

HOUSE OF ASSEMBLY

Thursday 22 September 1988

ESTIMATES COMMITTEE A

Chairman:

Mr D.M. Ferguson

Members:

The Hon. R.K. Abbott
 The Hon. H. Allison
 Mr D.S. Baker
 The Hon. E.R. Goldsworthy
 Mr K.C. Hamilton
 The Hon. R.G. Payne

The Committee met at 11 a.m.

Mines and Energy, \$20 448 000;
 Works and Services—Department of Mines and Energy,
 \$11 904 000

Witness:

The Hon. J.H.C. Klunder, Minister of Mines and Energy.

Departmental Advisers:

Mr R.K. Johns, Director General, Department of Mines and Energy.
 Mr T.R. Watts, Deputy Director General.
 Mr A.R. Marrett, Director, Administration and Finance.
 Mr R. Wildy, Director, Mineral Development.
 Mr P. Hill, Director, Policy and Project Development.
 Mr J. Fenton, Director, Mining Operations.
 Mr J. Noble, Assistant Director, Office of Energy Planning.
 Mr R. Laws, Director, Oil, Gas and Coal.
 Mr R. Janssan, Senior Accountant.

The CHAIRMAN: Can the Committee advise when the changeover is likely?

The Hon. E.R. GOLDSWORTHY: I think 5 o'clock would be appropriate.

The CHAIRMAN: Each Committee is different. I can open up Mines and Energy and capital works.

The Hon. J.H.C. Klunder: I am happy with that.

The CHAIRMAN: I declare the proposed payments open for examination. I refer members to pages 155 to 157 in the Estimates of Payments and pages 462 to 463 in the Program Estimates in respect of Mines and Energy and page 188 in the Estimates of Payments and pages 462 to 473 in the Program Estimates in respect of the works and services vote.

The Hon. E.R. GOLDSWORTHY: I have questions about the operation of ETSA, which is under ministerial control. However, I do not think the Minister has present any officers who can answer questions on the matters referred to in the financial arrangements concerning ETSA. I would be surprised if they could explain to me the half page in the Auditor-General's Report; I have not yet found anyone who can explain that. Is it appropriate to request the Minister to get one of his financial people from ETSA to join his team some time today?

The Hon. J.H.C. Klunder: This does raise from the beginning one of the difficulties that arises out of Estimates Committees, that is, that the Estimate Committees are sup-

posed to deal with the expenditure from the Consolidated Account and of course ETSA does not draw any money from that account, regardless of the degree of control and direction that the Minister may have over the operations of ETSA. Now that the Deputy Leader has raised that question we are in an awkward position. I was perfectly willing to answer questions about ETSA and I have brought some briefing notes with me, but I have some difficulty in bringing officers from ETSA here when there is no statutory requirement for them to be here to answer questions. I guess that that leads you, Sir, into an immediate position of having to decide whether or not questions about ETSA ought to be allowed.

The CHAIRMAN: I will not direct the Minister to bring in any of his officers. However, ETSA is under direct ministerial control following legislation that has passed through Parliament. I suppose that one can trace a connection with ETSA from the Estimates by way of wages paid to the ministerial department. I do not think that I can rule out of order questions that relate to ETSA.

The Hon. E.R. GOLDSWORTHY: Officers of the South Australian Health Commission, which is a statutory authority as opposed to a Government department, appear in large numbers. ETSA has made contributions to general revenue and that can be traced through the SAFA accounts; ETSA's accounts are now absorbed in SAFA, which again is headed by the Treasurer. We have a number of legitimate questions about the operations of ETSA which, as the Chairman rightly points out, is under direct ministerial control. With due respect to the officers here today, I do not think that they would have the detailed information which I think this Committee deserves. In light of the Chairman's ruling, I again ask that the Minister request an ETSA officer who understands its finances and some of the references where contributions have been made from ETSA to general revenue, and *vice versa*, to appear today at a convenient time.

The Hon. R.G. PAYNE: The legislation that was referred to passed the Houses in 1985 and became law shortly after that. Since then there were two Estimates Committee sessions while I was Minister, and at those times I did not decline to answer questions about ETSA (and the present Minister has not declined, as far as I understand him). I certainly had no officers available. Sometimes in Parliament we look at what has gone before in relation to what may apply when there seems to be a grey area.

The Hon. J.H.C. Klunder: The point raised by the Deputy Leader was incorrect. I am not basing not having ