloom and adverse public opinion. Escom warned in the early 70s that power shortages would occur.

The price now being paid includes

- Countrywide power cuts when the cold weather causes peak demand

- The prospect of the winter of '82 being marked by insufficient electricity for industrial and commercial use.

- A five-year period of dangerously low safety margins between demand and supply capacity. Engineering sources said the internationally

acceptable margin between demand and supply was 25 percent but an Escom spokesman said Escom could generate only 13 percent above demand

Although three power stations were being brought into operation sooner than expected, Escom did not expect the position to improve until after 1986, when another three power stations would be commissioned, a spokesman said

Escom has warned con-

sumers that further cuts in supply may be expected this winter "for long periods" and that there would be a recurrence in winter next year.

The present situation was that planned maintenance and repair programmes had to be reorganised with private contractors being used to alleviate staff shortages.

Although it denied reliance on Cahora Bassa, Escom admitted that the interrupted supply was an

aggravating factor.

Last week serious technical problems arose at several power stations and countrywide cuts were made

Escom said these would continue until after September when peak demand would be lower.

- Escom has adopted a change of name for the Cahora Bassa scheme to Cahora Bassa, after a request by the Frelimo Government.

Bell-John Prize  
For the best all  
in any year of s

P C Key

The Committee of  
Cape Chapter of  
Surveyors' Prize  
For the student  
the highest mark  
Professional Pr  
P R Swift

LTA Prizes

For the best sti  
the courses of I  
II and III in th  
fifth years rest  
I : N D G Sa  
II : A R Low  
III : No award

S A Brick Associ

For the best stu  
subject of Build  
C W von Daring

For the second b  
subject of Build  
K Strong

Student Planners

For the student  
greatest promise  
of the first yea  
M P Morkel

QUANTITY  
SURVEYING  
(Continued)

URBAN &  
REGIONAL  
PLANNING

# Cabora Bassa link may be restored soon

Mercury Reporter

THE link between the Cabora Bassa hydro-electric scheme in Mozambique and the Escom grid, which was severed last year, apparently by anti-Frelimo terrorists, may be restored soon to help alleviate South Africa's electricity shortage

However, public relations officer for Escom, Mr Boet Uys, was reluctant yesterday to be more specific about restoration of the power link because he said, it was a delicate issue.

'Recently there have been negotiations between Escom, the Mozambican authorities and the electricity company,' he said. 'And there is a definite keenness on all sides to restore the link.'

South Africa could draw more than 1 125 megawatts from the scheme — Escom predicts maximum demand on its national distribution grid to rise to at least 15 000 megawatts by September

POWER cuts have become frequent events in South Africa as the demand for power from the ever-burgeoning industrial sector outstrips supply. But Escom is doing something about the shortfall and has embarked on one of the most ambitious expansion schemes in the world.

Mercury Reporter Greg Pearce visited the latest Escom project that is helping to close the gap between supply and demand, the Drakensberg Pump Storage Scheme, part of which is now operational.

However, although the scheme will boost the power supply throughout the country it will not necessarily mean the end of power cuts in Natal. The assistant regional manager of Escom, Mr E J Bradbury, said yesterday that because Escom's power supply is inter-connected on a national web, the new expansion scheme would not mean that any one area would benefit more than another.

185

# Plugging the power gap

ABOVE:  
over the

HIDDEN 200 m beneath the northern Drakensberg foothills at Jagersrust is the Electricity Supply Commission's newest venture — large enough, once complete, to supply electricity for a city the size of Johannesburg

A hydro-electric plant is nothing new in the generation of electricity, but this plant — when completed in mid-1982 — will generate 1000 MW, with a difference, in that the entire system is underground 200 m below the surface and 1 km into the side of the mountain

Impressive is perhaps too mild a word to describe the maze of tunnels, 8 m in diameter that house the canals, turbines, water surge areas (each surge is 84 m high) that lie beneath the Drakensberg hills

And, because it is hydro-electric power, the storage scheme can be switched into the national grid, in the event of excessive de-

mand, in a little more than two minutes to relieve areas where demand is too heavy

### Dual purpose

Escom has worked very closely with the Water Affairs Department and their Tugela-Vaal scheme which supplies water to the Vaal from the Tugela River

The working principle of the Drakensberg Pumped Storage Scheme is much like two hands working in co-ordination — a dual purpose scheme supplying water and electricity, according to Escom's PRO for the scheme, Mr Marius Rautenbach

He said the water scheme had already proved its worth — the water being successfully transported by an intricate system of canals across the Drakensberg from the Jagersrust reservoir dam in Natal to the Sterkfontein Dam in the Orange Free State

These canals take con-

servation of fauna into account as well — the canals lifting the water only 1 m in every 10 km, so that if any animals venture too near the canal and fall in there is no danger of them being swept away

### No more waste

Mr Rautenbach explains how the system works

'Water is collected in the lower reservoir, the Kilburn Dam from the Tugela River, and pumped, using electric power, to the upper reservoir, the Driekloof Dam

'Although parts of the country are at times without electricity at peak demand periods (this is when the Drakensberg's two-and-a-half minute switchover will be used), there are times when there is an excess of electricity from the coal-fired stations — like the one in Pinetown. There is no way of storing this electricity, so it

goes to waste

'But not any more. Now that power can be sent to the Drakensberg scheme and used to pump the water by means of four turbines to the upper or Driekloof Dam

'It is at this stage that the four giant underground turbines, weigh-

## Water scheme help boost

ing more than 300 tons apiece and generating 250 MW each, are used in reverse to generate electricity. The water flows from the Driekloof Dam or upper reservoir over the turbines back to the Kilburn Dam and in so doing generates electricity

### Giant valves

'In the event of an emergency, or even just to stop the supply of water, giant ball valves have been installed each one having a surge tunnel 84 m high to allow the surging water to settle.

'If it is required the upper dam can unload its entire load of 26 m cu m of water in 29 hours

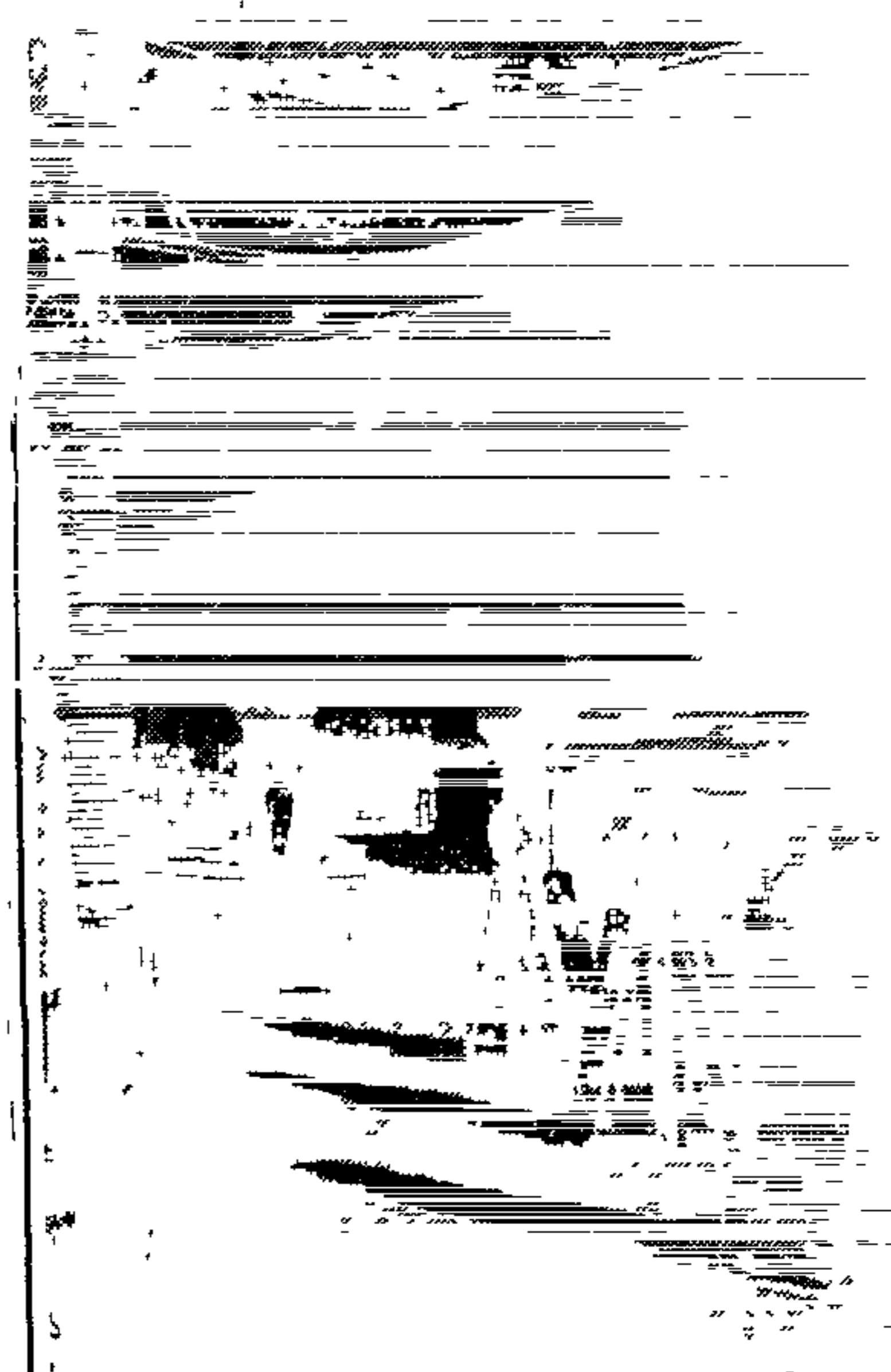
supplying 1000 MW this period — but this would never happen this is only an emergency reserve capacity'

Mr Rautenbach goes to explain how the scheme will work at times

'On a weekly basis is how it will work

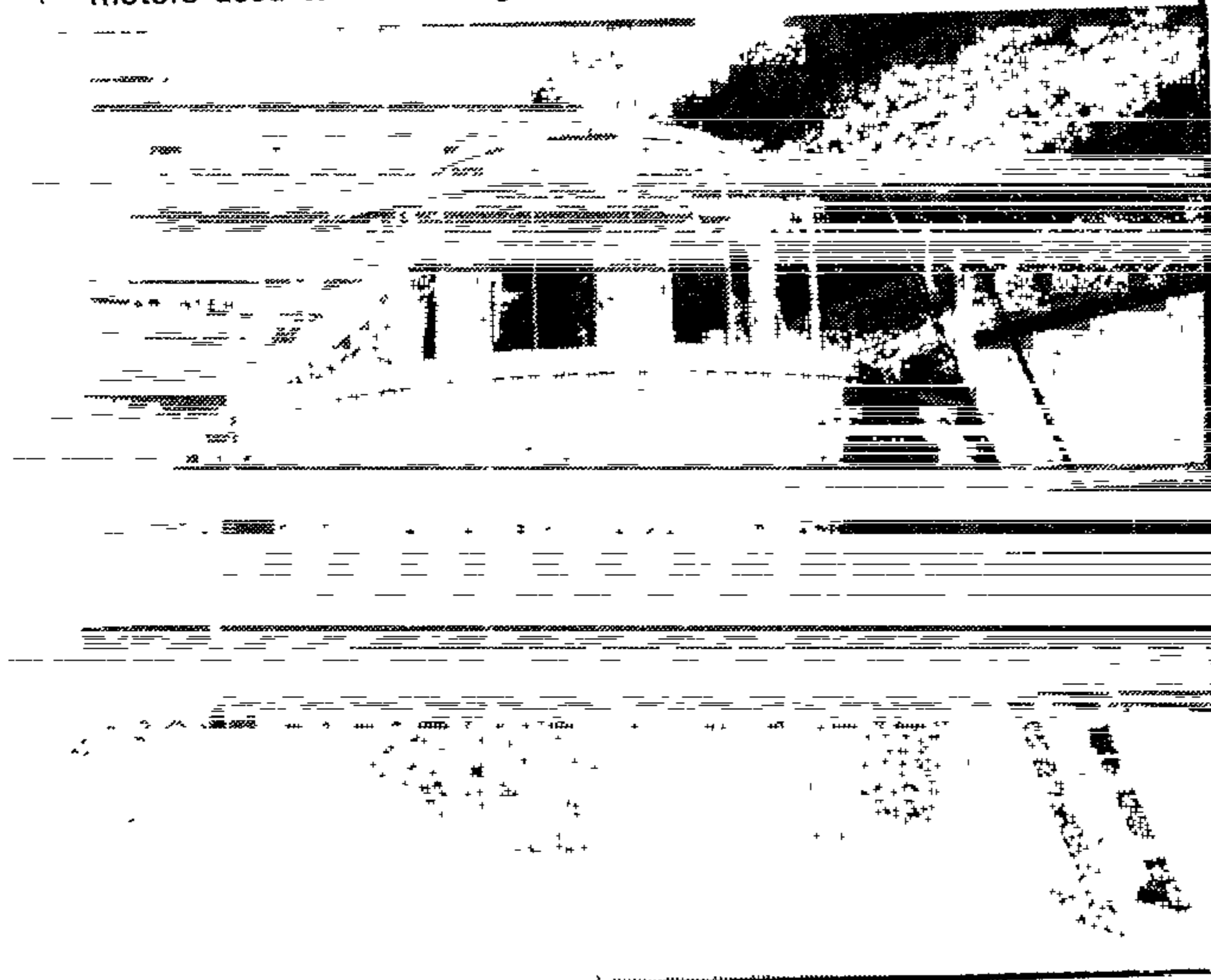
'Monday Once Driekloof Dam is full valves will be opened and water flowing, the turbines will generate power for ten hours. During the day the water will flow over the turbines and turn anti-clockwise, the water ending up in the lower reservoir at the bottom of the Dam at the bottom

'During the low demand periods, excess power from the coal stations will be



A HIGH voltage yard from which the power goes to consumers from the Drakensberg Pumped Storage Scheme

nis is where the water leaves the Driekloof Dam on its way  
urbines down to the Kilburn Dam. Below: One of the pony  
motors used to start the giant turbines.



## we will supply

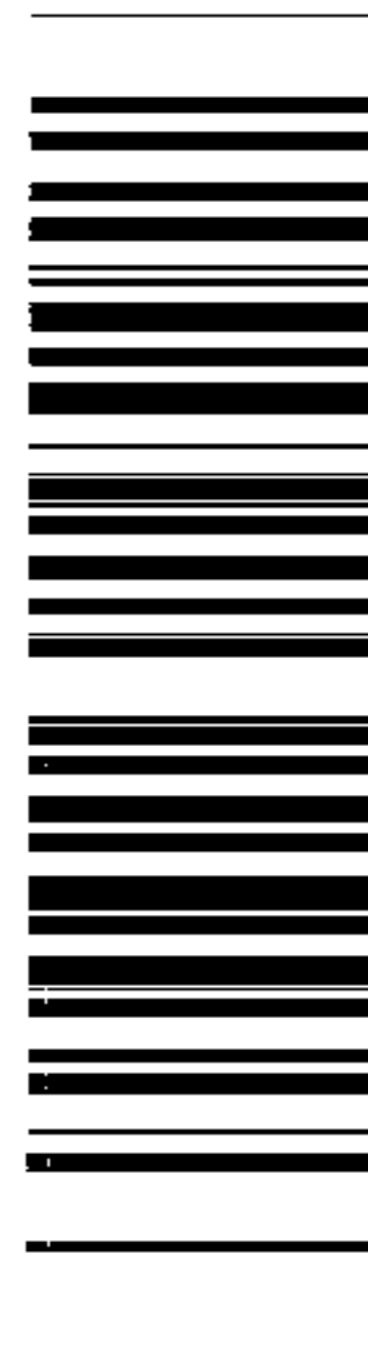
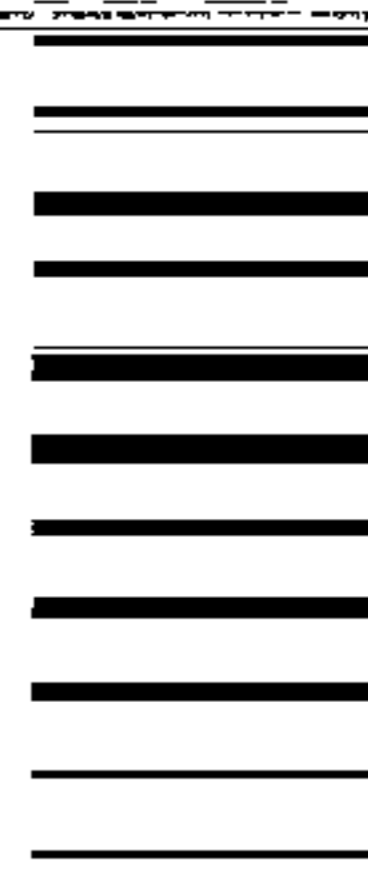
drive the turbines in a  
clockwise direction,  
pumping the water back  
to the top reservoir, the  
Driekloof Dam, for nearly  
11 hours. The level of the  
top dam will not be as  
high as it was in the  
morning because the wa-  
ter flows downward  
faster than it can be  
pumped upwards.

### Pumped back

The process is repeat-  
ed through to Friday  
when the top of  
Driekloof Dam will be  
empty. Then, over the  
weekend for 34 hours, the  
water in the Kilburn  
Dam will be pumped  
back to the Driekloof  
at the top.

Added to this will be a  
slow flow of nine-and-a-  
half hours of water from  
the Water Affairs Depart-  
ment's dam, the  
Sterkfontein, a supple-  
mentary replenishment  
used to top up the  
amount of water lost  
each day by evaporation  
and the loss caused by  
the up-flow being slower  
than the down-flow.

So after eight years —  
should the scheme have  
no setbacks — the  
Drakensberg Pumped  
Storage Scheme will be  
in operation helping to  
limit those times when  
the national grid be-  
comes overloaded and  
power cuts occur.



# Matla stands by for record blast

18/7/81  
185

Staff Reporter

TOMORROW morning is D-day for Escom's ill-fated giant Matla smokestack, near Witbank

The 275m stack — the tallest of its kind ever to be dynamited — is to be blown up at 8am tomorrow

Two workers died and seven others were injured when one of its internal-flues collapsed after high winds had battered the stack in August last year

An hour after sunrise tomorrow a massive explosion will rip the chilly morning air, followed seconds later by the roar of tons of pulverised steel and concrete crashing to the earth

The stack will fall along a narrow predetermined path between surrounding strategic buildings

"I'm getting very nervous," said Dr William Vance, technical director of Futurus Engineering which built the doomed stack "I hope it falls in the right direction"

Mr Jim Redyke, an American demolition expert from Tulsa, Oklahoma, hired to "drop" the stack, is confident it will go the same way as more than 70 other buildings he has blown up in the past 12 years — straight down to dust

Recently he did a test blast on a section of the stack to determine the exact quantity of high-explosive required to "pop" the stack without wasting energy

The test charges, laid in four of the 700 holes drilled at the 40m level along the face of the stack, merely cracked the reinforced concrete outer windshield

On the basis of this information Mr Redyke has calculated the exact amount of force required to pulverise the windshield and the two remaining internal flues to "drop" the stack

The charges will be placed in a "smile" pattern stretching halfway round the circumference of the stack. The flues will be cut in the same way to reduce resistance to the fall

Futurus have laid a 50 000m<sup>3</sup> soil trough to cushion the tower's devastating impact as well as to shield surrounding structures from the airblast and flying debris

The success of the demolition depends on an almost windless day, otherwise the project would be too risky

The stack must fall along a precarious axis which will permit it only a 20 margin for error on either side of a nearby coal loading depot and cooling tower. At its rear are the turbines and generators that drive the power station

Escom will close the power station during the blast and members of the public will not be allowed on to the site

Award  
who has shown  
at the end

best student in the  
ding Construction.

lding Construction.  
tudent in the  
citation Prizes

rd

w Keen

Sessions

respectively.

f Building Economics I,  
the third, fourth &

student in each of

Practice.

arks in

nt obtaining

ize

of Quantity

of the Western

of study.

all-round student

ize

PLANNING  
REGIONAL  
URBAN &

(Continued)

SURVEYING  
QUANTITY

# POWER CUTS: DO NOT BE CAUGHT!

## EARLY WARNING SYSTEM MOOTED AT TOP-LEVEL DISCUSSION

FOR THOSE who have the nightmarish fear of getting stuck in a lift during Durban's current power cuts, help could be on the way *Future* 19 JUL 1981

By MIKE PEIRSON, Finance Editor

Escom is considering the possibility of an early warning system which would take the form of a 10-second power cut in the commercial sector 10 to 15 minutes before the main cut. This would give peo-

ple sufficient time to take evasive action

It was one of the points to come out of crucial talks held late this week between Escom and Dur-

ban's City Electrical Engineer on the one hand and representatives of commerce and industry on the other

Meetings with commerce and industry were held separately as it was felt their individual problems were very different

Following the commerce consultations, Mr Ken Hobson, general manager of the Durban Chamber of Commerce, said: "We had very fruitful talks at which four main points were raised

"The first was for a fairer base for load-shedding nationally, taking into account those areas that have independent generation units.

"We also requested fairer local load shedding and isolating business centres from suburban areas and this is going to be looked at"

The third point related to an early warning system. This also included the use of Radio Port Natal People, he said, should listen to the station between 6.30 and 8 a.m. each day where fairly general information on the possibility of cuts is to be given

Finally there was the education side.

"The public should be made aware of the need for conservation of power," said Mr Hobson, "and what to do during a power cut and after

"For instance, if you leave an appliance on during a cut which has a high power intake when the power comes back it could cause an overload which would blow the switches at the sub station and cause another cut."

The Natal Chamber of Industries in their "constructive and useful" meeting decided to establish a sub-committee with NCI members and Escom representatives to investigate various factors which would help bring some relief to the situation

Executive director of

the NCL Mr Roland Freakes said the committee would try to establish ways of getting better advance notice of cuts to vulnerable industries and ways in which various industries could assist by voluntary load shedding.

"Of course you could not apply the 10-second early warning system proposal to industry because there are so many vulnerable areas," he explained "Plastics and food are just two that come to mind"

He added that basic data from all members of the NCI would be collected and used by the committee and would provide a channel for all NCI members' problems to be put over to Escom.

tween culturally sh  
for achieving them.  
to lowered conformi  
state of anomie and  
a condition of rel,  
bility due to inef  
Merton spells out  
ple can adapt to t  
either accept or r  
ject the instituti  
ton also conceptu  
namely innovation  
being deviant .

- (a) The degree to which the culture operates to bring about inner tensions, anxiety or acute needs for adjustment in its members.
- (b) The sort of attitude towards drinking the culture produces in its members.
- (c) The degree to which the culture provides suitable substitutes as channels of satisfying anxieties .

These global supra-cultural theories are, of necessity, speculative, imprecise and virtually impossible to refute or test

Realising these and other methodological limitations, sociologists embarked on less ambitious and more

(specific) norms, sanctions and values specific to different societies, then the theoretical possibility exists to transcend or violate these normative and regulatory prescriptions. If this occurs, it is usually referred to as "deviant behaviour" in sociological literature.

Within this perspective the anomie theory of deviant behaviour is used to explain alcoholism. Merton (Merton, 1957, p. 215) postulates that anomie is brought about by a disjunction be-

23. Venter, J D Die Drinkpatroon van Kleurlinge in KwaZulu en Natal, Nasionale Buro vir Opvoedkundige en Maatskaplike Navorsing, Navorsingsreeks no. 19, 1965.
24. Verslag van die kommissie van Ondersoek na Aangeleentheid van die Kleurlingbevolkingsgroep, Die Staatsdrukker Pretoria, 1974.
25. Williams, R J Biochemical individuality and cellular nutrition in Quarterly Journal of Studies on Alcohol, 20, 1959.

France <sup>S. Tubome</sup>  
to ship ~~19/7/81~~  
reactor (85)

PARIS France plans to deliver a nuclear reactor to South Africa in the next few days.

President Francois Mitterrand has given the green light even though he knows that delivery of the 900 megawatt reactor is sure to infuriate ideologues within the French Socialist Party.

Aides say the President believes France must honour existing contracts however ideologically objectionable they may be. And in an effort to clear the order books swiftly so that a fresh policy can be devised he has given instructions for the reactor to be shipped to Cape Town as soon as possible.

Delivery of the reactor completes the controversial R1 200-million nuclear deal negotiated by France and South Africa four years ago.

But as the ship carrying the nuclear equipment prepares to sail from the Mediterranean port of Fos-sur-Mer it is becoming clear that there are compelling economic reasons why the French Government may decide to tread carefully in its dealings with South Africa.

The Government knows France relies on South Africa for a large slice of its strategic minerals.

# GOING,

## Ill-fated tower brought down

From Page 1

gating the causes of last year's collapse

The insurers of the tower — Escrom and Futurus took out a joint insurance policy — are also investigating the incident. Although Escrom has already paid for the tower, it has not yet taken it over. It is understood Escrom footed the bill for yesterday's demolition.

"A 'Matia' is a Sotho word meaning 'power' or 'strength' — but at the moment everyone is trying to get behind the fatal weakness that has condemned the ill-fated massive Matia Power Station stack which was dynamited yesterday.

## The flaw that may cost over R4m

Staff Reporter

A QUANTITY surveyor has guesstimated the additional cost of demolishing and rebuilding the Matia tower at R4 118 000.

His estimates were Demolition R338 000, earth wall delayed and removed R500 000, reroute ash pipes R100 000, erect and later remove temporary replacement stack R500 000, new replacement chimney and three flues, less the existing substructure (if it is sound) plus escalation R2 400 000, consultants fees (say) R280 000.

The surveyor did not mention the cost of two more temporary flues for generators five and six.

The new stack would take between two and two and a half years to construct. It is likely that foundations of existing chimney are unsound, but this remains to be confirmed.

# GOING

## A stunned silence as stack sinks

RDW

AS THE clouds of dust settled at the Matia power station yesterday experts were scratching their heads and asking "Why?"

Why had the carefully planned and executed demolition of the ill-fated 275-m stack gone awry and added to the massive damage bill?

American demolition expert Jim Redyke, who came to South Africa to "pop" the stack, stood stunned as a dust column rose hundreds of metres into the early morning sky.

There was not breath of wind to drive the tower off its path. He had earlier confidently predicted the chimney would come crashing down in a straight line along the prepared landing site. But his predictions were wrong and the R3 500 000 stack lay in the tangled ruins of a section of Escrom's Matia power station. Although the 40 000-ton chimney narrowly missed nearby generators, a pollution precipitator was crushed by a couple of 25m slabs of flying reinforced concrete.

Hundreds of people gathered in the chilly morning to sip coffee and munch a roadside breakfast as the Matia tower was brought tumbling to earth.

An air of expectation hung over the power station. Mr Redyke was visibly nervous as he made final preparations to raise the tallest structure in the world ever to be dynamited.

This time it was no movie prop (he was responsible for hair-raising stunt demolitions in the films "Hooper" and "Smoky and the Bandit 2") — it was "certainly the biggest and most complicated job any demolition contractor could tackle".

The power station was closed down for the blast. Ten minutes before the detonation button was pushed a warning siren blew, cleaning the site.

Last minute instructions were shouted over two-way radio sets. Shortly before 8am, Mr Redyke, began a Cape Canaveral-style countdown — a tense, clipped strain in his voice.

He hit the button exactly on time. A muffled explosion rocked the two remaining flues inside the stack.

Strategically placed charges at the 40m level then bit the "smile" pattern from its face. A wave of pulverised rubble fanned into the air. The fresh early morning air was shattered by a deafening crack as the next phase in the 12-second demolition took place and nearly 200kg of ammonium-nitrate exploded, followed by a pushing roar.

Then came the low whine of concrete tearing against concrete. But instead of topping headlong like a felled tree and crashing into the carefully prepared fall-area, the stack's outer concrete windshield began to crumble at its base. Slowly at first, but with rapidly increasing momentum, the windshield slid relentlessly down to the ground in a shaft of brown dust. For a few seconds the two remaining flues stood erect amidst

# ... GONE OUT OF CONTROL



The chimney is finally brought to earth, but not as planned. Although the chimney narrowly missed nearby generators, a pollution precipitator was crushed.

the turmoil, then they too began to crumble at the base. The mighty Matia chimney heaved a final deflated sigh, shook the earth and disappeared in a pile of pulverised rubble and reinforcing steel.

Mr Redyke stood motionless — shocked that his masterplan for the demolition had failed. From a distance it seemed the tower lurched clumsily towards the generators at the last moment.

When the dust cleared a neat dome of fine concrete dust and rubble lay amidst heaps of mangled steel girders. Close by the shattered and twisted steel of the precipitator of No 5 generator lay among massive chunks of reinforced concrete.

An Escrom engineer on the site said the damage was "serious, but not as bad it might have been". No 5 generator was still under construction and the precipitator was not yet in use, he said.

The precipitators remove 95-98% of the dust from the exhaust gases expelled from the coal boilers. The stack was built to carry the gases into the atmosphere. "We never even thought the stack would go down like that. We were very lucky," said a relieved Dr William Vain technical director for Futurus (the engineering company which built the doomed stack).

A stunned Mr Redyke silently examined the damage, wondering what went wrong with his calculations. Dr Vance speculated the tower broke under the mass of tons of concrete loaded on its base structure after the first portion was removed. It is understood the temporary pipes which flush coal ash from the generators were also damaged in the collapse. Over 250 tons of coal are burnt in the boilers each hour, of which 25-30% converted to ash. The generators cannot function without ashtraps.

The chimney begins to crumble, raising a mass of dust. Even at this point it is falling to the right.

Cape Provincial Institute

ARCHITECTURE

FINE ART & ARCHITECTURE





The moment of truth, as 200kg of ammon gelignite, in the form of 2.5 X 17cm sticks, blasted the Matia stack into an expensive pile of rubble.

# Tower ill-fated to the end

Staff Reporter

ESCOM's ill-fated tower near Matia which collapsed mysteriously while under construction did the same again yesterday — this time while it was being demolished.

As with the previous one, yesterday's collapse has the experts scratching their heads in bafflement.

But the tower at Escom's Matia Power Station near Wilbank ill-fated or not, was finally laid to rest.

Perhaps not as the team of American demolition experts had quite planned. The master-plan to bring down the tower

went awry when the stack defied predictions and collapsed where it shouldn't have — destroying a nearby power station installation.

The experts had confidently predicted that the tower would, after it was dynamited, fall headlong into an open area between power stations.

Instead the tower "feared" and in the process flattened a section of a smoke precipitator serving one of the station's boilers.

After the dust cleared, the baffled experts examined the devastation which surrounded the doomed stack.

But an Escom expert said

the damage was not serious as construction is not yet complete on the generating unit.

He estimated it would take a few months to rebuild the steel structure, although he did know how much it would cost.

The bill for the demolition of the chimney, which cost R3 300 000 to construct, is understood to be about R338 000.

The 275-metre chimney hit the news in August last year when one of its internal flues collapsed, killing two construction workers and injuring seven others.

Subsequently a court of inquiry was convened to investigate whether the Factories Act had been infringed.

R Stubbins Award

J G Kirkman

design work.

best use of bricks in his

For the student who has made

Miss M F J Sandilands

first year.

Mrs. Thornton White Prize

185

To Page 2

The inquiry heard that sustained high winds battered the stack for a few days causing it to sway and creak. Soon afterwards the No 6 flue collapsed. It was decided to demolish the tower rather than rebuild it as tests had shown the concrete structure to be crumbly. It is thought the foundation may also be defective.

And now the tower is to be rebuilt at considerably greater cost.

But, this time the plans will be carefully changed.

The firm which constructed the tower is privately investigated.

RDM 20/7/51  
**Koeberg**  
reactor

**Own Correspondent**

PARIS — The second nuclear reactor for the Koeberg power project was reportedly being loaded onto a freighter at Foz-Sur-Mer, near Marseilles, yesterday

d. It will reach Cape Town in about two weeks

k. in Press reports said yesterday the 24-hour private visit to France last week by the South African Minister of Finance, Mr Owen Horwood, was to finalise the project

It is understood that if France broke the contract it would have to pay South Africa R1 500-million in compensation

Osborn Prize  
For the best work in fourth

S A Read  
General J B M Hertzog Prize  
For the best final year student.

D H Pryce Lewis  
David Haddon Prize  
For the best student of Architecture (or Quantity Surveying) in the subject of Professional Practice.

Miss C Tredgold  
Molly Gohl Memorial Prize  
For the best woman student in third year.

P A Rappoport  
Helen Gardner Travel Prize  
For a student who has satisfactorily completed 1st, 2nd and 3rd major courses.

P F Dunkley  
Sixth Year  
Cape Provincial Institute of Architects' Prize  
For the best student in :-

FINE ART & ARCHITECTURE

ARCHITECTURE

From the Sunday Times,  
London

PARIS — France plans to deliver a nuclear reactor to South Africa in the next few days.

President Francois Mitterrand has given the green light even though he knows that delivery of the 900 Mw reactor is sure to infuriate ideologues within the French Socialist Party who are strongly opposed to apartheid.

Aides say the President holds the view that France must honour existing contracts however ideologically objectionable

they may be. And in an effort to speed the order books swiftly so that a fresh policy can be devised he has given instructions for the reactor to be shipped to Cape Town as soon as possible.

Delivery of the reactor completes the controversial R1200 million nuclear deal negotiated by France and South Africa four years ago.

But as the ship carrying the nuclear equipment prepares to sail from the French Mediterranean port of Fos for South Africa it is becoming clear in Paris that there are compelling economic reasons why the French Government may decide to tread carefully in its dealings with South Africa.

The Government may oppose South Africa over

apartheid and it knows France relies on South Africa for a large slice of its strategic minerals, including 60 per cent of its titanium 30 as much as 10-million tons of coal.

The Government is averse to any measures which may boost unemployment, now close to 1.8-million

## SA to get French reactor

29/7/81

Reports from Paris said South African Finance Minister Mr Owen Horwood had discussed the matter on his visit to Paris last week.

Mr Horwood denied on his return to South Africa that he had spoken to French Government officials.

The exact date of sailing was uncertain today but it was said to be imminent. Officials at Fos near Marseille, professed ignorance of the shipment, reports The Stars Own Correspondent in Paris.

Bell-John Prize  
For the best all-round student  
in any year of study

P C Key

The Committee of the  
Cape Chapter of Quai  
Surveyors' Prize  
For the student obt  
the highest marks i  
Professional Practi

P R Swift

LTA Prizes

For the best student  
the courses of Buil  
II and III in the  
fifth years respec

I : N D G Seas

II : A R Low Ke

III : No award

S A Brick Associa

For the best stud

subject of Buildi

For the second b

subject of Build

K Strong

Student Planner  
For the student

greatest promise  
of the first ye

M P Morkel

(Continued)

QUANTITY  
SURVEYING

URBAN &  
REGIONAL  
PLANNING

# Matla falls — and experts

## remain baffled

By John Bentley

Matla's tottering tower came tumbling down yesterday, collapsing like a telescope on its lounations and not falling like a felled tree as originally planned by American revolution expert Mr. Jim Redyke.

Fortunately damage resulting from the "mistake" was relatively small, and the grant power station was able to resume electricity production after a delay of an hour to check all systems.

The jinxed tower, built to expel waste gases, was found to be faulty after one of its fines collapsed last year, killing two workers and injuring 28 others.

Several hundred spectators waited expectantly in the morning sunshine, listening on walkie-talkie radios as Mr. Redyke called out the countdown from a "crow's nest" platform.

### DROWNED

A flare fired past the tower signalled the moment of ignition. "There it goes," crackled a voice on the radio, before the sound was drowned by a deep roar.

There were cries of amazement as the 279-metre concrete structure came down, clouds of dust mushrooming upward as it collapsed.

Paradoxically, this

was the way Escom had originally wanted the job done — but the experts had said it was impossible.

A bemused Mr. Redyke, who has successfully performed many similar, if smaller, operations, was at a loss to explain why the tower came down as it did.

"I would never have believed it could be done like that. Every smoke-stack I've done has fallen straight out like a tree," he said.

### GOAL

He said he was "not very happy," but the project's goal had been achieved.

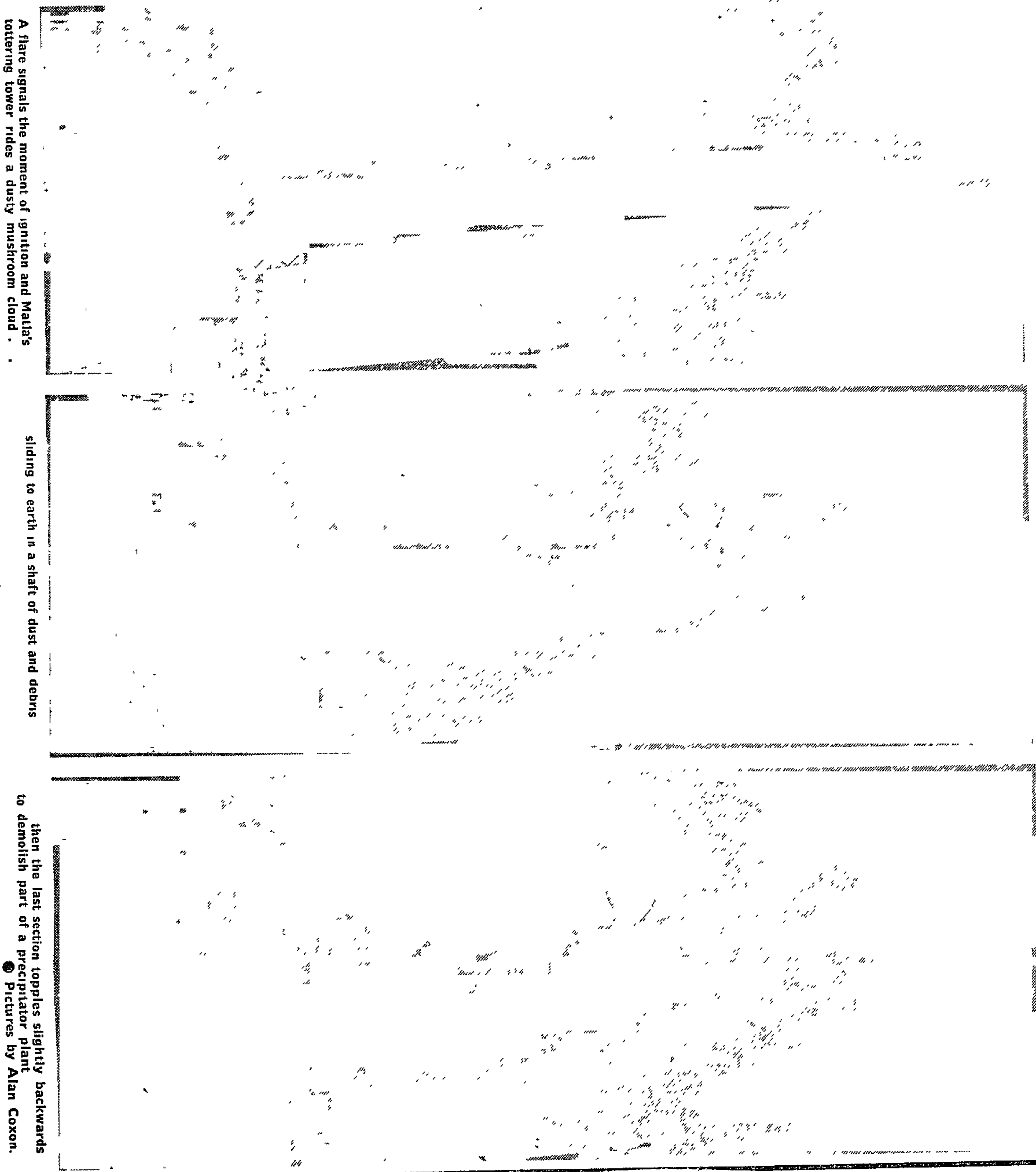
Mr. Alan Veck, Escocom's chief civil engineer, said "hinges" had been introduced into the structure to make it fall like a tree. It was possible that these might have failed.

"We might never have known the reason," said Mr. Redyke.

The falling rubble destroyed part of the precipitator to the power station's number 5 generating unit, and damaged some of the ash lines — giant pipes which carry away the ash after the coal has been burned.

The number 5 unit was not yet operational. Mr. E. Steinegger, a planning engineer in Escocom's new works department, estimated it would take two to three months to rebuild the precipitator.

It is not known who will be responsible for the R300 000 demolition costs and the R4-million bill for a replacement tower.



A flare signals the moment of ignition and Matla's tottering tower rides a dusty mushroom cloud.

sliding to earth in a shaft of dust and debris

then the last section topples slightly backwards to demolish part of a precipitator plant. Pictures by Alan Coxon.

# Second

## Koeberg reactor

Aug 21 7/81  
185  
due soon

THE SECOND nuclear reactor for the Koeberg power plant is due to arrive in Cape Town in about two months, a spokesman for Escom says

The reactor was shipped from the French port of Foz-Sur-Mer at the weekend, renewing protests from the French anti-apartheid committee

According to the latest edition of the magazine Africa Confidential, the reactor was shipped four months earlier than expected

### PRESSURE

The magazine implied this was because of rising pressure in France to call off contracts between South Africa and companies supplying vital parts for the Koeberg station

The Escom spokesman said he was unable to comment on the political problems involved in building the plant 'We are just doing the job, and are not involved in the politics'

The Minister of Finance, Mr Owen Horwood, reportedly received an assurance last week that France would honour its Koeberg contract.

### PARIS VISIT

Mr Horwood paid a fleeting visit to Paris and is said to have received the assurance from Cruzot-Loire, the company which dispatched the reactor at the weekend

Mr Horwood was not available today for comment, but it is understood that if France decides not to honour the contract it will have to compensate South Africa to the tune of R1 500-million

### 1.3) The method of the paper

The method of the paper is to examine the theory of cost benefit analysis, to consider the logical foundations of the technique particularly the flaws in the cost-benefit principle and the conflict between efficiency

and equity considerations, the sector. This is an extensive literature application of the theory for patient, attendance, mortality are reported by and the information on indirect objective costs - transport costs and waiting times - and on subjective elements were collected by means of a survey of 1 000 patients, half at Groote Schuur Outpatient Department, and half at five Day Hospitals selected as representative of the different sized Day Hospitals that exist on the Cape Flats. Results are at the 5% significance level. There is very little published work on the structure and staffing of the health system in the Cape Peninsula so a great deal of information is the result of personal investigation and discussion with those responsible for running these services.

### Footnotes:

- 1) Cape of Good Hope Province - Estimates of Additional Expenditure to be defrayed from the local funds for the year ending March 1950 and March, 1977.
- 2) See Feldstein Ch.1
- 3) See for example Dick
- 4) Ferster in "Measuring for Management", N.P.H.T.
- 5) Gruer p.390.
- 6) Murock (1974) p.1053.
- 7) Bryant p.116

# Phoenix electricity to be interrupted

NM 22/7/81

185

## Mercury Reporter

THE electricity supply to the Phoenix area will be interrupted on Thursday and Friday, or in the event of bad weather on Friday and Saturday, according to the Durban City Electrical Engineer

The interruption, which

will take place between 8 p.m. and 6 a.m., is to enable work to be performed in the Stone Bridge area of Phoenix

Supply may be restored earlier than stated and installations should be regarded as being live at all times.

# Shopkeeper indignant about electricity bills

By BILL GARDINER

A KWAZAKELE supermarket owner has found himself landed with an electricity account for R1 874,74 from the East Cape Administration Board (Ecab)

Indignant, Mr E Z Kabane told the Evening Post today that this was the second month in a row that he had received an electricity account for a huge amount

Last month he was charged R7 484,82 by Ecab for electricity supplied to his shop. When he queried the account, a clerk told him to "forget the seven and just pay R484", he said.

However, after pressing the matter further, he said the official looked up the electricity charges in the Ecab records and said he need only pay R321,25

But this month he was billed R1 874 for June — with no record of his previous payment of R321,25 on the account

"I don't know how they arrive at this

figure," he told the Evening Post. "For the past 10 years, I have been paying accounts of between R65 and R100. I paid R204,18 for March, R321,25 for May and now I am asked to pay R1 874 for June.

"I've told them (Ecab) that I am not paying this ridiculous amount — and now I am not happy about having paid the previous amounts. They never explain how they get these figures and how they make changes to the electricity accounts once I query them," he said.

Mr Kabane claimed his electricity meter was seldom read by Ecab officials.

"I challenge the administration board experts to read my meter properly, because it seems they are feeding wrong information into the computer which gives out this nonsense."

Approached for comment, the acting chief director of Ecab, Mr D J Matthee, said the electricity charges "sound very high".

# Lavis still two years away from electricity

(I. Herald)

25/7/81

(4A) (28) (185)

**MANY** Bishop Lavis residents spend more on paraffin for lighting their homes and cooking their food than they would spend on electricity — but they will have to do without electricity in their

homes for at least another two years.

A survey done recently in two sections of Bishop Lavis — Riverton and Greenlands — found residents paid about R60 for fuel monthly. It was estimated that electricity would cost them less than R20 monthly

A campaign to get more involved in the fight to have electricity installed in all the houses, has been started by the Bishop Lavis Action Committee (BLAC), a community organisation started last year. The owners of the township, the Citizens Housing League, have said electricity would be provided to some of the houses in 1982. There was no money available now, they said.

## WANT IT

However, residents want electricity to be installed in all the houses. They said the lack of electricity had in many cases led to bad health.

Mrs Susan Pedro, of May Road, said her daughter, Junita, 19, recently had an asthma attack, and it was later discovered that she was allergic to paraffin.

Mrs Pedro said she spends about R120 a month on gas, paraffin and candles.

'I spend even more in winter, when it is so cold,' she said.

Mrs Pedro said the candlelight affected the eyesight of her family members.

'My ten-year-old daughter, Zeida, is already wearing glasses. She even has to go to a friend's place if she wants to study, because it is difficult to study by candlelight.'

## FOOD

She said she always had to make her food by candlelight when she returned from work at night.

'This is inconvenient and unhealthy. Of all the problems we have in Bishop Lavis, the light problem is the biggest,' she said.

Mrs Doreen Crow, 51, of White Street, said not having electricity was 'unhealthy and expensive'.

'Buying wood, gas and paraffin is killing us. We must have electricity. It's high time,' she said.

Mrs Crow said she used two tins of paraffin weekly, which cost about R20.



# Power raiders are in for a shock

By KEVIN MAYHEW

TERRORISTS who strike at South Africa's power supply are in for a shock

Strikes against power installations — like that attempted at two Eastern Transvaal power stations earlier this week — are unlikely to knock out the national grid

Tuesday morning's strikes — the most ambitious against power installations to date — fell victim to a carefully planned 110 000km system interlinking the country's 25 operative power stations

They pool their 18 500Mw capacity into a national grid designed to adjust automatically if there is a failure at any point

Important installations are so placed that in the event of a breakdown — natural or otherwise — a round-the-clock national control centre can supplement areas affected with power from other lines

It would therefore require what Mr Ian McRae, general manager (operations) of the Electricity Supply Commission, called this week "an elaborate attack on more than one point" to effectively black out any area for a meaningful period.

Smaller installations which might be hit will be by-passed with temporary apparatus to keep the affected areas operational until major repairs have been completed

## National exercise

But in the main nearly every installation has back-up supplies which can take over its area

Knocking out one will merely mean a switch to another supply line until repairs are complete

In a recent national exercise, in anticipation of a well coordinated national enemy strike at South Africa's power supply, Escom simulated "knocking out" a large percentage of South Africa's power one morning

This required neutralising some key power stations and various other points in the national transmission system — an almost impossible situation which in real life had the potential to cascade into a total blackout if not handled correctly, according to Mr McRae.

The situation was stabilised and power restored within hours

"I think the exercise, done under conditions as if it were the real thing, proved that Escom is prepared to handle the sort of action we saw this week," Mr McRae said

"We don't mean to say that we are able to offer total protection and guarantee the power supply of the country, but what we can say is that we have every chance of minimising its damaging effect and keeping it under control"

Referring to this week's attack on parts of the Camden and Arnot power stations — which at 1 600Mw and 2 100Mw output respectively are big installations by international standards — he said the limpet mines used to destroy transformers had caused extensive damage but power was restored five hours after the 1 40 am blast

## Minimal time wasting

Only those generators supplying the damaged transformers had to shut down temporarily and power was re-routed from another source to meet the early morning peak demand

"It bears testimony to the fact that the system makes for minimal time wasting and delay in the restoration of power when stations like the two in question are hit," he said

In terms of its strategy to tackle breakdowns, Escom, which supplies 93 percent of the country's power, adopts what is regarded by many as a ruthless policy of shedding power to enable repairs to be completed

"We do not want to have the situation that New York found itself in some years ago when it did not timeously shed and had a total blackout for days

"Our policy is more ruthless in that we will totally black out small areas without notice if required in order to facilitate hasty restoration of power," Mr McRae said

# Power cut <sup>CT</sup> 27/7/81 hits (185) suburbs

Staff Reporter

A POWER failure hit Zeekoevlei, Retreat, Grassy Park and parts of Wynberg and Plumstead just after midday yesterday

Last night people in these areas were still in the dark and beginning to shiver

Cape Town's Electrical Engineer, Mr D C Palser, said last night that the core of the problem was a cable fault and a high voltage switch gear fault, both of which had developed in the area at the same time

All available men were out on the job and power should be restored by this morning at the latest.

Because most hot water cylinder switches were left in the 'on' position during such black-outs there was the danger of an artificially high load once power was restored

To prevent this happening, Mr Palser said, power would have to be restored "progressively", area by area

Present Situation: (Table 9 shows Membership, Contributions & Benefits) At present, cre firm, South African Preserving, at Tulbagh, have given permanent workers the option of belonging to Cape Medical Plan. In this case the employer pays 2/3 (about R15 per month) of the contribution to the Cape Medical plan. This factory still belongs to the ... and Canning Workers' Union fund, however, so that sea-

# More power cuts warning

**Own Correspondent**  
**DURBAN** — There were widespread Escom power cuts throughout Natal again yesterday. A warning of more cuts to come was put out today. The regional manager for Escom in Natal, Mr Edgar Wohlberg, said today a shortfall in the Transvaal supply had made the power cuts necessary last night. Areas affected were Durban, Maritzburg, Stanger, Ladysmith, Newcastle, Greytown, Kokstad, the low South Coast, and areas north of Empangeni. All major industrial consumers had been told to cut back on consumption, he said. A spokesman for the Durban City Electricity Department said areas

supplied by the municipality were affected, on a rotational basis. They were Kloof, Westville, parts of Pinetown, Durban North, Sydenham, Virginia, Amanzimtoti, Doonside and Illovo Beach. He said the public should realise that lights and appliances should not be left on during a cut. When power was restored to Durban North last night, it immediately tripped out again because of high demand. Mr Wohlberg said a further power cut might occur today had been issued by Escom, but so far there had been no problems. He said cuts occurred normally on Thursday and Friday.

## Hospital services and fees

The following section will provide some information on in-patient and out-patient fees at provincial hospital to compare to some extent the cost which would be borne by the workers if he/she did not belong to a medical aid to medical benefit scheme. The in-patient fees for patients at provincial hospitals are the following: Teaching hospitals Ordinary cases (General wards) R14, per day (plus primary fee), Ordinary cases (semi-private wards at own request) R15 (plus primary fee applicable to tax payers), Ordinary Cases (Private wards at own request) R19 (plus primary fee applicable to taxpayers) The primary fee is the initial admission fee 2. Non-teaching hospitals. Ordinary Cases (General wards) R12,00 (plus primary fee); Ordinary cases (semi-private wards at own request). R13,50 (plus primary fee applicable to taxpayers, ordinary cases (Private wards at

### 4. Food Industry Medical Benefit Fund Administered by the Food and Canning Workers Union.

There is no Industrial Council in the Food industry. Instead, a conciliation board of employer and trade union representatives is in operation.

This scheme falls under Medical Schemes Act. It has to apply for yearly exemption from certain provisions so far this has been granted. The sick fund consists of about 13 workers representatives. This is called the central committee. Quarterly meetings are held with employer and worker representatives. Other meetings are held only with worker representatives present. Every factory is meant to have a medical committee whose representatives are elected at meetings at the various factories. Representatives on the medical committee usually work part-time for the fund. At Ashton and a Pearl there is one full-time worker

This fund was established in 1950. At their stage only four canning firms participated. In the first year the income was just on R2 000,00 with an average membership of 1 540. When the fund started the contributions were 2½c a week. By 1955 had risen to 5c a week. The average membership had increased by nearly four times in 1956/7 and stood at just over 4 000. In 1957 panels of doctors were set up and free medical attention was paid for. (up until the only sick benefit had been pay).

In 1958 clinics were set up. The staff consisted mainly of first-aid attendants and nurses. Panel doctors attended lunch-hour clinics at factories as well as seeing members at their surgery.

Mass X-ray programmes for detection of Tuberculosis were started in 1958.

In 1959 free dental treatment up to a limit of R2,00 a year was introduced. In 1960 the limit on free medicines was raised from R4,00 to R6,00 and that on dental treatment was doubled. Clinics were now operating in all member factories except Wolseley and Worcester.

Between 1960 and 1973 medical/dental benefits have increased by over four times and now run at more than R20 000,00 a year. In 1969 the Fund was registered in terms of the Friendly Societies Act. It held dual registration with the departments of Health and Finance. (The latter has now been waived.)

In 1972 the first mass immunization against influenza took place. Over 3 500 workers were immunized at a cost to the Fund of R2 659,00. This was repeated in 1974.

This has not been done since, as there are doubts as to its effectiveness.

# Power to dispel the darkness

Sawetan 29/7/81  
By MZIKAYISE EDOM

**TEMBALISHA residents in KwaThema, near Springs, switched on their electricity on Monday — after two years in the "dark."**

The approximately 400 families living in the houses that were built in 1979, excitedly cleaned the dust from their elec-

trical appliances

"Our electricity problems are over now and we hope that the community council will now see to our fencing and bumpy street problems," said Mr Stephen Mbatha, secretary of the local residents committee

Before the residents were allowed to use the electricity in their homes they were asked to

pay R5 for the "opening of the electricity meter box"

"But some of the families have not paid the required R5 and we want the council to explain how they were allowed to use electricity," Mr Mbatha said

Mr A M Khumalo, chairman of the Kwa-Tema community council, said yesterday "My council will investigate Mr Mbatha's claims and the families which have not paid the R5 will be asked to do so at the end of the month We hope to complete the whole electricity project in the township within the next four years"

# Sowetans pay more for electricity

Many Soweto householders are paying more for their electricity than their counterparts in Johannesburg's northern suburbs

According to the latest newsletter of the Johannesburg City Council, the average northern suburbs consumer pays about R304 a year for electricity — a monthly average of R25

In the elite Soweto township of Selection Park a family has received a bill for R117,31 for July while another in Diepkloof has already paid R104

A resident of the more modest township of Molapo Extension, Mr Madoda N. J. 1 has been charged R54 for this month. He said this could not be accurate because there was normally nobody at home during the day

An official at the Wemmer Jubilee Centre, where Sowetans pay their electricity bills, said today power charges were 31c per unit — and on average a Soweto home used between 500 and 600 units during summer months and about 1 000 in winter.

At 500 units a month that would work out at R17,50 while the annual consumption would cost R210 at the same rate

In Johannesburg the unit rate for houses is 2,8868c for the first 1 050 units consumed in a month, according to the city's commercial engineer, Mr J H Davies

For flat dwellers the rates are R3 4535c for the first 750 units a month

Mr Edward Scholes, the deputy electrical engineer for Johannesburg said today that rates depended

on the nature of the load

In areas where more power was consumed lower tariffs were economically feasible, he said.

The Soweto Community Council has begun an investigation into the abnormally high bills received by residents over the past few months

The chief executive officer of the council, Mr Nico Malan, said he would see to it that meters were read regularly and would consider the possibility of users checking their own meters

# Power cuts spark big swing to generators

## Mercury Reporter

SALES of portable electric generators have rocketed during the past few months as businessmen — and to a lesser extent, housewives — struggle to come to terms with regular power cuts

Distributors of the portable generators all said that sales had increased but these were mainly to small businesses, petrol stations and the smaller supermarkets.

Mr Kelvin Thomas, power products marketing manager of Charlie Young Yamaha, said yesterday the increase in sales had appeared in the past couple of months as a direct result of power cuts

## Demand

'We have had a demand from home-owners for the smaller units,' he said

'The bigger demand comes from small businesses, supermarkets and petrol stations where they cannot afford not to trade during power cuts,' he said

Mr Dave Fisher, a distributor for Honda, said sales of the small generators increased every month

He also emphasised that it was rather the small businesses, supermarkets and petrol stations who needed their own power

'Generators for them are critical if they wish to continue trading during power cuts,' he said

Mr Vic Varcoe, head of Suzuki sales, said yesterday that a lot of businessmen had made inquiries about the portable generators, but said petrol stations were the biggest customers

## Running

He said the biggest generator, which had an output of 2500 watts, could run a television set, a fridge and six lights simultaneously

However, running heating appliances or cooling appliances with lights and television sets from the generators was not recommended because the frid-

ges and stoves drew an enormous amount of electricity

Meanwhile, the Durban City Engineer's Department has called on consumers to adopt electricity-saving practices in the home to help reduce the frequency of power cuts

The City Electrical Engineer, Mr Dennis Fraser, said last night, 'People may feel that an individual's contribution may not be worthwhile, but there are 160 000 domestic and 20 000 commercial and industrial consumers in the Durban supply area alone. A concerted daily effort on the part of a group as large as this could eliminate the need for load shedding in the area'

Load shedding or power cuts became necessary when the demand for power in peak periods exceeded the generating capacity

## Higher

Geysers accounted for about 50 percent of domestic consumption and should be switched off during peak periods between 8 a.m. and noon and between 5 p.m. and 9 p.m.

Thermostats on geysers should not be set higher than 60 C

A minimum number of hotplates should be used on electric stoves and pressure cookers and three triangular pots on one plate would reduce consumption

Other items which consumed large amounts of power were air conditioners, clothes and dish-washing machines, radiators and floodlights

Power cuts would be made on a rotational basis to distribute the inconvenience equally among consumers in different areas. Radio announcements would give details of intended power cuts

If consumers wished to confirm that power cuts were the result of load shedding and not a fault, they could check with the Durban Electricity Department by telephoning 314040



The following is the trial balance of Elf Ltd.

Stated Capital Account (800 000 shares)	
Retained Income 30th September 1980	
Net Income for the year ended 30th September 1981	
Proceeds of rights issue	
Taxation	
Audit fees	
Land and buildings, at cost	
Plant, at cost	
Accumulated depreciation - plant 30.9.80	
Furniture, at cost	
Accumulated depreciation - furniture 30.9.80	
Listed investments, at cost	
Stock	
Accounts receivable	
Bank	
Accounts payable	

- NOTES :**
- The authorised share capital is 200 000 shares of R2,00 par value.
  - During 1981 the company had a rights issue of 100 000 shares. This was fully subscribed. The proceeds of R200 000 less expenses of R4 200 and under R200 000 were credited to the account. This account is debited to the proceeds of rights issue.
  - No depreciation has been provided on cost. Plant costing R60 000 but an item which had cost R35 000 was the only item fully depreciated. This item is not reflected in the scrapping.
  - Audit fees consist of the fee for the audit of the books, expenses of R1 500 and a fee of R2 600 for management advisory services.
  - The net income was arrived at after charging :
 

Bad debts	R7 700
Leasing charges - motor vehicles	12 900
Managing director's salary	20 000
Travelling expenses	26 000

The travelling expenses include an amount of R100 per month paid to the managing director as travelling allowance.
  - Depreciation on furniture must be provided, at 15% p.a. on reducing balance. Furniture costing R3 000 was bought on 31 March. There were no disposals during the year.
  - Taxation includes R28 paid as Swaziland taxation.

# Power to cost R16m

By STAN MHLONGO

**EVATON needs R16-million to have electricity, Mr G C Theron, the assistant director of technical services, disclosed this week.**

He was speaking at the Evaton Community Council's monthly meeting.

The fact that most of the Evaton residents are poor should not deter the installation of electricity in the location, said Councillor Rabotapi.

Mr Peter Mokoena said "We know the socio-economy of this country. Most blacks will not be able to move forward with this progress."

Mr Rabotapi "Those who cannot move along with progress will have to be dragged along. They will have to learn to afford." He said every resident in Sharpeville pays R7 50 for electricity every month and that does not include rentals.

Mr Rabotapi also said the council had decided to instruct the chief director of the South African Police to take steps to apprehend those who initiated the riots of April in Evaton.

R	CR
	920 000
	269 000
	147 000
	311 000
000	
600	
000	
000	
400	220 000
400	4 800
000	
2 300	
3 200	
3 900	
_____	140 600
400	R 2 012 400
=====	=====

10 par value  
 R5 held, at R2,00 per share.  
 to "proceeds of rights issue" debited to this account.  
 must be provided at 10% p.a.  
 There were no sales of plant in 1981. This item of plant has no journal entry was made to



# Electricity tariff must increase by at least <sup>S. Express 9/8/81</sup> 25%, says Volkskass <sup>185</sup>

ESCOM will have to increase its tariff by more than 25% to bring the selling price of electric power in line with costs, says Volkskass in a new survey on the supply of electricity.

Escorn turned a deficit of R98-million last year — costs rose by 13,9% yet the tariff went up by only 6,6%.

The survey claims that costs will probably rise by 12% to 14% this year. The tariff increase already announced amounts to an average of only 6%.

The Volkskass economists believe costs will rise next year by at least double figures. That would mean the cost per KW/hour would be approximately 2,146 cents — which would call for a 25% increase in the tariff.

"The unknown factor is the contribution to the capital development fund," says the survey.

"Escorn policy in this connection is unknown."

"In 1980 (the contribution) amounted to 0,4871 cents per KW/h. Should it be lower the (tariff) adjustment could be smaller."

"But that would only postpone further increases."

Yet, pointed out Volkskass, even with a 25% increase the cost of electricity in South Africa would continue to compare favourably with that in other countries.

As Escorn resigned unchallenged as the sole supplier of electric power, it made economic sense in the case of such a capital intensive industry to

concentrate generating capacity for maximum utilisation.

But, warns Volkskass, Escorn's strong monopolistic position has the potential disadvantages inherent in the situation.

"It places still greater responsibilities on members of the Commission and the Management Committee not only to satisfy the rapidly growing demand for electricity at all times but to do this in the most efficient way."

However, the entire burden could not be shifted on to Escorn.

Consumers had a responsibility to use electricity with the greatest care and to strive continually for savings.

It was now particularly important to attempt to reduce consumption during peak demand times.

● Rising costs will push up the cost of electric power, says a new bank survey

ce, University of Cape Town.  
e to:

The Editor

@DEBUN

Computing Service

UCT

Private Bag

7700 RONDEBOSCH

DD 12/8/81 (185)(340)  
**Mdantsane power cut**

MDANTSANE — The manager's office here has announced that electricity will be cut in the whole area north of Qumza Highway and west of Zone 7 on Friday from 8 am to 5 pm

The announcement stated this would be made in order to carry out maintenance work

The areas affected will be Zone 1, portions of Zones 2 and 6, Zones 4, 8, 9, 10, 11, 12 and 13 and the Ciskei Mill

# Koeberg 'safe' despite cracks

HOUSE OF ASSEMBLY  
 Fine cracks had appeared in the lower concrete raft supporting the Koeberg nuclear power plant under construction near Cape Town, the Minister of Mineral and Energy Affairs, Mr F. W. de Klerk said yesterday.

measures at the station was extremely effective even if compared with the highest international standards.

He was replying to questions by Mr John Malcomess (DPP Port Elizabeth Central) on whether the containment of the reactors at Koeberg would be able to withstand an attack designed to smash them by a hostile force.

Mr De Klerk said the cracks were not unexpected in reinforced concrete structures of that size and the cracks were very small less than half a-millimetre wide.

He said the cracks would not affect the operational safety of the plant.

Although no corrective measures are necessary, the Atomic Energy Board has as a result of the very high standard of safety which has been set for the plant, already done extensive investigations in the past year.

The risks attached to and consequences of hostile attacks on the Koeberg power station together with measures to combat such attacks are matters which have been receiving careful attention since the planning stage of the Koeberg installation.

These factors form an important part of the safety assessment conducted by the licensing branch of the Atomic Energy Board before a decision is made whether a licence should be granted for the operation of the plant and under what conditions such a licence should be issued.

The assurance can be given that the planning of safety measures in respect of the Koeberg power station is extremely effective even if compared with the highest international standards.

It would however, not be in the national interest to disclose the exact details of these security considerations, Mr De Klerk said.

output in the  
 printing on the  
 it has been

the @KRLD command.  
 one being lost each time.  
 to happen - lines are  
 shifted upwards, with line 1  
 displayed on the screen, the

Chapter 7):  
 name must be preceded by an  
 .ll be used. To make use of  
 no qualifier is defined the  
 .led use on succeeding control

ently assigned to the run:  
 and slow to print on the terminal and requires the full 132  
 but this should be sent to the line-printer as it is bulky

Note: The list is abbreviated for demand mode. The full table of contents listing may be obtained by:  
 omitted, the full table of contents will be listed.

had been diverted  
 high speed printer  
 diverted to a file  
 Reverts normal print

4.35. @RESUME

Normal upward-rolled  
 shifted downwards,  
 being lost. @KRLD  
 lines already be

4.34. @KRLD And @

will assign file SR

asterisk (see the  
 the implied qual  
 project identifier  
 statements involv  
 Defines a qualif

4.33. @QUAL Or @

Note: The default

d) list the names

print position

@PRT,TL F1.,F2.,... <CR>

# Local cooling system

claim

By Andrew McNulty

Poverty was clearly a primary unemployment were partially r docks earned about 4/- a day, by Cape Town's relief committee but the relief works provided any money, therefore, and they had to save on accommodation ment were probably relative on wages and employment in casual labour existed in ment during this period. 72 afflicted by these ills. "respectable" classes were instance, were notoriously seeking cheap lodgings. Po made worse by substantial grants were poor and often If the lack of wages or poor health was another factor. of sickness which dragged which, in turn, exacerbated It is true that its water Indeed, considering the health period, the city coped remarkably of the rapidly-growing municipal refuse disposal were still over the former, refuse disposal and the more unsavoury corner to an average death rate declining) and 36.7 amongst death rate from tuberculosis 1893-4 to 3.1 per 1000 in In other words, one death amongst 'coloureds' was far of this, and a leaflet had the disease. It started communicated more particu

ESCOM'S R11 000-million power station development programme could be threatened by a growing shortage of water for industrial use unless an efficient system of dry-cooling is perfected — and a local company claims to have done the job.

The new design for heat exchangers was developed over 11 years by a South African consulting engineer, Mr D Mulock-Bentley, working with Government bodies, including the CSIR, the Department of Water Affairs and the Water Research Commission

A Johannesburg engineering firm, G E Vincent Metal Sections, has been given world rights to manufacture the heat exchangers, which, Mr Mulock-Bentley says, could have a big impact in local and world markets.

After carrying out large-scale tests, a French company with international representation has taken world patent rights, he says.

He claims that the "SF" design, which uses a series of flat water plates instead of conventional water tubes, is 53% more efficient than conventional tube systems.

"They are also more robust, versatile and easier to clean."

He values the South African market for heat exchangers at R41-million, of which about half is for industrial uses — including mining, chemical, petrochemical and paper industries — and the remainder for power stations

Growth is forecast at about R10-million, or more than 20%, a year

"So far no heat exchangers have been suitable for use in a big power station. This could be the first in the world"

The French company, Mulock-Bentley and Associates, and two other large European firms have formed a consortium that has tendered for a R200-million contract to supply the cooling plant for the 3 600-MW Matimba power station near Ellisras in the Northern Transvaal.

An order for the heat exchangers alone is worth about R75-million.

"If we are successful, it would certainly place this heat exchanger top in the world"

Mr Mulock-Bentley says that they expect sales of R3-million in 1961 after first-year sales last year of about R750 000

Excluding the winning of any big power station orders, he forecasts sales of R6-million and R8-million in the following two years.

ng and for this low wages and rage African working at the ove the minimum wage considered sustain a decent existence, If an African were to save f coming to the city, then he urers as were in regular employ- ly no work has been published w, however, that sweated labour know that there was much unemploy- Indians and whites were alike ul whether some of the more rks and shop assistants, for t have added to the numbers , endemic, but the situation was is period, for many of the immi- lamental causes of poverty, ill became trapped in a vicious cycle drove them into overcrowded housing nd Cape Town was not a healthy city. r than it had been in the past. litary and shipping during this respect. The same could not be said k, however. Methods of sewage and ly. Although the Council had taken he hands of a private contractor, usually ignored. This contributed 00, 18.8 amongst whites, (this was gainst this was the fact that the e, rising from 2.3 per 1000 in , and 3.8 to 6.2 amongst 'coloureds'. t Europeans and one in every six ies were well aware of the implication 1898 setting out precautions against nfectious disease likely to be ventilated and badly lighted houses

# Escom orders two power stations

By JOHN MULCAHY

ESCOM has awarded the first two contracts totalling R1 400-million for two power stations, each costing R2 000-million.

A French consortium, Stein Industrie-EVT (Sieva) has been issued with a letter of intent for boilers for Matimba station near Ellisras in the north-western Transvaal, and Combustion Engineering of the US will build the boilers for "power station C"

An Escom spokesman said inquiries issued for boilers for power stations had drawn wide international response, and because of the continuous expansion programme it had been decided to award contracts for two power stations, which would advance the commissioning date of station C

Unsuccessful bidders for the lucrative Escom orders include Babcock Africa, Deutsche-Babcock and Steinmüller. Steinmüller has the contract for boiler construction at Tutuka

The siting of station C has not been disclosed as it is believed Escom is still negotiating with mining companies for the coal supply

Matimba will draw its coal from Iscor's Grootgeluk mine, which was opened earlier this year

Each boiler will use about 2-million tons of by-product coal a year — the residue after Iscor has extracted the coking coal component for steel production

Excavation of the trenches at Matimba started in July and about 10% of the work has been completed. Major concrete pouring and steelwork are scheduled for mid-1983, and erection of the main parts of the boilers and turbines should start in early 1984

The Matimba plant will be dry-cooled, with water used for cooling recycled, as water supplies in the area are limited.

Each of the 30-storey boilers will cost R700-million, of which about 80% will be spent in South Africa

Station C will have a capacity of 3 600-MW, and the exact siting of the plant will be decided in the next few months

Escom has given no indication on the capacity of the Matimba station, but the first of the 600-MW boiler/generator sets is expected to be operational by the end of 1986

Power station C's first boiler/generator set should be in operation towards the end of 1987, with the remaining five sets following at yearly intervals

It is believed that Hill Samuel was instrumental in arranging a significant proportion of the financing for Combustion Engineering's side of the contract, and much of the financing will be raised abroad

Hill Samuel last year arranged almost R425-million in funds for the financing of the Tutuka power station from British banks and through Eurofinance

Tenders for civil work and terracing will be called for early next year, and station C is expected to provide work for about 6 500 people during the construction phase and permanent employment for about 1 000. About 1 000 houses will have to be provided

It is believed that Combustion Engineering has awarded the contract for SA component manufacture and plant construction to Ical, a subsidiary of Northern Engineering Investments

To cope with the R160-million contract Ical will double production capacity at its Alberton plant

RDM  
21/8/81  
185

# Escom to spend R4000-m on two powerstations

8/21/81

260 185

By Mervyn Harris

Two boiler-plant contracts, each worth R700-million, have been awarded by Escom for two powerstations which will each cost an estimated R2 000-million.

Escom has announced that letters of intent have been issued to the consortium Stein Industrie-EVT (Sieva) for the boilers of its Matimba powerstation near Ellisras in the north-western Transvaal and to Combustion Engineering of the United States for the boiler plant of a coal-fired station.

Nearly 80 percent of the R1 400 million boiler-plant contracts will be spent locally.

### CAPACITY

The siting of the coal-fired station, which is at present called Station C and will have a capacity of 3 600 mW, will be finalised within months.

A spokesman for Escom said that in view of its continuous expansion programme, Escom had decided to advance the commissioning date of Station C and award the contracts for the two powerstations.

Inquiries issued for the boiler contracts attracted wide international response.

The first generator of Station C is expected to be in operation towards the end of 1987 with the five remaining sets following at yearly intervals.

Tenders for civil, terracing and other work will be called for early next year.

Station C will provide work for about 6 500 people during the construction phase and permanent employment for 1 000 people when operational.

About 1 000 houses will have to be provided.

Matimba, the Tsonga word for energy, will be the largest dry-cooled station in the world and is planned for up to six 600 mw sets.

Water supplies in this area of the north-western Transvaal are limited and the dry-cooling system will reduce use of water to about one-third.

The boiler-plant contract comprises the manufacture and supply of various items of machinery. The boilers will be 30 storeys high with walls consisting of many kilometres of piping in which water is heated.

### FINANCE

Each boiler at Matimba will use about 2-million tons of by-product coal a year when fully operational.

The coal will come from Iscor's Grootegeluk mine and is the residue after Iscor has extracted the coking-coal component necessary for its steel production.

Finance for the Matimba boiler contract will be obtained from local and overseas sources.

on can  
(RSI)

ess the key marked CTRL

cable to the terminal

type in

The standard type and

ly check if it is plugged

(b)  
a)  
th  
re  
th  
(i)  
be  
wh  
(  
1.  
the ST  
There  
3.2.1.  
3.2. LOGGING IN TO THE  
in and switched on at tr  
Power on. If the termin  
3.1. POWERING ON THE TE  
3. USING THE UNIVAC 110



more will be available to spend on amenities. This amounts to a penalty being placed on a community which drinks little; a peculiar form of regional taxation dependent on local drinking patterns.<sup>16</sup>

The criminalisation of domestic production of beer and the links between beer consumption and the repressive system of township finance have created resistance to the beer monopolies. In 1962 in Cape Town, for instance, the residents of Langa rejected the proposed building of beer halls and liquor outlets in a referendum, by 11 167 votes to 2 916 (Liquor : the background, 1976 : p. 131). Nevertheless in 1966 the Cape Town City Council raised loans to build a beer brewery with a daily output of 10 000 gallons.

In 1961 following the legalisation of the sale of liquor to Africans, the consumption base of location finance was further strengthened by the establishment of liquor outlets in Langa, Nyanga and Guguletu. Initially 80% of the profits were tied to homeland development, forcing residents into the subsidisation of areas in which many of them had never lived or were likely to live. This policy was reversed as the boards began requiring further sources of revenue.

To augment sources of revenue BAABs and their predecessors attempted to create conditions under which mass consumption of beer and liquor could take place. Halls for the consumption of beer and liquor have been established as virtually the only recreational facilities in the townships, artificially raising levels of consumption, and substituting consumption for recreation. For the satisfactory working of a beer hall the most important consideration is the efficient serving of beer in such a manner that the customers are speedily served through a foolproof system under complete surveillance and control. The provision of queue races leading the customers from the entrance past the cash boxes to the disposal point prevents the possibility of

16. Michael Savage, 1977

Further, each time income for a sport services will deteriorate proportionally beer profits fell below expenditure remained the only source of funds thus reducing the amount available. At the same time the costs of service (see graph for services expenditure

Expenditure itself is determined a functions of BAABs, these functions allocation and the provision of such forms of control. The extent directly from workers' pay packets own control and repression is a policy for the residents of the townships.

The finances of labour bureaux, the control and allocation, are central on following page).

Over the last three years expenditure the bureaux has increased while the dropped slightly. In 1977-8 expenditure to the extent that it absorbed a small income. The forms of control exercised the growth of large bureaucracies run areas in which labour is accommodated control over the black population

The wages of the officials of BAAB (of tituted 15% of total expenditure in 19 tituted 34% of general expenditure expenditure is based on maintenance and A total of 1 270 employees (of whom 20; R2 833,716 in salaries (Hansard 18 4 chairman and board members earn high sa

1. Wages as a proportion of expenditure

# Power cuts hit all parts of Natal

NM 22/8/81 (185)

Mercury Reporter

VIRTUALLY the whole of Natal was hit by power cuts at different times for four hours yesterday bringing to a halt trains and disrupting businesses

The first power was shed about 8 30 a m in areas for up to an hour each until midday Electric train traffic in the Colenso area was brought to a standstill for

about an hour

'We normally try to avoid shedding power from the Railways,' said Escom's regional manager Mr John Bradbury 'But everything crashed on us unexpectedly when we had some technical faults at power stations so we even had to resort to putting the Railways out of action'

The shedding involved Pietermaritzburg and areas as far north as

Pongola and inland as far as Colenso

The areas around Durban included Chatsworth, Sydenham, Berea, Westville, Kloof, Umhlanga, and Verulam

Meanwhile Escom has commissioned two major stations for completion in 1986 One of them had not been planned for until recently when the electricity shortage grew more seri-

ous Escom has yet to decide on the location of the so-called Power-station C which will have a capacity of 3 600 Mw

The other station is to be built at Ellisras in the north-western Transvaal

Mr Bradbury said the combined output of the two new stations would alleviate the power shortage as the present economic growth had been considered



CT 24/8/81  
**Power cut at Ocean View**  
 Staff Reporter *(M)*

THE whole of Ocean View was without electricity from 5.45am till 3pm yesterday. Late yesterday afternoon a spokesman at the City Council's Muizenberg depot could not give a reason for the power failure.

An Ocean View resident, who said he telephoned the depot earlier in the day to ask for an explanation, claimed the telephone was slammed down on him.

At 12.30pm the Cape Times was told that the depot's chief electrician and technicians were out at Ocean View looking for the fault.

There were many braais at Ocean View and owners of gas stoves were inundated with requests for hot water.

to ensure that NA

an error condition would result. The first print character is a minus character, which is not a legitimate form control character. If this minus sign is interpreted as a form control character (in some processor implementations), there is not enough field width provided for printing -10. In this case the FORMAT statement requires a change such as

```
WRITE(3,10) NAME4, NAME2
```

If the output list items in the WRITE statement had been 10555-10 starting in print position 1 the printed line is

```
NAME2 = +1.0  

NAME4 = -1.0  

WRITE(3,10) NAME2, NAME4  

FORMAT(1,3,3,X,1,3)
```

(3) After the following sequence is executed,  
 The first three columns are skipped,  
 the next five columns read in the value for K1, which is 1234,  
 the next three columns are skipped,  
 the next six columns define the value of IARRAY(1), which is -12340;  
 the next eight columns define the value of IARRAY(2), which is -12340,  
 the next five columns define the value of K2, which is -123,  
 the next 10 columns define the value of K3, which is 102034;  
 the next five columns define the value of K4, which is 0.  
 The list is now satisfied and any remaining items on the card are ignored.

Escom  
 117 Mr D J N MALCOMESS asked  
 the Minister of Mineral and Energy Affairs.

What are the tariff rates charged by Escom in each of the undertaking areas for the supply of electricity?

The MINISTER OF MINERAL AND ENERGY AFFAIRS

Subject to the provisions of the Electricity Act, 1958, there are three standard tariff classes in each of Escom's undertaking areas. The present tariff rates, which have been adjusted to allow for the current cost of coal consumed at Escom's power stations, as well as the ruling surcharge or discount depending on the undertaking area where the consumer resorts, are as follows —

(1) Tariff class (A) Large power consumers (for a supply to a consumer whose notified maximum demand is 25 kVA or more) (25 kW on the Reef and in the Orange Free State)

Undertaking area	Service charge R/month	Demand charge R/kVA	Energy charge C/kWh
Border	22,50	9,90	1,06
Orange River	33,00	7,26	1,43
Western Cape	24,00	6,72	1,13
Northern Cape	18,75	7,31	1,00
Rand and O F S	24,25	6,79	1,05
Eastern Transvaal	23,75	5,46	0,93
Natal	21,00	5,78	0,91

Note (i) The demand rate shown is the standard rate for high voltage supply  
 (ii) The demand rate represents each kVA maximum demand supplied

(2) Tariff class (B) Small power consumers (for an electricity supply of which the monthly maximum demand does not exceed 100 kVA (kW))

175 WEDNESDAY 26 AUGUST 1981

Undertaking area	Service charge R/month	Energy Rate 1 C/kWh	Energy Rate 2 C/kWh
Border	9,00	6,29	3,25
Orange River	13,20	9,22	4,77
Western Cape	9,60	6,71	3,47
Northern Cape	9,00	5,27	3,24
Rand and O F S	11,64	5,16	2,83
Eastern Transvaal	9,50	4,67	2,77
Natal	8,40	4,71	2,46

Note. Rate 1 is for the first 500 kWh and rate 2 is for energy consumed above 500 kWh

(3) Tariff class (C) Urban domestic consumers (for an electricity supply for domestic purposes within a constituted township)

Undertaking area	Service charge R/month	Energy Rate 1 C/kWh	Energy Rate 2 C/kWh
Border	4,50	6,29	3,25
Orange River	6,60	9,22	4,77
Western Cape	3,18	5,81	3,47
Northern Cape	4,50	5,27	3,24
Rand and O F S	5,82	5,16	2,83
Eastern Transvaal	4,74	4,67	2,77
Natal	4,20	4,71	2,46

Note Rate 1 is for the first 300 kWh and rate 2 is for energy consumed above 300 kWh

In certain cases where a high cost is associated with the supply, extension charges are payable over and above the standard tariff charges by consumers in the different undertaking areas

# Escom power keeps 'em down on farm

Star 28/8/81 185

By Bob Davis

Escom is linking 10 farms a day to its power lines, and helping to slow down the drain of young farmers to the cities

Of the 72 000 farms in the country about

46 000 now have Escom power

Press officer Mr Boet Uys said the rate had escalated since the mid 1970s and there were indications that the average 10 connections a day would be-

come 11 a day in the 1980s

A total of 4 000 farm schemes had been approved for 1981/82 and more applications were received daily

Mr Uys said farmers were using electricity

both for domestic and industrial purposes such as pumping, sawing and milking

The heaviest concentration of applications had been received from farmers in the central Transvaal and Orange Free State with the exception of the Orange River region where distances were a prohibitive cost factor

The higher fuel prices had had the effect of escalating demand, with the cost of self generated power being between 16c and 20c a km/hr and that of Escom supply about 8c to 10c a km/hr

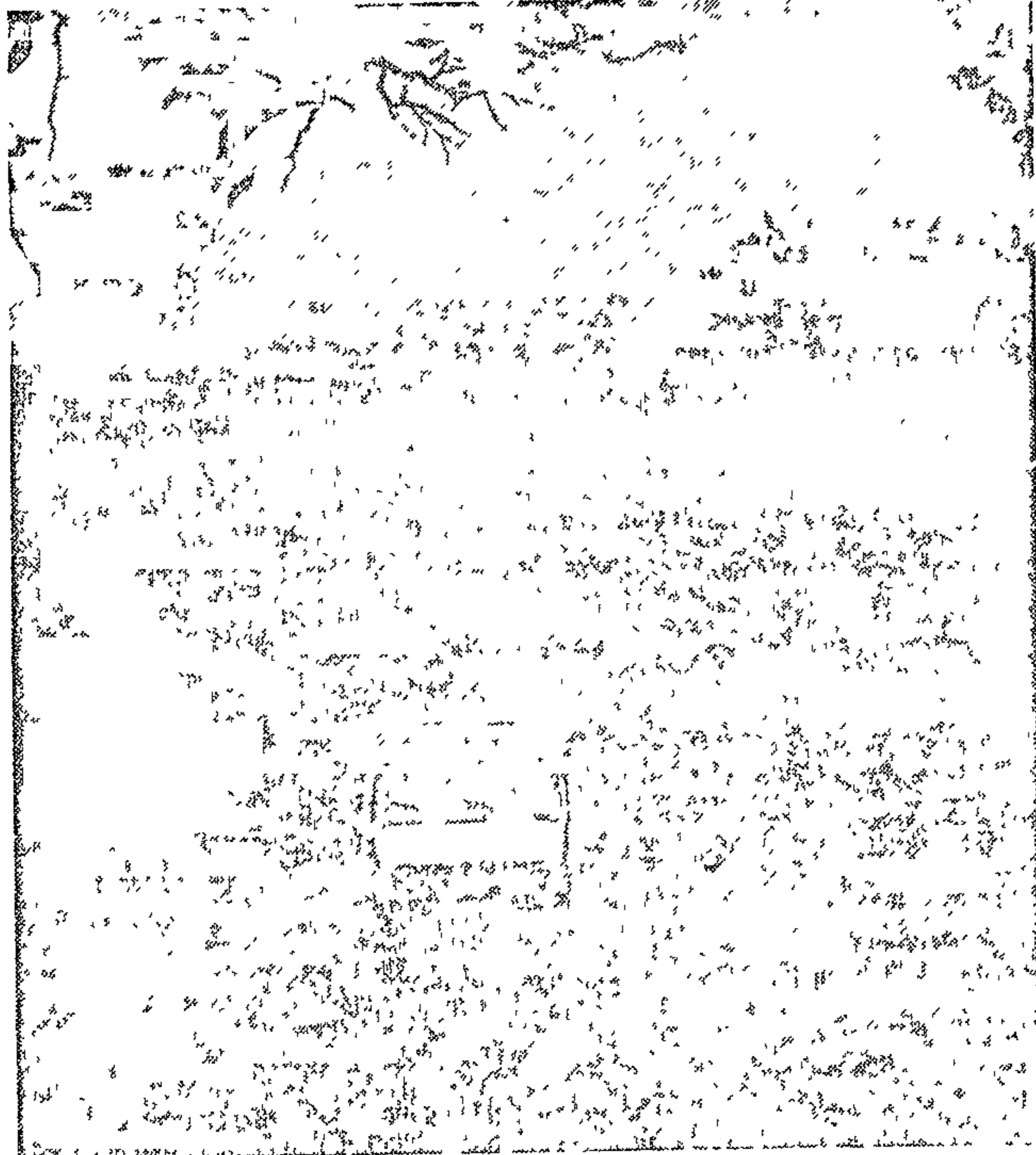
'I know of a case in the Dendron area where the pumping bill had been reduced from R1260 a month for diesel to R800 a month for Escom power

The availability of electricity had also been a factor in keeping young farmers on the land

'Many farmers have told us that young people have decided to stay on the farm after the electricity had been connected' Mr Uys said

Young wives in particular had been willing to change their minds about going to live in a town or city after the power had been turned on and electrical household implements had been installed

'It is not only that electricity provides more comforts' Mr Uys said, 'but it also makes economic sense'



Getting electricity to a farmhouse is hard work, but it makes economic sense and it keeps the young wives and their husbands on the land

There are times when using a terminal that it becomes necessary to terminate an active task or to discard its input or output. For example, if a large amount of output is being printed on the screen and it

### 3.7. INTERRUPTING AN ACTIVE TASK

# Lavistown electricity when loan available

Divisional Council  
Reporter

ELECTRICITY will be installed in 1800 houses at Lavistown as soon as a low-interest loan promised by the Government is made available, the general manager of the Citizens' Housing League, Mr Eric Pohl, said today

Mr Pohl said the cost of carrying out the work, about R1-million, would be prohibitive unless a low-interest loan were obtained.

The Department of Community Development had promised one in 1979 but, because of a shortage of funds for housing, the money was not yet available

'As soon as we get it we will call for tenders,' said Mr Pohl. 'The work should be started within three months of receiving this loan'

## FRUSTRATION

'I can understand the frustration of these people living in houses without electricity, especially during the cold weather, but there is nothing we can do about it without funds'

Mr Pohl said that the Citizens' Housing League, which was a voluntary non-profitmaking organisation, was not allowed to use its amenities fund for installing electricity.

Mr Pohl said that the league had received Government grants to upgrade services such as water and sewerage in the area and had spent millions doing this.

It had also spent a total of R400 000 on sports facilities for Lavistown and a new library had been built, with the aid of a grant from the Provincial Administration, which would be opened next month

# Blackout as power crisis hits Jo'burg

Johannesburg was back to normal by 2 pm today when electricity supplies were restored after nearly all the city, except for the central business district was blacked out early this morning.

Faced with a countrywide demand in excess of 14 000 MW, Escom pulled the switch nationwide from Cape Town to the northern Transvaal

This prevented Escom helping Johannesburg meet demand after the city was faced with a "full crisis" situation when plant at its own Kelvin power station failed at 1 am.

Mr Wessel Barnard, the city electrical engineer, said a boiler failed "due to old age" and the crisis had been aggravated by the bitterly cold weather which had gripped the city in the past week.

## Peak demand

Mr Barnard said Escom had been able to give Johannesburg only limited assistance because of problems of their own.

High demand and the slow repairing of machines pulled out of the network for maintenance had led to the curtailment of power to the country's six regions, a spokesman for Escom, Mr Boet Uys, said this morning.

"At 7 am we were 900 MW below demand but the situation is improving and at 10 am we were 526 MW below demand," he said.

Cold weather and the resultant high demand from householders as well as the steady demand from industry meant Escom had to keep machines running without maintenance until they became overtaxed and broke down, he said.

## Traffic

Traffic snarl-up occurred throughout Johannesburg because the power cut affected many robot-controlled intersections.

"We are faced with a serious situation — I do not have enough men to man all the intersections where traffic lights have failed," Mr Theo Olivier, deputy chief traffic officer (operations) said today.

"Our hands have been tied with many of our men doing duty at schools during peak traffic period in the morning and the power failures taking place at the same time," he added.



# Escom in legal row over Matla chimney failure

The accuracy of a statement on the partial collapse of the Matla Power Station chimney released by Escom last week has been challenged by the lawyers of the chimney's constructor, Futurus Engineering, forcing Escom to withdraw the statement.

Escom is expected to release a new statement today. The initial announcement said investigations into the failure of the R4-million chimney at Matla power station near Kriel last year were "virtually complete".

But the construction company's lawyers told Escom that evidence in the original statement on reasons for the tower's collapse was plainly false and "defamatory".

They asked Escom to ensure that your Press release is not published in

the form and said that unless the defamatory parts of the statement were withdrawn legal proceedings would be instituted.

Escom withdrew the statement but two newspapers published it and this is now being discussed with Futurus's lawyers.

The chimney which partially failed was demolished at a cost of R300 000 this year.

The cost of demolition and the bill of around R4-million for a replacement stack makes the issue one of importance to both parties. It is not known at this stage who will be responsible for footing the bill.

A 275 m high chimney at Matla collapsed in August last year, killing five and injuring

the chimney was demolished in July this year.

# Protest at

Aug 10/9/87

# Housing

# League -

400

185

## demos

## in city

MORE than 400 'angry' Bishop Lavis residents who picketed the Dorp Street offices of the Citizens' Housing League because a league official failed to turn up at a mass meeting last week, were dispersed by a large contingent of police today.

The demonstrators then gathered in St George's Cathedral and a delegation of 20 was elected to meet league officials at their offices.

The Bishop Lavis residents were stopped by police in Wale Street when they arrived by bus shortly before 9.30 am, but were allowed to proceed when told they would be meeting in a hall.

### WARNED

The demonstrators were warned in terms of the Riotous Assemblies Act when they blocked Dorp Street in front of the league offices. They dispersed quietly and made their way to the cathedral.

A spokesman for the group said Bishop Lavis was 'sick and tired' of having waited for 20 years for the Citizens' Housing League to provide electricity in the township.

'They said they don't have the money, but we don't believe them. They think nothing of spending R300 000 on luxury flats for white pensioners.'

### 1 000 GATHERED

The anger erupted last Thursday night when about 1 000 people



11/9/87  
**Bishop**  
**Lavis:**  
**No cash**  
**for power**

D & S. P adj.  
AD < AS AD > S  
P constant i rate  
not



unemp.

THE Citizens' Housing League would like to give the people of Bishop Lavis electricity, but it was dependent on the Government making finance available, a spokesman for the CHL said today.

S=1. Ex Post. Eq. AD  
Not Ex Ante - Act  
diff decision by  
Not stable stable

'We realise the inconvenience and cost of not having electricity,' said Mr J G J Viljoen, deputy general manager, technical services.

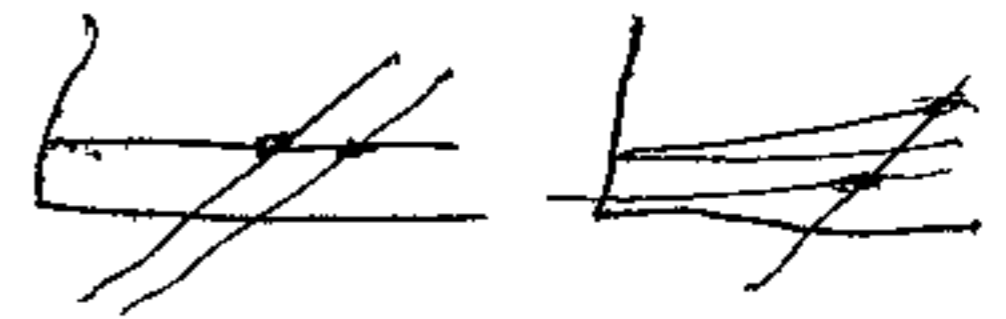
in planned.  
- diff reasons.  
forces

'But we have to wait for money from the Department of Community Development There is nothing

Everybody saves ris

**DEMAND**

The department had told the CHL that the Government did not have funds for this financial year.



Yesterday a large crowd of Bishop Lavis residents marched on the Cape Town offices of the CHL to demand the installation of electricity.

The CHL, a utility company, owns the land and houses of Bishop Lavis and provides the municipal services.

Mr Viljoen said the residents had been asked to elect a committee to approach the CHL, whose board would consider accepting it as a representative organisation.

# Police disperse City demo

CT 11/9/87  
185

By ENRICO KEMP

POLICE were called out yesterday to disperse more than 400 Bishop Lavis residents who marched on the Cape Town offices of the Citizens Housing League to demand the installation of electricity in their homes.

The residents, most of them women arrived in five buses shortly after 9am and marched to the league's offices in Dorp Street to discuss the installation of electricity in 1 800 Bishop Lavis houses.

There has been no electricity in the 1 800 homes since they were built about 20 years ago. Fuel costs for the residents involved are about three times what they would be if they had electricity.

The peaceful protest march was planned at a mass meeting in Bishop Lavis last week when representatives of the Citizens Housing League failed to attend to discuss the issue.

Uniformed and security police arrived on the scene soon after the crowd had gathered with placards demanding electricity in front of the building housing the CHL's offices.

The policemen formed a cordon to prevent anyone entering the building and a steel-mesh gate in front of a ground floor CHL office was bolted.

A senior police officer addressed the crowd over a loudhailer and said the gathering was prohibited in terms of the Riotous Assemblies Act.

He gave the residents five minutes to disperse, but

agreed to allow a delegation of five people in to meet officials of the CHL.

The crowd dispersed and regrouped in the Church House in Queen Victoria Street to elect a delegation who would ask officials of the CHL to come and address the crowd.

The deputy manager of the league Mr J G I Viljoen, said he could not address the residents and asked for a delegation of 20 to come to the league's offices to discuss the electricity issue.

The CHL's manager for State-assisted housing, Mr Johan Nel gave an undertaking that the league would reply to Bishop Lavis residents at the end of the month after negotiating with the Department of Community Development for a loan to finance the installation of electricity in the township.

In what was later described as a "significant victory" by a resident the CHL also undertook to liaise with representatives elected by the people instead of the Matroosfontein management committee, which the delegation rejected. Mr Nel asked the delegation to "choose your leaders and you can work with us in finding a solution".

He and Mr Viljoen said the CHL was "sympathetic" to the plight of those living in homes without electricity, but was unable to raise finance for installation. The CHL had to negotiate loans through the Department of Community Development because the interest rates on State loans were much lower than private loans.

Staff Reporter

**BISHOP LAVIS** residents who have been without electricity for about 20 years told the Citizens Housing League yesterday of their hardship and high expenditure on alternative fuels for household puri

At out 20 residents who met three officials of the CHL, Mrs Mureen Snell of Clansburg Bishop Lavis said she spent about R 10 a month on paraffin for her stove

rent. Mrs Mureen Snell of Clansburg Bishop Lavis said she spent about R 10 a month on paraffin for her stove

## Residents tell of R80 fuel bills

paraffin fridge and lamps. When she moved into Bishop Lavis her rent was R11 a month. It had now increased to R 100.

It is wrong and unfair. We are decent people and we are not living in stables. Why can't they put electricity into our homes? she asked. Another man said "Elec-

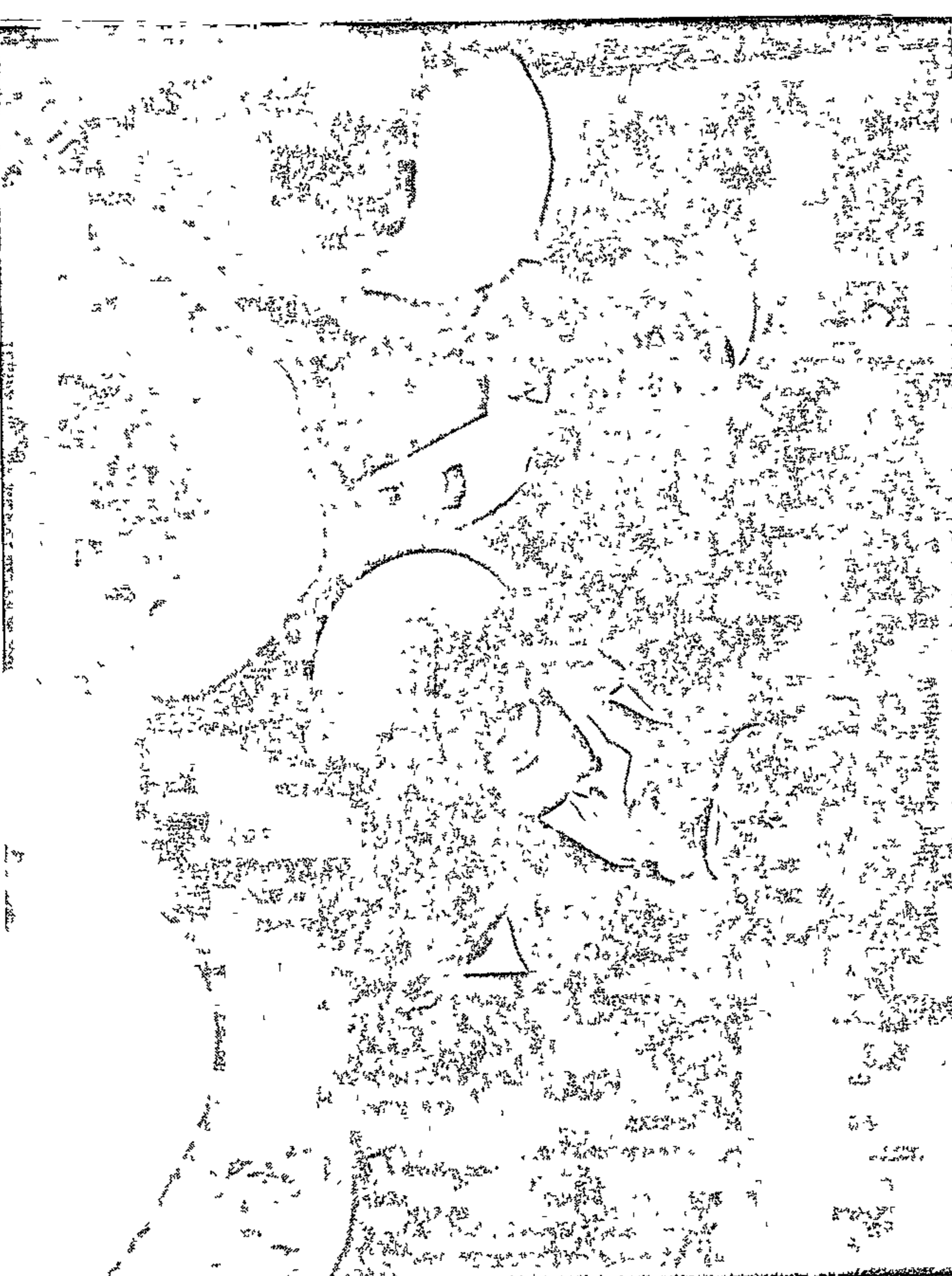
tricity is not a privilege. It is a dire necessity in our modern society. He said he earned R200 a month and spent R600 a year on gas oil, paraffin and candles.

A mother of four said "Two of my children are at university and the other two at high school. At night, they all have to study by candle-

light. This is very inconvenient."

A woman said three people living in her home had asthma, which was aggravated by the smoke from her paraffin fridge. Her six-year-old daughter had to wear spectacles before starting school because of the weak lamp-light. The interior of her house had to be repainted every year and new curtains had to be bought because of the dirt paraffin smoke.

"Why do I as a human being have to live under this kind of oppression? Why must things always be so hard for us? Life is short, yet we struggle till into our graves," she said.



Lieutenant-Colonel G S Engelbrecht tells the crowd which gathered at the offices of the Citizens Housing League yesterday to disperse.

NM 4/9/87  
185

# Northern Natal could get

## Sasol 4

Financial Editor

SASOL 4 could well be built on the coalfields of Northern Natal, according to the Director-General of Mineral and Energy Affairs, Dr S J P du Plessis.

All that it required was an entrepreneur to furnish the capital.

No Sasol spokesman was available yesterday to comment on this view but previously they have indicated that the Sasol programme is fully committed to completing the second and third plants.

The company cannot spare skilled staff to start on another unit, and additionally the heavy financial burden of at least R5 000-million makes it difficult to contemplate further plants.

Sasol expects to be busy until at least 1985 on existing projects.

Dr du Plessis said that for strategic reasons it might be necessary to build further Sasol plants round the country.

He said that the country was consuming 80-million tons of coal a year at present but in 40 years would be mining 740-million tons.

Sasol 2 and 3 would use about 13,75 million tons of coal at full capacity.

# NEW

# Battle Move

C. Harold 12/9/81 1RS

# to Fight

~~HA~~ ~~SA~~

'We will march to the Cape Town offices of the Housing League and if they still refuse to install electricity in our houses, we will refuse to pay rent.'

This was the decision taken at a packed mass meeting at a Bishop Lavis cinema last Thursday night where about 1,000 residents expressed their dissatisfaction at the failure of Housing League officials to address the meeting.

'If they don't want to come to us, we will go to them. They will be forced to listen,' residents said.

They decided to march to the offices this Thursday morning and stay there until they receive an answer from the League.

They said they would refuse to pay rent if the answer was negative.

### DEADLINE

The meeting followed on an earlier march by about 400 residents to the Bishop Lavis housing offices of the League where they gave a one-week deadline for an answer to be given.

As a speaker at the meeting called on the Housing League officials to come forward at the meeting, there was a hushed silence before residents started singing: 'CHI, we want electricity.'

There were shouts of: 'They are cowards' and 'they are thieves,' as nobody came forward.

Residents said the Housing League claimed they did not have R1-

# UP LAVIS

million to install electricity in the houses in Bishop Lavis but they were prepared to build luxury flats for pensioners in Gardens for R3 million.

A Mrs. Titchaels, a pensioner from Polberg Road said she used one can of paraffin a week on her fridge alone.

'It is difficult for pensioners and widows to survive without electricity,' she said.

### LEAD

Another resident, Mr. R. Pedro, said people should not depend on students to do everything for them.

'Our parents should lead the way,' he said.

Emotions ran high throughout the meeting as people spoke about the problems caused by not having electricity.

The hall was brightly decorated with posters which read: 'We have suffered too long in the dark', 'We don't want any promises, we want electricity now' and 'everything is possible if we stand together'.



FLASHBACK: A sea of faces as Bishop Lavis tenants march on the local Citizens' Housing League offices recently.

Asked why he did not address the meeting last week, Mr. Eric Pohl, general manager of the Housing League, told Cape Herald the people had to make representations through the Matroosfontein Management Committee.

'However, I would be prepared to see their representatives in my office, but only if they come along with members of the management committee, who are their official representatives.'

'I have nothing new to tell them because I have told them the same story over and over, but they refuse to believe it,' he said.

# Relying on an ageing power source

5/12  
14/9/87

AS

On some of the coldest days of the winter, thousands of homes and businesses throughout South Africa were without power because generating capacities were below demand. The worst day for Johannesburg, in early September, was when the city's own power supply failed at the same time as that for the national grid. BOB DAVIS reports.

Johannesburg's electricity headaches began 15 years ago when the Government refused the city permission to build a new power station, favouring Escom's expansion plans.

"I am not criticising the Electricity Supply Commission but we will have to depend more and more on them as our needs increase," said Mr Wessel Barnard, Johannesburg's chief electrical engineer.

He said the city took 30 percent of its power supply from Escom's national grid but Johannesburg would maintain its ageing power stations at Orlando and Kelvin until dependence on Escom reached the 90 percent mark.

"We have calculated that the saving to Johannesburg will be R400-million over a 15-year period if we continue to generate as much as possible of our own power," said Mr Barnard.

## RECORD LEVELS

At the height of winter, when demand peaked at what was believed to be record levels, Escom had to pull the switch, leaving much of the country and most of Johannesburg without power because it could not cope.

Mr Barnard said it had been an unfortunate combination of circumstances.

One of the 10 generators at the Orlando power station and four of the seven at Kelvin B were out of commission at the same time, causing a shortage for the city of 360 Mw.

But when demand was switched to Escom it was found that that source had also run into difficulties

## LOAD-SHEDDING

One of the Electricity Supply Commission's power stations in the Eastern Transvaal had failed to generate full capacity and load shedding had to take place.

What went wrong at Kelvin?

"The plant there has now reached the age (15 years) where upgrading is urgently needed," Mr Barnard said.

A number of boiler tubes had been unable to take full pressure and had burst. Repair work, going on almost round the clock, would take several weeks.

Since then slag in one of the boilers still in commission had increased the problem.

Mr Barnard said Johannesburg had been able to make use of four emergency generators, parts of which dated back to the war years, but these were costly to run and were used for short periods only.

## NEW STATION

In retrospect, would the city not have been better off if the Government had given permission for Johannesburg to build a new power station in the mid-1960s?

"It was in the national interest for us not to build that power station," Mr Barnard said, "and I still support the decision in the long term."

Mr Boet Uys, Escom's Press officer, said the Electricity Supply Commission was grateful to Johannesburg for the responsible attitude adopted by its electricity department.

"And all the stops are out to try and solve the power shortages problems for the whole country," he said.

- 64  
ROM 18/10/81  
**Matimba**  
Order 185

The problem arises when the amount accounted for on the Equity available for capitalisation of the associate is less than the amount incurred by that enterprise. This room for manipulation of the folios as can be seen from the following:

NUREMBERG — Maschinenfabrik Augsburg-Nuremberg, MAN, says a consortium it forms with Alstom Atlantique of France has obtained a letter of intent for a R300-million South African turbine order. MAN expects the letter from Escom to lead to a firm contract by the end of 1981 or early 1982. The order will be for six 600 megawatt turbines for the coal-fired Matimba power station in North-Western Transvaal. It will only be possible to say what MAN's share will be when a firm order is obtained. Finance will be largely obtained outside South Africa, as most of the order will be manufactured in Europe — Reuter

associate company are discussed, interest on the financial statements also leaves the associate company, actual interest cost

Assume that investee Company I, holds 40% of A (the associate company), and accounts for that investment on the Equity Method. I then lends A R1 000 000 at 14% p.a. to finance the construction of a manufacturing facility. The R140 000 of interest has been treated as interest income by I, whereas A has capitalised the amount, and therefore shows no expense. This has the effect of increasing A's profits by R140 000. Through this occurrence, I has increased its profits by 40% of R140 000, i.e. R56 000, <sup>57</sup> (based on I's shareholding in A).

This does not seem equitable, and the effect of capitalising the interest relating to such borrowings should be eliminated before calculating the investor's share of the associate's earnings. The question arises as to whether the full R140 000 should be eliminated from the earnings of the associate before the investor calculates its share of the profits or just 40% of the profits, based on the percentage shareholding. The views of two prominent accounting firms, with which I concur, is that the investor should

# Police read Riot Act to

ABOUT 400 Bishop Lavis residents encountered uniformed and Special Branch policemen when they went to the Cape Town offices of the Housing League last week to demand electricity for their houses after more than 20 years in shadows.

The march followed an emotional mass meeting at a Bishop Lavis cinema where about 1 000 residents decided 'If the Housing League cannot come to us, we will go to them'

At about 9 30 am last Thursday as the residents

*C. Herald 19/9/81*  
**400** in

arrived in pairs at the league's Dorp Street offices, several policemen moved to close off the entrances to the building. The residents, who had arrived in five buses, gathered outside the building, were confused when they were told by a senior police officer that the gathering was prohibited in terms of the Riotous Assemblies Act. They were given five minutes to disperse.

In threes and fours, they went to St George's

Cathedral Hall followed by police in several vans and cars.

A police photographer and a policeman with a video camera were locked out of the hall where the people discussed their next 'battle plans' between singing of 'We shall overcome,' 'CHL, we want electricity' and 'Senzeni na' (What have we done).

Volunteers were sent to fetch two busloads of people who were stopped by police in Upper Wale Street.

Later, when the people from the buses came into the hall, there was loud applause from those already there.

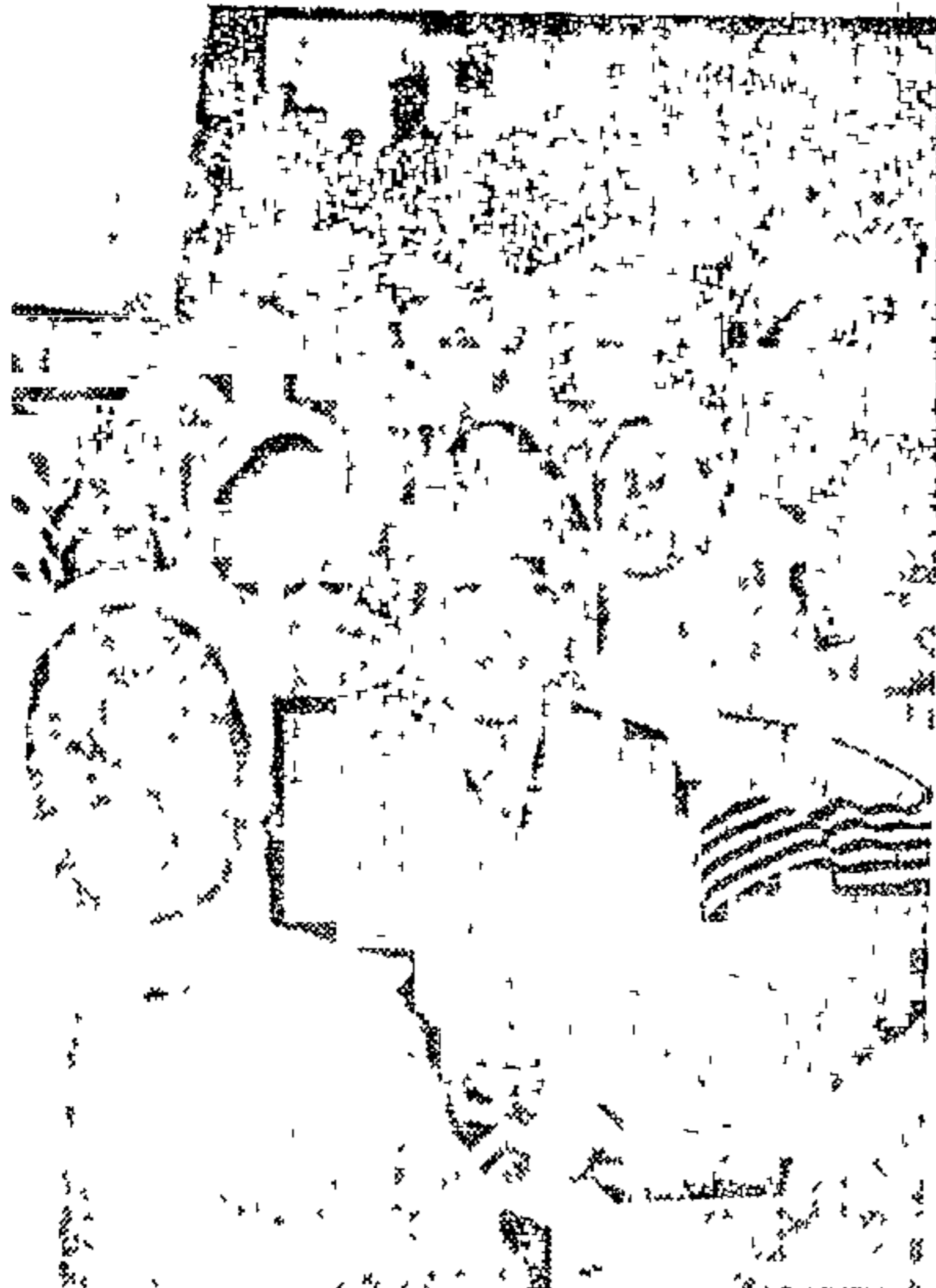
About 10 45 am, people in the hall were told they had to leave and go to the cathedral.

A delegation of five people tried to get Housing League officials to speak to the residents.

Mr J G J Viljoen, deputy manager of the Housing League, was prepared to speak to 20 representatives at his offices.

About 1 pm they left in pairs for their buses where their representatives reported back on the meeting with the Housing League officials.

Lavis hope after 20 years in shadows



Long group of protesters from Bishop Lavis red of living in the dark.

# DECISION ON LIGHT IMMINENT

C. Herald 19/9/81 (185) (185) (185)

**BISHOP LAVIS** residents will have to wait until the end of September to be informed if — after 20 years — they are to be supplied with electricity.

But the representatives will in future negotiate through the Housing League rather than the Matroosfontein Management Committee

This was the outcome of a meeting on Thursday between officials of the Housing League and a delegation from 400 Bishop Lavis residents who had earlier assembled in protest outside the HL's offices in the centre of Cape Town

The residents were unhappy about the lack of electricity in the township. (See story on this page.)

### HARDSHIPS

At the meeting, delegates told of the hardships encountered in Bishop Lavis due to a lack of electricity.

One said that his paraffin, gas and candle bills were R80 a month whereas with electricity he would not have to pay more than about R20

Another said that blacks were oppressed in all

walks of life, and the residents of Bishop Lavis no longer accepted they had to do without a basic necessity such as electricity.

Housing League officials replied that they sympathised with the residents and would supply electricity immediately — if they had the money.

The Government had been approached for a loan by the HL but while it agreed to the request did not have money available, Mr Johan Nel, the Housing League's manager for State-assisted housing, said.

### ACCEPTED

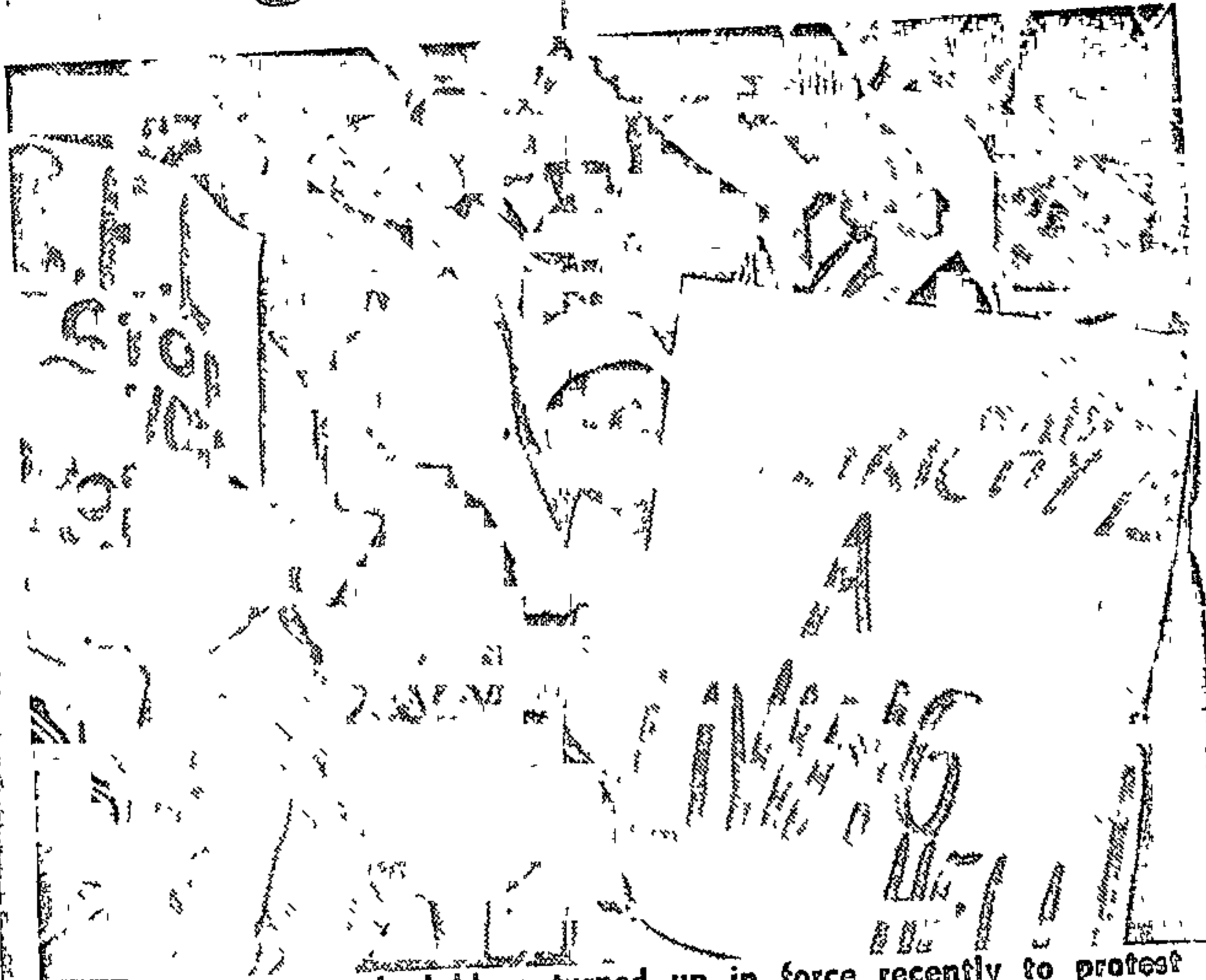
Mr Nel said his group would be meeting with the Director-General of Community Development, Mr Louis Fouche, by the end of this month when a final answer on the availability of money would be received

The delegation accepted that they wait for Mr Fouche's answer.



# Telling it like it is...

185  
19/9/81



© MEN, women and children turned up in force recently to protest against the non-provision of electricity in Bishop Lavis.

More and more people are demanding:

## Let US

# SPEAK FOR OURSELVES

*C. Herald 19/9/81*

THE low polls in the recent management committee elections are not surprising if one looks at the many recent confrontations between communities and local authorities — the latest being the protest by about 400 Bishop Lavis residents demanding electricity in their houses.

This shows the increasing rejection of management committees and a message that more and more communities are spelling out 'We don't want management committees. We want to speak for ourselves.'

Not only do the people reject the management committee system, but also the system of a few speaking on behalf of

sent, but at the request of the community representatives, he was given observer status only at the meeting.

The residents were able to have the Council's maintenance lease, whereby tenants would have to pay for all repairs, scrapped for old tenants.

This was seen as a victory not only for the

be part of the 'victories' of their people.

At the recent hearing on bus fare increases for the Western Cape, a man said 'I work hard, but my people's struggle is my struggle and I have to be here with them.' These words were probably in the minds of many of the people who stayed out of work for community activities.

In the few cases where there have been deputations sent to discuss on behalf of the people, they were not people who went on their own accord, but were elected by their communities

#### MAINTENANCE

Earlier this year, a deputation from the Bokmakierie, Bridgetown, Silvertown and Kewtown (BBSK) Residents' Association went to the City Council to discuss the maintenance problem

A member of the Athlone and District Management Committee was pre-

SENT TO CITY COUNCIL TO DISCUSS

#### CHARGES

Another victory which benefited all areas was scored by the Mitchells Plain Electricity Petition Committee (EPC) when they succeeded in having the City Council drop overdue charges on all electricity accounts under R30

This was not done through a deputation, but through a march by about 200 residents to the Cape Town Civic Centre. Many of these people had stayed away from work illustrating their determination to

Apart from the victories won by single communities on behalf of many others, there have also been the cases where many communities came together to fight issues as one, or to give support for a community taking up an issue.

In July, more than 1 500 people gathered in the Bonteheuwel Civic Centre to start a campaign by the Bonteheuwel people to have their houses repaired by the City Council. People from many communities had come to the meeting in buses to show their support for the people of Bonteheuwel.

In response to an application for higher bus fares by three Western Cape bus companies last month, more than 30 organisations lodged joint objections.

#### POLICEMEN

Representatives from community and other organisations were met not by officials of the Road Transportation Board, but by uniformed policemen.

This has been a characteristic of most of the community protests — the presence of uniformed and security branch policemen.

At the Bishop Lavis protest last week, a man said 'We are not here for violence. We are decent and religious people. We only want electricity, we don't want to fight. Why did they call in the police?'

In the same way the Mitchells Plain people could have said: 'We are only here because the due date is inconvenient' and the bus fare objectors could have said: 'We are only here because we cannot afford to pay high bus fares.'

In the words of a Bishop Lavis resident: 'This is not politics. We are here because not having electricity affects us and our children. We want to make things better for our children. But whenever people stand together, the police get scared and they think it is something political.'

And the extent to which they are affected by the issues they are taking up, is shown by the determination of the people to get what they want and the growing support they get.

# Secret of Escom's new power station will soon be revealed

S. T. W. Finance Correspondent

185

ESCOM will soon reveal the few details still under wraps of its newest power station, known so far only as Station C.

Persistent rumours — based mainly on elevation plans supplied by Escom — suggest that Station C's location will be somewhere in the northern Free State in the area south of Vereeniging.

If this speculation is correct, Station C will be near the Letlhabo power station, currently under construction in the Sasolburg area.

An Escom spokesman insists however, that Station C "could be anywhere where there is coal and sufficient water".

Escom has promised the nine tenderers for Station C's turbines that it will announce its decision by the end of the year. The companies are the same ones that tendered for the R300-million turbine contract for the Matimba power station in the north-western Transvaal, which was awarded this week to a French-German consortium. They have been asked to revalidate their Matimba offers.

The nine include Siemens and MAN of West Ger-

many, Brown Boveri of Switzerland, Alsthom of France, GEC of Britain, General Electric and Westinghouse of the US and a Japanese company.

Escom is believed to have drawn up a short list. Observers figure that having awarded the Matimba contract to a French-German consortium, Escom will probably give the Station C order to a company from another country. The one most often mentioned is Westinghouse.

Besides the tenderers themselves, the other big winners from large contracts such as those currently being awarded by Escom are the banks which finance the deals.

The widest smiles so far among the bankers are at French Bank, the local subsidiary of Banque de L'Indochine et e Suez. It is the main banker not only to Alsthom, which has a share in the Matimba turbine contract, but also to Alsthom's 90 percent-owned subsidiary Stein Industrie part of the consortium awarded the R700-million order for boilers for the Matimba station.

MAN, the German partner in the Matimba turbine consortium, is believed to have appointed Bayensche Verinsbank to oversee the financing of its share of the contract. Hill Samuel is acting as main financial adviser to Combustion Engineering, which is supplying the boilers for Station C.

According to bankers, equipment for Matimba and Station C will be financed mainly by means of export credits and offshore loans, but it will be another six months before details are

What is known is that three countries' official export credit insurance agencies — ECGD in the UK, Cofas in France and Herines in West Germany — have already agreed to provide loan guarantees to the tenderers' banks.

According to bankers, equipment for Matimba and Station C will be financed mainly by means of export credits and offshore loans, but it will be another six months before details are

Soweto (Port Elizabeth) lighting masts  
10 Mr A SAVAGE asked the Minister  
of Co-operation and Development

Why did his Department erect lighting masts in the shanty town in the Port Elizabeth Black township known as Soweto while the electrification project was still in the planning stage?

The DEPUTY MINISTER OF CO-OPERATION

The high-mast lighting in Shanty Town known as Soweto, Port Elizabeth, was erected by the Eastern Cape Administration Board and not the Department of Co-operation and Development. A detail plan for the electricity distribution network for the area was completed in 1977. High lighting masts were erected in the positions as planned in 1977.

Because of the shack development in

SEPTEMBER 1981

470

the area which does not conform to the final lay-out plan, some of the masts cannot be supplied with electricity at this stage. This situation does also not allow the development of certain services, such as electricity, in areas set aside for this purpose.

As soon as funds become available the area will be developed and all high lighting masts will be coupled to the electricity network as planned in 1977 and development will be implemented in accordance with the final layout plan.

Bishop 25/11/1  
Lavis 185  
electricity:  
New row

THE Bishop Lavis Action Committee (Blac) has accused the Citizens' Housing League of an about-face in negotiations for the supply of electricity

The committee says the league has gone back on a promise that it would negotiate only with the committee

This month about 450 Bishop Lavis residents marched to the CHL offices in Cape Town after an official did not address a meeting, as promised

At a later meeting between a Blac delegation and the league it was agreed that Blac would be recognised as the negotiating body, as they had the support of residents

The league agreed it would no longer negotiate with the Matroosfontein Management Committee

#### 20 YEARS

Negotiations for supplying electricity in the area — after 20 years — were to take place soon

The committee says the league now insists that members of the Matroosfontein Management Committee be present

A statement says 'We condemn the Citizens' Housing League's high-handed attempts to sidestep the legitimate body of the people of Bishop Lavis, without their consent or knowledge

'The league has again proved that it makes only empty promises. Action will definitely be taken by Bishop Lavis residents.'

League officials were not available today for comment.

# Fight for electricity

*C. H. H. 26/9/81*  
BISHOP LAVIS people are gearing themselves for a bitter fight with their landlords, the Citizens' Housing League (CHL), as the deadline for a decision on electricity supply to the township nears.

The CHL's manager for State-assisted housing, Mr Johan Nel, said after a recent meeting with representatives of the tenants that a final answer on the availability of Government funds would be had by the end of September.

On Sunday, a meeting was held at the Galaxy Cinema in Bishop Lavis by the Bishop Lavis Action Committee — to decide on a united response to the possible rejection of supplying electricity after September 30.

Residents suggested the following action:

- A rent boycott. (This was not well supported by the meeting.)
- Legal action. (Also not well received, although it was agreed attorneys would be approached.)

# Residents' electricity demands backed

Angus 28/9/81

185

ABOUT 30 representatives of civic organisations and trade unions walked into a Citizens Housing League meeting today and handed over letters of support for Bishop Lavis residents' demands for electricity.

The delegation sang freedom songs in the pass-

age on the fourth floor of the CHL building in Dorp Street and demanded to see the manager, Mr P W Pohl, who was in a meeting at the time.

When Mr Pohl did not come out of the meeting they walked into the chambers and demanded to speak to him

An angry Mr Pohl at first refused to accept the letters. He told the delegation that he would speak to a small group of them after the meeting.

The delegation was not satisfied and handed the letters over to Mr Pohl.

Mr Pohl threatened to call the police if they did not leave. He refused to read the letters and a member of the delegation read a letter aloud to him.

The letter said the organisations considered the demand of the people of Bishop Lavis to have electricity installed in their houses a just and reasonable one.

'We consider electricity to be a right and not a privilege.'

The letter also asked for a reduction in the fuel bill 'to alleviate some of the hardships forced on to the people.'

It demanded that the CHL meet with the elected representatives of the Bishop Lavis Action Committee on Wednesday and called on the CHL to abide by their agreement that the Management Committee would not be present at the meeting.

September 29, 1987 3

CT 29/9/87  
**Electricity  
demand  
backed**

Staff Reporter

A GROUP of about 25 representatives of civic organizations and trade unions walked into the Citizens Housing League building in Dorp Street yesterday morning and handed over letters of support for Bishop Lavis residents' demands for electricity.

It is reported that they demanded to see the manager, Mr P W Pohl, but that he was at a meeting at the time and refused to see them immediately. The group insisted and walked into a room where the meeting was taking place, handing over a number of letters.

One of the letters said the organizations represented considered the demand of the people of Bishop Lavis to have electricity installed in their homes a just and reasonable one.

It demanded that the Citizens' Housing League meet the elected representatives of the Bishop Lavis Action Committee tomorrow and called on it to abide by their agreement that the Management Committee would not be present at the meeting.



Aug 30/9/81  
**Shock**  
185

(Continued from Page 1)

the increase to the consumer to 13,5 percent'

The council has made one concession on electricity which will affect the majority of domestic consumers. The 10 percent levy on accounts not paid by the due date which was abolished earlier this year on accounts of R30 or less will now apply to accounts up to R35.

The council has warned however that those consumers who exploit the concession and delay payment for a month or more will have their supply disconnected without further notice.

to a particular  
suitable because  
suming no sel  
intention of  
Everingham an  
fair value of

"since t  
represent  
and does

value to a substantial block of shares.

# SHOCK 13,5 PC RISE IN CITY POWER BILLS

Aug 30/9/81 185

**Municipal Reporter**

**ELECTRICITY in Cape Town is to cost all consumers an average of 13,5 percent more from tomorrow. The City Council says the main reason is the soaring cost of Escom power.**

The shock increase means that all electricity accounts will be higher in November.

Part of the increase is the cost Cape Town must pay to avoid the systematic power cuts that have plagued those areas getting an Escom power supply

only as the commission battles to produce enough power to satisfy the whole country.

To avoid cuts the council has had to rely more and more this winter on its own power generation system at additional cost.

In a statement released today the City Council said the major contributory factors for the increase were increases in Escom's tariff, the cost of coal and to a lesser extent salaries and wages, capital charges and the cost of stores and materials.

Escom's revised tariff for next year plus escalating coal costs would increase the cost of electricity from Escom by 26 percent.

The council said Escom's shortage of generating capacity would have a major impact on the cost of coal for the council's Athlone power station in-

creasing costs by about 12 percent next year.

At the same time the council had to make allowance for a coal price increase of 16 percent.

It would mean an overall compounded increase in the city's coal bill of around 30 percent.

## OWN POWER

The combined effect of all these inflationary factors is estimated to be an overall increase in total expenditure next year of around 21 percent.

This increase will be offset by an anticipated five percent growth in sales leaving a balance of 16 percent.

By the immediate introduction of a revised tariff and drawing from reserves in the Electricity Tariff Stabilisation Fund it has been possible to restrict

(Continued on Page 3, col 6)

Although an investor would ordinarily be a minority, it would be a minority with significant influence. A valuation of a minority interest as yielded by the market value is unsuitable for the special minority for two reasons. Firstly, a minority without significant influence has no influence over earnings. Thus, dividends would be of paramount importance. The equity method does not yield a dividend-based value but an earnings-based value and thus the market value is unsuitable. Secondly, because of the focus of attention on dividends by investors in South Africa, an astute investor would periodically re-arrange his/her portfolio in order to maximize dividend returns on that portfolio. This implies a short-run market valuation, again in conflict with the

# Cape Town CT 1/10/81 electricity (185) up 13,5 pc from today

By NEVILLE FRANSMAN  
Municipal Reporter

WITH THE City Council announcement yesterday that electricity tariffs will rise by 13,5 percent from today, Cape Town has reaffirmed its ranking as the most expensive city for electricity consumers among the four largest municipalities in the country

For a Cape Town householder used to paying R24 for consuming on average 600 units a month, the bill will go up to R27. Comparable approximate figures for Johannesburg are R19, Durban R19,50 and Port Elizabeth R22.

Some consolation for Capetonians is that in the northern area such as Goodwood and Parow, directly supplied by Escom, electricity costs are still higher than Cape Town's. A householder there using the average 600 units is paying R31 monthly, and will be paying R33 when Escom's rates go up next year.

There is further good news for Cape Town. In July the City Council abolished the 10 percent surcharge on all monthly accounts of R30 or less paid after the due date. This limit has now been raised to R35.

## Further away

Meanwhile, it has been stated often that local rates were higher to cover the cost of transmitting power from upcountry sources. Cape Town was also much further away from coal sources and so had to pay more for coal for its own power stations.

The new domestic rate for Cape Town is 4,39 cents a unit, as against the 3,86 cents householders were paying up to yesterday. The service charge for domestic users has gone up to R1,10c from 98 cents.

This is the third time in three years that Cape Town's electricity rate has been increased. At the end of 1978 it went up 12 percent, in March 1980 6,3 percent and 12,5 percent in November last year.

A City Council statement yesterday explained that inflationary influences outside its control had necessitated the latest rise.

Major factors were increases in the tariffs of Escom (which supplies more than half of the City's power), the cost of coal (the

City buys its own for the Table Bay and Athlone power stations), salaries and wages, capital charges and the cost of stores and materials.

## Escom's tariff

The largest single factor was the projected increase in Escom's tariff next year.

Besides this, Cape Town had already been obliged to live with the fact that Escom did not have adequate generating capacity to meet the national demand and had to make up the local shortfall at additional cost by means of the City's own generating plant — that is, the Athlone and Table coal-fired stations, the Steenbras hydro-electricity installation and two gas turbines.

The shortage of generating capacity on the Escom system was expected to persist for at least one to two years, and this meant that Cape Town would be forced to buy more coal for its own power stations. The City's coal bill was expected to rise by 30 percent next year.

The City Council statement continued: "The increase in expenditure would normally require a 16 percent increase in the electricity tariff."

"The impact of these anticipated cost increases next year can be reduced, however, by the immediate introduction of a revised tariff and by drawing from reserves in the Electricity Tariff Stabilization Fund."

The City Electrical Engineer, Mr D C Palser, disclosed in an interview that Cape Town could expect an income of R121 million this year from its electricity undertaking.

## Expenditure

This would be spent as follows: Escom — R44m, coal — R13m, capital charges — R24m, salaries and wages — R17m, general administration, stores and materials — R10m, contribution to electricity capital development fund — R3m, contribution to electricity stabilization fund — R3m.

● The new "large user" rate for Cape Town (old figures in brackets) are: service charge — R15,70 (R13,80) a month, demand charge — R6,93/kVA (R6,10) a month, energy charge — 2,50c (2,20c) a unit, and the minimum monthly payment — the service charge plus R665 (R585).

# ARE-UP

# IN NOW

C. Head

3/15/81

185 ~~A~~ ~~HA~~

# ON HIGHLIGHTS

**THE Bishop Lavis campaign for electricity took a dramatic turn this week when a group of trade unionists, residents and young people invaded the Citizens' Housing League offices in Cape Town.**

The group — about 30 people — went to see Mr Johan Nel, manager of State assisted Housing Scheme, two days before a September 30 deadline for a decision on the supply of electricity to the township.

They demanded to see Mr Pohl to hand him a letter from a public meeting on September 10 supporting demands for electricity.

They were stopped by sales manager Mr Jan Grewe, who, offering to accept the letter, said the general manager was conducting a meeting with senior officials.

Although the delegation's visit was unannounced, Mr Grewe said he had received instructions earlier to accept the letter.

## Board room

The delegation unanimously refused to accept that Mr Pohl was unavailable and marched to the board room, where he was meeting with other officials of the league.

While the delegation waited outside the board room, they sang freedom songs.

When it appeared that there was a break in the meeting the delegation walked into the board room, and the chairman of the Housing League, Dr G H Hansmann.

An agitated Mr Pohl initially refused to accept the letter, but offered to meet the delegation once his meeting was over.

He wanted to explain things, he said. A spokesman for the delegation said they had no desire to discuss the demand for electricity, and that this was the responsibility of the Bishop Lavis residents themselves.

## Motive

They wanted Mr Pohl to read the letter so as to ensure it would not be thrown away.

Mr Pohl repeatedly refused saying that 'if you behave in a responsible manner' he would meet with the delegation later.



MR F W POHL, general manager of the Citizens' Housing League is confronted by members of a delegation representing trade unions, residents and youth groups. With Mr Pohl is the league's sales manager, Mr Jan Grewe.

When he threatened to call the police, his threat met spontaneous laughter.

A delegation member started to read out the contents of the letter, but halfway through the reading, it was accepted by Dr Hansmann.

The delegation left, singing freedom songs on their way out.

Mr Pohl refused to comment and said a Press conference would be arranged later.

## Contents

The letter said:

'We the undermentioned residents, trade union and youth organisations consider that the demand of the people of Bishop Lavis to have electricity installed in their houses to be a just and reasonable demand.

'Further, that in a period of escalating costs a reduction in the fuel bill will help to alleviate some of the hardships forced on to our people. We consider electricity to be a right and not a privilege.

'We therefore:

- Give our unconditional support to the struggle of the people of Bishop Lavis to have electricity installed in their houses.
- Call on the CHL to accede to the demands.
- Demand that CHL meet with the elected representatives of the Bishop Lavis Action Committee on Wednesday, September 30.

their agreement on September 10 that Management Committee not be present at the meeting.

# Escom's <sup>202</sup> Tugela <sup>5/10/87</sup> project <sup>185</sup>

Own Correspondent

DURBAN — Escom was looking into the establishment of a huge pump-storage power station complex near the mouth of the Tugela River, Mr H E Wohlberg, Escom regional manager, said in Durban.

Speaking at the Durban Chamber of Commerce 125th anniversary symposium on the Natal/kwa-Zulu region, he said the complex, if approved, would be similar in principle to the Drakensberg scheme — but it would have a higher power output.

No figures were available but it would probably cost more than the Drakensberg scheme's R400-million. It would be commissioned by about 1989.

## TWO DAMS

The site presently under scrutiny was at Mvumase, 30 km from the Tugela mouth.

Two dams would be needed, one above and one below the power station. Hydro-electric power would be generated from the upper dam and the water used would be stored in the lower dam. This water would be pumped back at times of low power use.

# Electricity: *Star 8/10/81* biggest rise *185* in four years

By Bob Davis

Escom's electricity tariffs are to increase by an average of 13,1 percent from next January — the first increase to exceed the 10 percent mark in the past four years.

Johannesburg's electricity tariffs will thus go up by 4,6 percent from the same date as the city is linked to the Escom system for about 35 percent of its energy

Areas hardest hit by the electricity price rise will be the Orange River Undertaking with a 15,2 percent increase and the Western Cape with 15 percent

The Rand and Orange Free State will pay 12,4 percent more, with the Eastern Transvaal paying 14,7 percent, Natal 14,3 percent and Northern Cape and Border 12 percent

Announcing the tariff increase, Mr I D van der Walt, Escom's general manager, said South Africa's exceptionally high inflation and interest rates, continued interruptions in

the supply from Cahora Bassa and the consequent use of older power stations and sustained growth in electricity demand had compelled Escom to raise the tariff.

Increases in the coal price could lead to a further increase of electricity selling price about 1,2 percent, said Mr van der Walt.

"The average increase is below the present inflation rate and has already reached a figure in excess of 15 percent."

The announced tariff increase was also a result of the accumulated deficit on the electricity supply account at the beginning of 1981.

Mr van der Walt said that in determining the tariff increase for 1982 unavoidable cost increases had been taken into account.

He said Escom had nevertheless honoured its undertaking to keep tariff increases below the current inflation rate where possible.

# Power rise blow to W Cape industry

Augus 9/10/81

195

~~195~~

## Consumer Reporter

THE 15 percent increase in Escom electricity charges in the Western Cape is a serious blow to plans to attract more industry to this area, says the president of the Cape Chamber of Industries, Mr Alan Bramwell.

The Mayor of Cape Town, Mr M J 'Kosie' van Zyl, said he was also concerned about the effect this might have on the vital need to create more jobs for the city's growing population.

In a statement issued today Mr Bramwell said this would be a further handicap to local manufacturers competing with firms in the Transvaal, whose electricity charges will be increased by only 12 percent.

'We feel our situation should be brought more into line with other areas,' said Mr Bramwell's statement, which pointed out that local manufacturers are already handicapped by growing transport costs of their main market in the north.

### Unemployment

The Chamber of Industries, with local authorities including Cape Town City Council, Bellville City Council and the Divisional Council of the Cape, is concerned about mass unemployment in the Western Cape in future unless more jobs can be created for the growing population.

The former Mayor, Mr Louis Kreiner, pointed out that this could lead to social unrest and other evils.

Plans are far advanced to form an organisation, Wesgro, to attract more industry to the Western Cape.

### Contributions

Cape Town City Council has promised to contribute R50 000 a year to this provided another R50 000 is forthcoming from industry and R80 000 from other local authorities.

Mr Jack Roos, director of the Chamber of Industries, said today that the response to this request has been encouraging and the money was coming in both from industry and commerce and from local authorities.

The Divisional Council has promised R15 000 a year for the next three years and the Bellville City Council R10 000.

# Prices expected to spiral after Escom increase

185  
RDM 9-10-81

By GERALD REILLY

THE first price shock of the new year — and it won't be the last — was announced yesterday, a hike of 13% in Escom's power charges from January

The vicious cycle of producers and manufacturers scrambling to compensate for inflated production costs, by raising consumer prices, would follow the same pattern as this year, Pretoria sources said yesterday

Government administered prices, against a background of an inflation rate which economists warn will still be between 14 and 16%, would all rise again during 1982

And in spite of the fact that the economic growth rate was expected to fall below 4% next year it was not likely to harden the Government's attitude to farmers and industrial demands

This year the Government submitted to every demand for a hike in administered prices

## Exploitation

They included bread, milk, mealie meal, wheat, cement, bricks and fertilizers

The PFP spokesman on finance and economy, Mr Harry Schwarz, has called on the Government to protect the consumer from widespread "exploitation"

Labour leaders have also called for a closer look at profit margins in industries where product prices are Government controlled

President of the Federal Consultative Council of Railway Staff Associations Mr Jimmy Zurich said yesterday "It's like

wild cat chasing its tail, and no one is prepared to call a halt"

He warned that if prices next year rose on the same scale as this year the troubled labour scene would worsen

A basic cause of the recent wave of strikes was the inability of wages, even after increases, to ensure the maintenance of living standards, Mr Zurich said

# Dismay greets Escom hikes

DD 9/16/81 (185)

**EAST LONDON** — Dismay greeted Escom's latest tariff hikes yesterday, with fears that they would fuel inflation.

Electricity tariffs will go up by an average 13,1 per cent next January.

The softest blow is for Border and the Northern Cape, with a 12 per cent increase. Other hikes are 12,4 per cent in the Free State and the Rand, 14,3 per cent in Natal, 14,7 per cent in the Eastern Transvaal, 15 per cent in the Western Cape, and 15,2 per cent in the Orange River undertaking.

Despite Border getting off the lightest, the reaction here was cool.

The Mayor, Mr. Errol Spring, said last night the city had been fighting for a

long time for rationalisation of Escom tariffs throughout the country, thereby putting East London on an equal footing with other cities.

The marginal difference between the Border and Rand increases showed there was "obviously still a long way to go" before tariffs were equalised, as East London's tariffs were much higher than those of Johannesburg.

"Any move to equalise tariffs is, however, welcome."

Economists interviewed yesterday said the increase would lift the cost of living "significantly."

They said the price increase was less than the inflation rate and, on its own, would not lift the consumer price index drastically.

But, said Standard Bank chief economist, Mr. Andre Hamersma, because electricity was used in nearly every home and nearly every product, the increase would ripple through the economy and the final impact on inflation would be "quite significant."

Another economist pointed out that Escom provided more than half of the total energy used in South Africa and that "13 per cent added to the cost of that would run to several hundreds of millions of rands."

Escom said the latest increase was the biggest in the past four years, and this was the first time it exceeded 10 per cent.

"In real terms," said Escom senior general manager, Mr. David Vander Walt, "electricity today is cheaper than it was

in 1960."

He said the increase was necessitated by the "exceptionally high inflation rate," high interest rates, continued interruptions in electricity supplies from Cabora Bassa and sustained growth in electricity demand.

Increases in the coal price could lead to a further increase in 1982 by about 1,2 per cent, he added.

Dr. Nthato Mollana, chairman of the Soweto Committee of 10, said the electricity hike would put electricity even further beyond the means of blacks.

"When the expensive township electrification scheme is finished, nobody will be able to afford the power and there will be a massive switch off," said Dr. Motlana.

Mr. Ron Miller, New Republic Party spokesman on energy, said Escom's "shock announcement will have a serious impact on the cost of living for the man in the street."

"It will push up inflation, which is already running at 15 per cent, and will result in a round of price increases on just about every commodity used in households, commerce and industry."

The increases he said would cost users about R250 million.

Dr. R. A. P. Fackema, chairman of the energy sub-committee of the Federated Chamber of Industries, said the large increase highlighted the need for better timing of tariff increases, which, in future, should not reinforce declines in the economy.

He said the FCI welcomed a reduction in tariff differentials between economic regions.

Mr. Spring said "As long as we are not in any worse position we must accept the increases in these times of inflation."

He said if the tariffs were equalised, it would make the city more competitive in the industrial field.

"But until they are equalised, any concessions offered to us by the government will obviously have to compensate for our high tariffs."

Mr. Donald Card, city councillor in charge of industrial affairs, said the lower Border increase would do nothing to make the area more attractive to industrialists. — DDR



# Escom's shocker will fuel inflation

185

10/10/81

By GERALD REILLY

COMMERCE and industry spokesmen yesterday expressed concern at the inflation shock waves which will be created by the 13% increase in Escom power tariffs from January next year.

And the PFP spokesman on finance, Mr Harry Schwarz called for "another" close and urgent look at the whole financial structure of the corporation.

He said repeated tariff increases — they had risen by more than 140% since 1975 — were a major part of inflation.

Power was a basic input throughout commerce and industry and the effect of higher tariffs had an immediate impact on the price spiral.

Similar fears were expressed by leaders in the private sector.

## Concerned

The chief executive of Assocom, Mr Raymond Parsons, said Assocom was concerned at the likely inflationary impact of the increases.

Assocom believed that unless the so-called administered prices decisions were coordinated with overall anti-inflationary policy and the business cycle the chances of a substantial reduction in the inflation rate remained poor.

There was little purpose in pursuing a monetary and fiscal policy designed to curb overall spending and rising costs if certain State corporations with their monopolies avoided that discipline by simply putting up prices.

Assocom therefore hoped that the study of the economic advisory councils of administered prices would be completed soon so that sound guidelines for the pricing and financial policies of State corporations could be laid down for the future.

## Problem

A major problem was the extent to which capital expenditure of corporations ought to be financed from current revenues.

Mr Schwarz said a serious feature of the power price increase was it would create inflationary expectations and at least some prices would rise in anticipation of the January tariff hike.

The Government, he said, appeared to be dealing with inflation only by seeking to control the money supply and was not tackling the problem of controlling costs.

Escom owed the country a satisfactory explanation for the series of increases over the past two years. The question of financing capital spending from current revenue should also be investigated.

# Escom offers that tempt the investor

RDM 12/10/81

185

185

ESCOM is showing considerable imagination and initiative in one of the two loans with which it will be coming to the market next week. In addition to a conventional loan issued at par, it will offer another with a 10% coupon but with a deep discount.

This means that Escom — and its two merchant banks, UAL and Senbank — are trying to tailor the "merchandise" to the market's needs. They are going all out to design stock which will sell

For those who want the fixed-interest stock, there it is. But for those institutions — and traders — who want flexibility there will be the discount stock.

It is apparent that the buying pattern on the gilt and semi-gilt markets has been closely studied. There is a marked preference in the market for discount stocks and the issue appears to have been designed to meet this preference — which is a refreshing change from the old rigidities.

Discount stocks do not move too wildly when rates fall and the market goes into a bull phase. Low-coupon stocks are more volatile in bull markets because they are more popular.

One can infer from this Escom action that it and its advisers appear to believe we are approaching the top plateau of rates and that long-term rates will not run away. Whether we are at the peak, particularly if one looks back and notes the four percentage points rise in the past 18 months.

Another innovation is that the discount stock will be reissued at any time in the next three years. This suggests that the tap will be open wide and that periodically new issues of the stock will be made.

I do not doubt that the discount stock will prove attractive to institutions who appear to be changing their investment patterns. A little more than a year ago they were trading in equities and locking up their gilts. Now it would seem that they are locking up their equities and turning to trading in gilts.

The rates on the new stock will be announced on Thursday or Friday and the lists will open on October 20 for a week.

The market is trying to assess just where the rate will be pitched. Escoms are trading at 13,28% to 13,30%, so it is expected that the bankers who will test the market this week will try to get 13,3%, but might be pushed to 13,35%.

If these rates are anything to go by the discount stock would be issued at about R75% — redeemable at par R100 in 2007. But the capital value of the stock will appreciate as soon as the downward movement in rates begins.

Escom will not settle its rate until the results of the Government issue are announced. The market appears to believe — and this is pure guesswork — that at least R300-million will be taken

## HAROLD FRIDJHON — in the money markets

up of the long-dated, particularly as some major institutions regard rates as having peaked.

Guesses about the success of the short-term, three-year loan are a little wilder. While some market traders talk to R200-million, I think this is on the high side after the Reserve Bank has been rolling over much of the maturing loans.

Secondary market activity was quite high last week with RSAs at 13,23% and the 8½% down to 13,19%. Many institutions regard the yield curve as being flat for the immediate future and prefer to go short without losing yield.

\*\*\*\*

THE money market has experienced heavy demand for paper with rates inclined to be marginally easier for November and December, but with a marked reluctance to buy January maturities.

Everyone in the market prefers to remain short. With the discount houses in the bank, there is still a large deficiency in the banking system although the amount of Reserve Bank accommodation has fallen from R600-million to R468-million.

It is expected that this balance will continue to decline until near the monthend when it will increase to about R450-million.

Next month should be fairly comfortable, but in December

there will be increasing tightness with heavy tax payments due. That tightness might remain until after the February big-tax monthend.

It is because of this that January investments are not attracting much support — except at a price. It is probably for this reason that the Treasury bill rate rose by five points to 11,40%. This week's bills mature in the second week of January.

The three-month bankers' acceptances rate is still quoted at 13,75%, but there has been some trading at 13,6% and there are offers in the market at 13,5%. These are discount rates.

While very short call rates are way down, monthend money with asset covering is quoted at 13% and at 11,5% on straight deposit.

Year money appears to be bypassing the banks who are nominally quoting 14,75% with the building societies quoting around 15%, but with rates subject to negotiation depending on their day-to-day requirements.

The discount houses are selling November BAs at 13,4% discount (13,6% yield), December at 13,55% discount, but January is quoted at 13,65% for a 14,125% yield.

NCDs are shading the BA rate in the shorter periods, but the rate is widening for January for which a yield of 14,5% is being demanded.

# Electricity project under fire

Sowetan 14/10/81  
SOWETAN REPORTER  
AN ELECTRICITY project  
under construction in Vos-  
loorus came under heavy at-  
tack from members of the  
Vosloorus Civic Association

during a meeting at the St.  
Boniface Anglican Church.  
"Residents pay R5 each  
month for the R1,5m pro-  
ject" said Mr Pule Mogot-  
lane, an executive member  
of the association "This is in-

cluded in our electricity bills  
every month", he said

"Surely, if the authorities  
can promise us that it will be  
owned by the community it  
would have been better. The

community, in other words  
would have footed the bill  
and it would be to our advan-  
tage because we'll pay about  
20 cents after completion.  
And we will be dealing with  
Escom directly."

# Delay in Soweto

## power project

By David Braun

Confusion surrounding the Soweto electrification project may result in the scrapping of power cables worth millions of rands and a delay in the electrification of thousands of homes

Repeated attempts failed to get comment from the resident engineer, Mr Cloete Delpport, senior managers at Tesacon and Industrial Electrical, the main contractor and main sub-contractor respectively, and cable contractors.

In several Soweto areas trenches have been ordered re-opened so that cable, which in some cases was laid months ago, can be dug up and tested. If found to be faulty it will be scrapped.

In the Diepkloof area contractors on site say they have been told to pull up cable along a two-kilometre stretch. This could result in a loss of more than R15-million.

The delay on this part of the project could be several months now that trenches are open in the rainy season.

Workers on site said they were given no official reason why the cable must be pulled up. Several contractors in Soweto put the blame on lack of clear leadership and co-ordination of standards of quality throughout the project.

Engineers have been known to 'pass' trenches,

To Page 3, Col 3

SUBA-2  
STD3-5  
STD6-7  
STD8-9  
STD10  
NONE  
SUBA-2  
STD3-5  
STD6-7  
STD8-9  
STD10

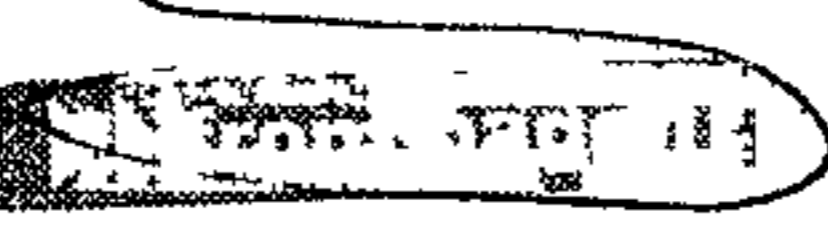
EXC

PRO

NONE  
SUBA-2  
STD3-5  
STD6-7  
STD8-9  
STD10

# Power for Soweto hits snag

Stey  
15/10/81  
185



'fail' the same trenches the next week and then 'pass' them the week later," one worker said.

Another, on site at Diepkloof, said engineers passed trenches there and gave the go-ahead for cable to be laid.

This was done and the inspectors came back and said it was all wrong, the whole lot must come out again."

Other parts of Soweto reported to be experiencing similar problems are Meadowlands, Orlando East, Jabavu and Dobsonville.

Contractors, who refuse to be identified because they say they will lose their jobs, say that there has been a round of meetings to decide who is at fault and who is going to pay.

They claim that their contracts have been altered and that they have been penalised consistently by means of deductions from their pay.

One contractor said that if their grievances were not resolved as many as a dozen contractors would stop working and bring the entire electrification project to a halt.

### CONDITION

Mr John Knoetze, chairman of the West Rand Administration Board (Wrab) said there was doubt about the condition of some cable and that the matter was being investigated.

The consultant has some reservations and the cable is to be tested. If it is found to be deficient we will not pay for it as we are insured against this sort of damage.

Mr G H Marais, consulting engineer for the entire project, said it was perfectly normal procedure on a contract of this nature to dig test holes to inspect cables.

"If the cables are not approved by the engineer

he can order them taken out. That is quite normal, in the same way as an architect can order the replastering of a new building.

"It is up to the contractor to put it right. How he does it is his concern."

Mr Marais said that if contractors were not happy with inspectors they should complain to the resident engineer in charge of inspection.

### FALSE

Mr Cloete Delpport, resident engineer of the project, said he could not comment as he was not authorised to speak to the Press. He did say that some of the claims made by contractors were false.

Mr R J F Sanne, member of the management committee of Tesacon, the main contractor, said his company knew about the cables.

"Our sub-contractor is Industrial Electrical and they are checking the situation. There is an insurance policy involved and that is now being sorted out."

The amount of damage has been overestimated. We know of about 300 m of high-tension cable which represents about R400 000, less the copper content of the cables."

Mr Sanne said there was no question of a delay to the consumers as the same kind of cable was in stock.

"It is purely a matter of digging the proper trench and laying the cable again. The cables were incorrectly positioned, for what reason I do not know."

The resident engineer ordered them out. This is a normal occurrence on a complicated site."

Senior managers at Industrial Electrical said they could not comment.

"There is a blanket agreement throughout this project. No-one other than the consultant and Wrab can talk to the Press," they said.

SEMI	NONE	15	2	3	15	2	3	15	2	3	15	2	3
	SUBA-2												
	STD3-5												
	STD6-7												
	STD8-9												
	STD10												
	NONE												
	SUBA-2												
	STD3-5												
	STD6-7												
	STD8-9												
	STD10												
	NONE												
	SUBA-2												
	STD3-5												
	STD6-7												
	STD8-9												
	STD10												
	NONE												
	SUBA-2												
	STD3-5												
	STD6-7												
	STD8-9												
	STD10												
	NONE												
	SUBA-2												
	STD3-5												
	STD6-7												
	STD8-9												
	STD10												
	NONE												

UNSKL

UCT

By JOHN MULCAHY

ESCOM is likely to remain South Africa's major capital spender for at least the next 10 years, making substantial demands on the domestic and foreign capital markets.

Dr Joop de Loor, Director-General of Finance, in supporting a motion at the Assocom congress in Durban yesterday that the Government ensure correct priorities were accorded to State capital spending, said one of the main tasks of the capital priorities committee was to monitor Escom spending.

The motion before congress called for greater control over expenditure by State corporations, and said the Department of Finance should determine the limits to which capital programmes should be financed from revenue.

Dr De Loor said there had to be an element of self-financing of future capital spending from current revenue, and fi-

# Escom to remain top borrower

IN A TERSE statement Assocom yesterday confirmed that it was considering a merger with the Federated Chamber of Industries. It said: "The Assocom domestic session of congress yesterday considered the possibility and feasibility of a merger between Assocom and the Federated Chamber of Industries. Assocom agreed that the matter be investigated further jointly with the FCI with a view to formulating recommendations for submission to both organisations as soon as possible."

201 15/10/81

185

Escor was required to submit for approval annual budgets, although Escor did consult the Department of Finance on its loan proposals

He stressed that capital spending had to be divided into continuing long-term expenditure, such as on Escom, the Railways and the Post Office, and ad hoc expenditure, required by the "small spenders", Iscor and the SABC

The Cape Town Chamber of Commerce expressed concern that neither Escom nor

A related motion, tabled by the Pretoria chamber, and calling for the establishment of an additional private-sector consultative body to advise the Cabinet on State spending priorities, was defeated after an explanation by Dr De Loor on budgetary machinery

Firstly, said Dr De Loor, there was the capital priorities committee, which considered major elements of long-term capital expenditure. One example was the decision to raise the coal-export ceiling, involving hundreds of millions of rands, and which was considered a high priority because of its foreign-exchange earning potential

Expenditure bottlenecks had been caused because of the conscious attempts by the

Government to reduce real capital spending, and it was reaching the stage where the State had to be more selective because of limited funds.

Defence was regarded as the top priority, followed by education and housing, and requirements for the other sectors had to fall in line.

Once the inputs from the high priority long-term projects were received, they had to be matched with the current year's Budget requirements

Mr Denis Paxton, a past president of Assocom and a member of the Economic Advisory Council, said that whatever machinery there was to monitor expenditure, it was disturbing that there were numerous bodies, from the public and private sectors, which were "trying to jump the queue".

Levies in any form were a means of circumventing budgetary capital allotments, said Mr Paxton. The Department of Community Development, in trying to borrow money from building societies, aimed to "get around" the priorities.

15/10/81  
(185) ~~262~~  
~~264~~

# Appeal to keep power tariffs to minimum

Mercury Reporter

DURBAN'S Management Committee is being asked, with the poor and aged in mind, to limit electricity tariff increases to domestic users to an 'absolute minimum' when Escom puts up its prices.

The appeal is from Councillor Cornelius Koekemoer in a letter to Town Clerk Gordon Haygarth following Escom's announcement that its Natal tariffs will increase by 14,3 percent on January 1.

Councillor Peter Mansfield described the appeal yesterday as 'clever politics but poor economics' which would hurt those whom Mr Koekemoer was trying to protect.

Mr Koekemoer said Escom's announcement had come as a 'tremendous shock'.

Together with inflation — which was running at about 15 percent — the proposed increase was a cause for anxiety among middle-income and upper-income people.

It was enough to cause 'near desperation' among elderly people and families in sub-economic income groups, he said.

'A recent survey has shown that the high cost of electricity has caused many senior citizens to reduce their preparation of hot meals to two per week and the plight of these people is, to say the least, heart rending.'

He said the City Council was not obliged to pass on the whole of Escom's increase to consumers. He warned Manco that 'any further substantial increase in tariffs can result in increased consumer resistance by way of reduced consumption and a significant switch to gas appliances'.

Mr Koekemoer pointed out that although the council had helped ratepayers by making contributions from the city's Electricity Development Fund to the Rate Fund, not all electricity users were ratepayers.

## Grateful

'The direct benefit that non-ratepayer consumers derive from rates relief is negligible,' he said.

Tafta's executive officer, Mr Michael Claye, said pensioners would be grateful for any special concession which would keep down their cost of living.

It was very likely that some of them were not having hot meals at all.

'On a pension of R109 a month what kind of flat accommodation can you get for R50? On top of that you've got electricity charges and you've got to buy food,' he said.

Mr Mansfield said Mr Koekemoer's proposal would seem, at first glance, to be of benefit to the elderly and others living on low incomes, but the reverse was true.

The City Council by failing to pass on Escom's increased tariffs would inevitably have to increase rates.

# Soweto will light up on time: Wrab

She 16/10/81  
285  
By David Braun

Soweto residents will not have to pay for damaged cables — and neither will there be a delay in the electrification programme

Mr John Knoetze, chairman of the West Rand Administration Board, gave this assurance today after sub-contractors on the multi-million rand project claimed millions of rand had been wasted on re-excavating cables at various sites in Soweto.

"There is a length of cable of undetermined length which has to be tested. It has not been proved acceptable to the client, the community councils, and we will not pay for it if it is faulty," said Mr Knoetze.

He said the client and contractors were insured so Soweto residents would not have to pay for any substandard materials.

"There is also no question of a delay as we have sufficient cable in stock to replace any damaged sections," he said.

"The digging of trenches is ahead of schedule so the project is not affected by this development," said Mr Knoetze.

ember 22 and 29. On her return she was told there had been a cardiac arrest in the operating theatre. She immediately summoned Mr Cyril Sutton, a technician at the company which manufactured the anaesthetic machine.

Mr Sutton testified that he tested the machine on November 26 in the presence of a Dr Bosman and Dr Wicht. He found it to be in "good working order".

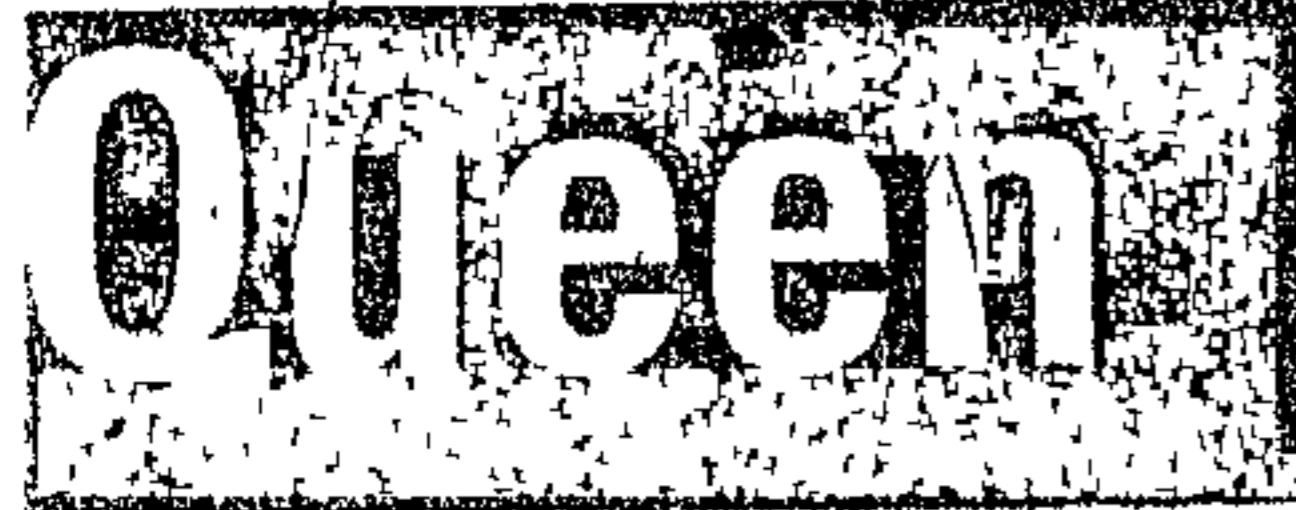
The hearing was adjourned till 11 February 1982 for further evidence.

Mr F G Bantie appeared for the state. Mr D Irish instructed by Findlay and Tait appeared for the Cole family. Mr A D Dalling appeared for the anaesthetic machine manufacturing company. Mr M T Steyn appeared for the Vincent Pallotti hospital. Mr J R Fisher appeared for Dr Wicht and Dr Brown.

he anaesthetic bought in good working order of the slight sign of the head a warning machine as an

nachine was November 21 the opera-

n said she between No-



be announced at Libertas farm from the left, back row: Louise and front row: Gera Malherbe,

# Escom is unfair to W Cape Mayor

CT 16/10/81

185

Municipal Reporter

**THE Mayor of Cape Town, Mr Kosie van Zyl, criticized the Electricity Supply Commission (Escom) yesterday and accused it of discriminating against the Western Cape.**

He said it seemed as if the Western Cape had to subsidize the wealthy Pretoria-Witwatersrand-Vereeniging area.

Addressing the Epping Industria Association, Mr Van Zyl said that "instead of growth in the Western Cape being stimulated, we find things are happening which actually discourage growth".

He felt the recently announced increases in Escom rates had, in relation to the Reef and other Transvaal areas, further adversely affected local industry.

"Power tariffs throughout the country have been increased by an average of 13,1 percent — on the Reef by 12,4 percent and in the Western Cape, the highest of all, by 14,7 percent. These increases mean that Escom's rates have been raised by 141,5 percent since 1975. The highest in one year was more than 48 percent in 1977."

There was a strong feeling among local industrialists that Escom was discriminating against the Western Cape, which was already paying 66 percent more for electricity than the northern areas, where industry had become more established.

"With the Western Cape already having to deal with high rail and power tariffs, one would expect that when rates are adjusted, we here in the south could rightfully lay claim to special treatment and concessions."

"However, the opposite appears to be the case. The Western Cape is suffering

## Coins: PFP wants details 'without delay'

Own Correspondent

**JOHANNESBURG** — Opposition MP Mr Ken Andrew yesterday demanded details "without delay" from the Minister of Finance, Mr Owen Horwood, of selective sales of rare mini-Kruger rands to VIPs — regardless of embarrassment to politicians or officials.

Mr Andrew's call for "this necessary information" came after government and gold mining industry officials made statements about the controversial Kruger rand affair which are in conflict with what Mr Horwood told Parliament.

And he made his demand because it has now also emerged that Mr Horwood could have difficulties in getting the Advocate-General, Mr Justice van der Walt, to investigate the matter.

Among VIPs given the opportunity to buy the valuable coin sets were top Finance Department and banking officials, gold indus-

try executives, members of the Chamber of Mines coun-



electricity rates increases in the country, almost as if its struggling economy has to subsidize the wealthy Pretoria-Witwatersrand-Verenging region

### 'Drawbacks'

"The drawbacks to economic development and establishing of new industries in the Cape which originate in Escom's discriminatory policy, with detrimental results, are self-evident. Escom policy can hardly be described otherwise but as being in direct conflict with government policy regarding encouragement of industrial decentralization

"The time has arrived that Escom's priorities be subjected to an in-depth inquiry. The Western Cape can no longer dare to be satisfied with the present state of affairs," Mr Van Zyl said

Because of the concern over the current state of affairs, the Cape Town City Council had taken the initiative in establishing Wesgro — an association to promote the Western Cape "dynamically" as a region for investment in commerce and industry

Wesgro would initially operate on a budget of R180 000, with R50 000 being contributed by the Cape Town City Council and the rest expected from neighbouring municipalities, the Cape Divisional Council, commerce and industry

Wesgro would not be confined to the Cape Peninsula, but would serve the interests of the Western Cape as a whole, extending as far as Piketberg, Worcester and Heidelberg, Mr Van Zyl said

# Plug pulled out of Soweto power

Save Jobs 16/10/84  
By WILLIE BOKALA  
THE big electrification switch-on for Greater Soweto will only come in late 1983 or early 1984.

This emerged yesterday with reports that the much-awaited electrification project in the area had short-circuited and could be put back by months. Millions of rands have been being wasted through faulty work and planning.

Mr John Knoetze, chairman of the West Rand Administration

185  
Board spoke to the SOWETAN on the 1983/early 1984 switch-on dispelling high expectations in Soweto that the switch-on would be by end of this year, in time for introduction of TV2 and TV3 in January next year.

Mr Knoetze said the original target date for the completion of the project was end of 1983 or early 1984 and said reports that there would be a delay were "absolute nonsense".

He said that although the project had been disrupted by the scrap-

ping of kilometres of power cable in certain areas because of faulty work and planning, the progress of the electrification would not be retarded.

Workers say, however, that they have been ordered to re-open trenches and pull out cables so that they could be tested. Losses could amount to more than R1,5-million.

The delay could be several months especially now that trenches are open in the rainy season.

Some have been open for more than two months.

This is said to be happening in more than five townships in Soweto with engineers approving certain cables, digging up some the next week, and then testing them again a week later.

Mr Knoetze also said that it was not true that the board was losing millions in the confusion and but insurance companies were paying for losses as the board was insured.

See Page 2

Mr J Knoetze



# Escom denies Mayor's claim

CT 17/10/81 18.5

**Municipal Reporter**

IN a sharp reaction yesterday to criticism expressed by the Mayor of Cape Town, Mr Kosie van Zyl, the Electricity Supply Commission (Escom) hit back by saying that Mr Van Zyl was wrong in stating that the Western Cape was being discriminated against by paying 66 percent more than the Transvaal for power.

The regional manager for Escom in the Western Cape, Mr G F Hellstrom, said the difference in tariffs as stated by the Mayor was exaggerated.

He was backed up by Escom's national public relations officer, Mr C J Uys, who said from Johannesburg that large consumers in the Cape paid only 22 percent more.

In a statement issued to the Cape Times, Mr Uys said "To say that the Western Cape pays 66 percent more is wrong. For similar use, large consumers in the Western Cape would pay 22 percent more than counterparts in the developed parts of Escom's Transvaal and Free State regions and 10 percent more than industry in other parts of these provinces."

"In 1982 the increase in rates for the Western Cape will be equal to that applicable to the Eastern Transvaal

region and the Orange River undertaking."

In 1960 the average power price was 242 percent more than that of the Reef and the Free State, in 1970 it was 138 percent, and in 1980 only 38 percent.

Mr Uys said Escom had recently been forced to increase its tariffs (by an average 13,1 percent) because of the particularly high inflation rate in South Africa, high rates of interest, continuing breaks in supply from the Cabora Bassa scheme and the consequent use of outdated power stations, and the sustained demand for greater generating capacity.

He warned that an increase in the coal prices, over which Escom had no control, could possibly lead to a further increase of 1,2 percent in the price of electricity. He added that the latest increase was the first time in four years that a rise of 10 percent had been exceeded.

Countering Mr Van Zyl's call for an in-depth inquiry into Escom's priorities, Mr Uys said misgivings about whether Escom was being managed effectively arose from an incorrect press report on the findings of the Council of Trade and Industry. This report was subsequently corrected.

# Escom accused of jilting load on Western Cape

RDP 17-10-87

THE Mayor of Cape Town, Mr Kosie van Zyl, hit out yesterday at Escom's latest tariff increases, saying they adversely affected industrial growth in the Western Cape in relation to the Reef and other Transvaal industrial nodes.

He said it appeared the Western Cape had to "subsidise" the power needs of the wealthy Pretoria-Witwatersrand-Vereniging complex and urged an inquiry into

## Escom's tariff policies

Mr Van Zyl told the Epping Industrial Association near Cape Town "Instead of growth in the Western Cape being stimulated, we find things are happening which actually discourage growth."

"Power tariffs throughout the country have been increased by an average 13,1%, on the Reef by 12,4% and in the Western Cape, the highest of all — by 14,7%."

"These increases mean Escom's rates have been raised by 141,5% since 1975."

There was a strong feeling among Western Cape industrialists that Escom was discriminating against the Western Cape, which was already paying 66% more for electricity than the northern areas, where industry was better established.

"With the Western Cape already having to deal with high rail and power tariffs, one would expect that when rates are adjusted, we in the south could rightfully lay claim to special treatment and concessions."

## Penalised

"However, the opposite appears to be the case. The Western Cape is further penalised with the biggest electricity rates increases in the country, almost as if its struggling economy has to subsidise the wealthy PWV region."

"The drawbacks to economic development in the Cape which originate in Escom's discriminatory policy, with detrimental results, are self-evident."

CAP 124 U 12175 1 1411  
being in direct conflict with Government policy regarding encouragement of industrial decentralisation

The time has arrived for Escom's priorities to be subjected to an in-depth inquiry, Mr Van Zyl said

Because of concern over the present state of affairs, the Cape Town City Council had established Wesgro — an association to promote the Western Cape "dynamically" as a region for trade investment

Wesgro would at first operate on a budget of R180 000, R50 000 contributed by the Cape Town City Council and the rest expected from neighbouring municipalities, the Cape Divisional Council, and commerce and industry

● The Housewives' League intends registering its strong opposition to the size of the proposed Escom tariff increases in a memo to Mr F W de Klerk, Minister of Mineral and Energy Affairs, and the Electricity Board

# SA was target of secret cartel's international deals

From Page 1

185 SUNDAY TIMES 18.10.87

agreements could have had any real influence on Escom's tender procedures," an Escom spokesman told the Sunday Times

But an American development economist, Dr Richard Newfarmer of the Overseas Development Council in Washington and a University of Notre Dame professor, has calculated from cartel documents that collusion between cartel members has effectively pushed up prices by 16 percent to 40 percent.

In terms of various secret cartel agreements it is frequently arranged in advance what tender prices are to be, who is to be put in the most favourable position to win the tender and how the loser members of the cartel are to be compensated for going to the trouble of putting in a "fake" tender

In communications from cartel headquarters in Lausanne, cartel members are referred to by code numbers and letters

Among the hundreds of documents obtained by American investigators into the International Electrical Association is a letter dated November 12, 1974 from the then Secretary-General of the IEA, Mr J R Hughes Headed "Advice of Order Special Arrangement" it states that "Reference A 9396 has resulted in an order Successful tenderer 18 Description of plant ordered three 600 megawatt turbines with condensing and feed heating plant"

Copies of the letter were sent to "3, 4, 9, 11, 16, 18, C, D"

With the assistance of Dr Newfarmer and other sources the Sunday Times was able to break the code and discover that the letter refers to an Escom tender

"Reference A" refers to a "product section" of the cartel consisting of those members that manufacture steam turbines and generators. 9396 was the code number allocated to the contract for the Matla power station in South Africa The contract was awarded to MAN, member no 18

Other cartel members who

were somehow involved in a "special arrangement" concerning the tender, received copies of the notification They included Brown-Boveri (no 3), Kraftwerk Union (a Siemens subsidiary, code number 9), CEM (no 16), Toshiba (code C) and Mitsubishi (code D)

"Special arrangement" meant simply that the tender had not been arranged in terms of standard existing agreements between the cartel members, but by special agreement

The Sunday Times has so far been able to decipher two further references to specific South African contracts in secret cartel documents

## Dues

In 1973 cartel headquarters in Lausanne sent an account to Toshiba in Japan demanding payment of cartel "dues" relating to two transactions described as E 5128 and E 5147

Transaction 5147 was the tender for the hydro-electric plant at the Hendrik Verwoerd dam, while 5128 was for the hydro-electric plant at the Van der Kloof dam

Escom accepted the tenders of Hitachi for the hydroturbines and of Toshiba for the generators

Tenders for the latest Escom hydro-electric scheme — Drakensberg — have also gone to the Japanese cartel members

In the case of transformers the cartel had been particularly successful, also in South Africa, Dr Newfarmer found

Despite having to make a few "bargain basement" tenders in the mid 1960's — apparently by agreement to knock out non-member competitors — cartel members were able to win tenders for transformers in South Africa at prices nearly 20 percent higher than what they would have got without collusion

between them

A cartel report lists 11 South African tenders for transformers awarded to cartel members between May 1965 and December 1967

In two cases the cartel put in only one tender, pushing up the price to 113 percent and 121 percent of their standard price In the only case listed where the cartel members tendered according to standard cartel agreements, the price obtained was 117 percent of the standard price

This list indicates that when the cartel was functioning, they were able to raise their price by as much as 50 percent

In documents filed with Swiss registry officials the IEA blandly describes itself as a gatherer of information and statistics for members Indeed, only if members are regularly and reliably informed of one another's activities, can they secretly arrange matters between them

But, in addition, so as not to leave it to chance or the market, all product sections have extremely detailed and complex "Tendering and Contract Agreements" Copies of agreements still effective in 1976 are included in the documents obtained by the American congressional investigators

Terms differ from agreement to agreement, but many include

● the fixing of prices at regular meetings in so-called price handbooks

● inflation and escalation clauses are dealt with in terms of fixed multipliers, and no member may undercut these prices

● market share is fixed in terms of a predetermined table, and the Secretary General has to ensure that tenders are allocated accordingly

● terms for delivery, payment, and guarantees are fixed by standard section agreements, so that members cannot even compete on that level

The members of Section E — producers of water driven generators — for instance have committed themselves to strict price "discipline" Tenders are allocated by agreement to ensure that each member gets a predetermined share

The secretariat establishes who is entitled to the next tender and others are obliged to bid at least 7.5 percent higher

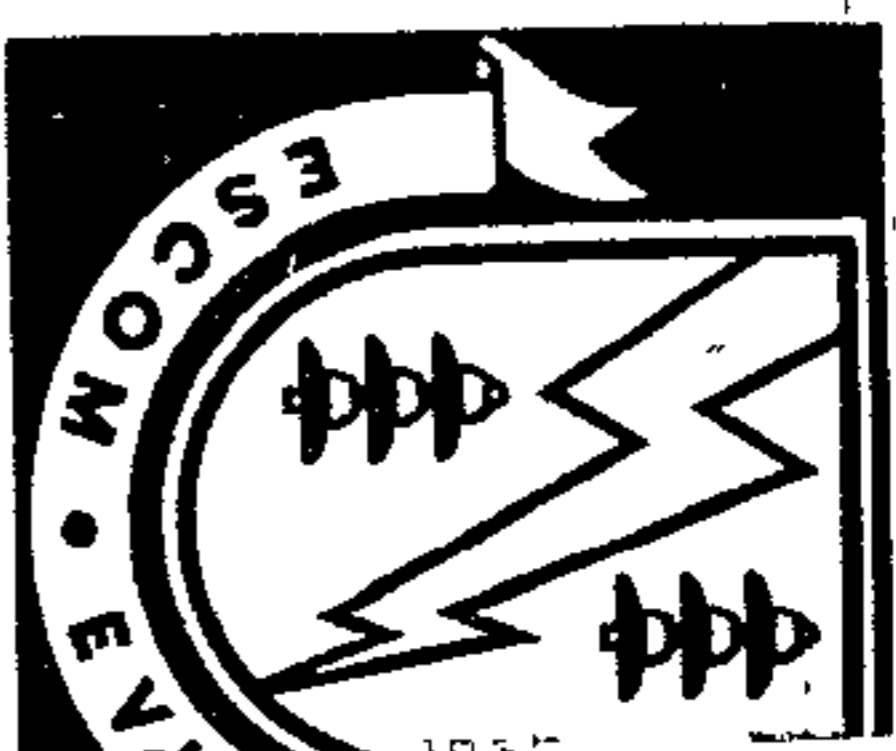
Those concerns that do not get the tender are compensated for their fake tender — 2 percent of the contract price must go to a fund which is shared at the end of the year according to who got what, calculated by the Secretary General

This week all attempts to trace a telephone number for the IEA in Lausanne were unsuccessful

Spokesmen in South Africa for Brown-Boveri, Asea and MAN all denied knowledge of the cartel this week

Rigging by foreign firms costs S African taxpayers millions of rands

# ESCOM JANUARY CARTEL TRAP



**COLLUSION** between international manufacturers could have cost Escom and the South African taxpayer hundreds of millions of rands in the past 20 years.

A Sunday Times investigation has revealed that South Africa was a major target of a secret cartel of manufacturers of electrical equipment, which it is estimated pushed up tender prices by between 15 and 25 percent.

In the past two decades all Escom contracts for water and steam turbines and generators — worth thousands of millions of rands — for new power stations have been awarded to cartel members.

Escom plans to spend R11 000-million on expansion this decade. Nearly a third of that will be spent on overseas contracts for electrical equipment.

A report by a United States congressional committee, based on hundreds of secret documents, and published last year, revealed that a score of major German, Swiss, French and British electrical giants have secretly been operating a tightly regulated international cartel for the past 30 years to "rig" tenders in developing and non-producing countries.

Ten years ago several major Japanese companies were also persuaded to join the cartel.

Using secret codes and a seemingly innocuous front organization in Switzerland, the International Electrical Association, cartel members concluded agreements aimed firstly at destroying smaller manufacturers in developing countries and then

## Consortium

Japanese members include Toshiba Electric, Mitsubishi and Hitachi.

Only a week ago Escom announced the award of a R380-million generator and turbine contract for Matimba, the latest of five similar new power stations to be completed by 1984. Successful tenderer was "a German-French consortium".

And last week MAN-Alsthom and Kraftwerk Siemens subsidiary Kraftwerk Union announced that it, too, had been awarded a R360-million Escom tender.

Major suppliers of transformers to Escom are Asea and British General Electric, both cartel members.

This week when the Sunday Times asked for comment on the American findings, a spokesman for Siemens in Munich — founder member of the cartel — would at first only confirm that an "export cartel" had existed "before the war".

"Times have changed, the world has changed and there was no possibility to make such agreements after the war," the spokesman said. "It is impossible on account of competition worldwide."

SUNDAY TIMES

By MARTIN WEIZ

18 10 81

185

# Rigging by foreign

# SCHEM

□ To Page 2

When pressed he finally admitted that Siemens is still a member of an "export" cartel. But, he said, it was quite legal. A senior Siemens official was a signatory to a cartel agreement for producers of turbines and generators signed on June 24, 1970 and updated on January 1, 1973. The agreement is included among the documents uncovered by the American investigation.

Cartel documents dealt with in the American report include agreements still current in 1978. All of them extend to South Africa.

This week Escorn claimed that it had never heard of the cartel.

"If it exists, it can't be very effective. In our experience the unsuccessful tenderers are very unhappy they wouldn't put up that performance. If it weren't for real. Also for technical reasons we doubt whether cartel

The cartel organization also ensured that these lucrative contracts were "fairly" distributed among its members.

European members of the cartel, according to a 1980 membership list, included the German companies, Siemens, AEG and MAN; the Swedish, Asea; the Swiss, giant Brown-Boveri; the British, General Electric; and the French, companies Alsthom and CEM.

...in weakness  
...maximum  
...the  
...is  
...get  
...system  
...about

...and then using  
...systems  
...in use  
...that they  
...systems  
...that they  
...look at the  
...it pro-

Why is it that white children get use the textbooks and we have to either use the books in school or not get any at all.

Don't you ask  
Let's ask  
...not that  
...regard to  
...they have  
...been observed  
...by changing  
...of the system  
...of the main

Clearly, most successful firms have  
...I've had enough  
...Objectives  
...Optimization



# Price-fix probe demanded

Mail Correspondent

ALLEGATIONS that price-fixing by an international cartel of suppliers of electrical equipment may have cost Escom hundreds of millions of rands over a 20-year period have led to a call for a top level Government investigation

The allegations are based on the findings of a United States Congressional committee which reported last year that the cartel manipulated tenders for the supply of expensive electrical equipment to developing and non-producing countries

The South African connection was suggested yesterday by a Sunday Times report which claims that Escom has been a prime target of the cartel and that all Escom contracts during the past 20 years for water and steam turbines and generators have been awarded to cartel members

Mr John Malcomess, the PFP's chief spokesman on energy, said the allegations were too serious to allow them to be glossed over

He called on the Minister of Energy Affairs, Mr F W de Klerk, to investigate and to ask the US Ambassador to make available to an investigating team the report of the Congressional committee

Mr De Klerk said yesterday he would take the necessary steps if there appeared to be any substance to the charges

PORT ELIZABETH — Allegations that price-fixing by an international cartel of suppliers of electrical equipment may have cost Escom hundreds of millions of rands over a 20-year period have led to a call for a top level government investigation

The allegations are based on the findings of a United States congressional committee which reported last year that the cartel manipulated tenders for the supply of expensive electrical equipment to developing and non-producing countries

The South African connection was suggested yesterday by a Sunday newspaper report which claims that Escom has been a prime target of the cartel and that all Escom contracts during the past 20 years for water and steam turbines and generators have been awarded

## Escom claim:

## call for probe

MD 19/10/81

185

to cartel members

Mr John Malcomess, the Progressive Federal Party's chief spokesman on energy, said the allegations were too serious and the amounts of money involved too massive to allow them to be glossed over

He called on the Minister of Minerals and Energy Affairs, Mr F W de Klerk, to launch an immediate investigation and to appeal to the US ambassador to make available to a South African investigating team the report of the congressional committee

Approached yesterday Mr De Klerk said he had

taken note of the report and would soon hold discussions with Escom executives. He drew attention, however, to Escom's denial that it could have been the victim of international price manipulation and added that his own experience fully backed up Escom's assertion that there was keen competition between suppliers

Reacting to Mr Malcomess's suggestion that the US Ambassador be asked for a copy of the congressional report, Mr De Klerk said "I think Mr Malcomess must allow me to run my department the way I see fit" — DDC

Soweto 7/15/81

# 'Wasted millions'

SOWETO residents would not have to pay for any substandard materials damaged cables, nor will there be a delay in the electrification programme.

Mr John Knoetze, chairman of the West Rand Administration Board, gave this assurance after sub-contractors on the multi-million rand project claimed millions of rands had been wasted on excavating new cables at various sites in Soweto.

"There is a length of cable of undetermined length which has to be tested. It has not been proved acceptable to the client, the community councils, and we will not pay for it if it is faulty," said Mr Knoetze.

He said the client and the contractors were insured so that Soweto residents

would not have to pay for any substandard materials

"There will be no delay as we have sufficient cable in stock to replace any damaged sections."

But he added "It may appear that there will be a delay, but no one can say exactly how much cable is damaged and how much has to be replaced."

"The digging of trenches is actually ahead of schedule so the project is not affected by this development."

He said the big switch-on for Soweto was still scheduled for the end of 1983, or the beginning of 1984.

Wrab has had meetings with all the parties involved in the matter and Mr Knoetze is satisfied there are satisfactory solutions to problems caused by excavation of new cables.

# 10 pc jump in electricity charges likely in the New Year

NM 23/10/81  
185

## Municipal Reporter

DURBAN'S electricity tariffs are likely to rise by an average 10,3 percent to meet Escom's 14,3 percent surcharge increase next year.

Most householders in the city — those using single-phase or 220-volt power — can expect to pay an extra 77 c a month for their first 100 kWh, an extra 45 c for the next 500 units and an extra 0,26 c a unit for the rest.

Those on three-phase power (380 v) are likely to pay 75 c more for the first 100 units, R2,25 more for the next 500 and an extra 0,26 c a unit for the rest.

Businessmen and other consumers using between 220 v and 11 000 v are to pay 5,75 c a unit instead of various rates which apply at present. Their monthly service charge will go up from R4,55 to R7,50.

Big businesses and industries using bulk power supplies are to pay higher demand and energy charges. Their discounts will be halved.

Regional surcharges to householders in areas fairly close to the city (Amazimtoti and Kingsburgh, for example) will be reduced from 10 percent to 7,5 percent.

Surcharges to householders further away (in Gillitts and Hillcrest, for example) will be reduced from 20 percent to 15 percent.

This is due to increased demand.

The adjustments, announced at a Press conference at Durban's City Hall yesterday, will be recommended to the Trading Undertakings Committee next week.

A report from the City Treasurer and City Electrical Engineer says Escom's increase is expected to increase the cost of current to the city from R115 348 000 to R127 100 000 during this financial year.

If normal growth were taken into consideration the cost is likely to be R144,8 million in the 1982-83 financial year. The Electricity Department may have to meet a total expenditure of R215 million from the sale of current.

## Adjustment

Municipal officials said Escom's increase, effective from January 1, spelled the end of a five-year 'holiday' which Natal had enjoyed while charges had gone up from time to time in other provinces.

Durban's last major tariff adjustment had taken place in 1976 when Escom had increased its prices by 25 percent.

Yesterday officials also announced a recommended service charge of R25 a month to replace a charge based on a minimum of 300 kVA demand by low-voltage bulk users.

They said small businessmen should consider whether it would be economical to switch to the LV three part tariff.

This should be done before January 1.

Inquiries should be made to the Chief Engineer (Commercial), Mr Duncan Wallace, telephone 319295.

24/10/81

## 'Unfair treatment by white' claim by workers

### Mercury Reporter

THE entire black labour force of the Tongaat Town Board's Electricity Department downed tools yesterday, as a protest against what they called unfair treatment of black workers by a white official

The Town Clerk, Mr V Parkhouse, said he was not aware of their grievances, and he had called for an investigation

He said the striking workers, who assembled in front of the town board offices, dispersed after they were informed that it was illegal to strike

A spokesman for the 30 workers said they were fed up with the official's attitude

'We are not treated as human beings but as savages. There is a limit to what we can put up with and it's now

time that the authorities took some action,' he said

The workers, mainly labourers, reported for duty yesterday morning but instead of going about their routine they left the electricity depot in Plain Street and walked to the town board offices where they assembled

They were later addressed by an official of the board who advised them

that they either return to work or go home as it was apparent they were 'extremely upset'

The spokesman said 'We hope the authorities will now take note of what we had been complaining of all along. Unless we have an assurance from the Town Clerk that we will be treated as human beings in future, we are not prepared to return to work'

# Striking town board workers dismissed after refusing to work

24/10/81

185

Mercury Reporter

A NUMBER of striking workers of the Tongaat Town Board were dismissed yesterday after refusing to return to work, Mr V V Parkhouse, the Town Clerk, said.

He told the Mercury yesterday he was not in a position to disclose the number of people involved 'at this stage', but added that the dismissed workers had been told to collect their pay on Monday morning.

Mr Parkhouse said the striking workers assembled at the board's electrical department yesterday morning and some of them disregarded pleas by board officials to return to work.

The labour unrest started on Wednesday when about 30 black electrical workers downed tools following claims that they were being unfairly treated by a white official. The unrest escalated yesterday with workers from other departments joining in.

According to a workers' spokesman their new demands included immediate removal of the official and refunds of their pension contributions.

The workers had told the Mercury earlier that they were 'fed up' with the attitude of the official. 'We are not treated as human beings but as savages. There is a limit to what we can put up with and it's now time that the authorities took some action,' said their spokesman.

Commenting on their allegations, Mr Parkhouse said no formal charge had been laid against the official. 'All we have are rumours,' he said, 'but investigations are continuing.'

# League seeks loan for Lavis electricity

Argus 20/11/81

185

THE GENERAL manager of the Citizens' Housing League, Mr Eric Pohl, saw the Minister of Community Development, Mr Pen Kotze, this week to ask for permission to borrow money for installing electricity at Lavistown.

Mr Pohl said today he was awaiting the minister's decision.

Meanwhile, he had written to the Lavistown Management Committee explaining what was happening. A copy of the letter had been sent to Lavistown Action Committee.

Mr Pohl said that as soon as he heard from the Minister he would tell the Management Committee, who were the officially recognised representatives of residents, and would probably call a Press conference.

## SEWERAGE

Before seeing the Minister he had asked the department for a loan of R1,1-million this year at 1 percent interest towards installation of sewerage at Lavistown. He regarded this as top-priority.

He had also asked for permission to use money from the league's reserves for improvements to houses, including installation of electricity.

He had later asked for permission to use money from the reserves for sewerage and to borrow money on the open market for installing electricity.

## PREVENTED

He said the league originally wished to build all its houses with electricity.

The Government prevented this 30 years ago because 'those were the standards of the time' and it was thought the people

then being housed could not afford electricity.

In a Press statement this week the Action Committee expressed disappointment at having received no news from Mr Pohl for eight weeks about their demand for electricity.

The statement said: "The only conclusions one can come to in the face of this is that the landlords of Bishop Lavis do not care for the residents — their only interest seems to be the punctual payment of rental fees."

## NEWLANDS HOUSE

It asked how the Department of Community Development could afford to buy and restore Newlands House if it had no money for installation of

'While people are suffering as a result of lack of electricity, money is spent on luxuries such as renovating old houses which no one will inhabit and on Christmas lights to decorate the city centre.'

Mr Pohl said the Citizens' Housing League had asked for money to install electricity three years ago 'long before these people started screaming and yelling'.

## VOLUNTARY

The league was a non-profitmaking, voluntary organisation, and suggestions that it did not care about its tenants made him 'hot under the collar'.

'If that were so, we would not have provided the housing in the first place, or amenities such as sports fields.'

He said the Christmas lights in Cape Town were provided by the City Council, which had nothing to do with Bishop Lavistown.

# New Escom loan attracts R222-million

RDP 14  
28/10/81  
185

By HAROLD FRIDJHON

THE Escom loan issues have met with a resounding response. The two loans numbers 154 and 155 attracted applications totaling R222 424 000 nominal value which is 2,8 times the R80-million which the Commission had been looking for.

The discount stock, loan no 154, which had been offered at a price of R76,70% with a coupon of 10%, drew R197 861 300 nominal value while the par stock, loan 155 with a coupon of 13,20%, brought in subscriptions amounting to R24 563 000.

Escom has decided to accept subscriptions with a nominal value of R138 728 000 — and a total rand value of R110 753 000 — and together with Central Merchant Bank (Senbank) and Union Acceptances decided on the following basis of allotment:

- Applications up to R250 000 in full
- Applications above R250 000 to R500 000 75% of the nominal value applied for, subject to a minimum of R250 000
- Applications in excess of R500 000 and up to R20-million 70% of the nominal value applied for
- Applications in excess of R20-million nominal value not more than 20% of the total rand amount allocated

These allocations are only approximate because all applica-

tions will be rounded off to what is deemed to be the most practical nominal values.

The two loans drew 220 applications, 108 for loan 154 and 112 for loan 155. This is probably the biggest response that Escom has ever had from any of its loan issues.

The success of the discount loan, no 154, indicates clearly that the imaginative merchandising of the loan certainly caught the attention of the institutions. Escom and its two banks certainly created a stock which the market wants, particularly by institutions who are looking for the profits which will accrue on maturity.

Another significant inference which can be made from the success of the two loans is that the institutions are bulging with money and are on the alert for investment opportunities which give returns closely approximating the inflation rate.

I understand that last week the capital market was very actively taking RSA stock at 13,23%, a rate which is almost on par with the yield rate of the present Escom stock.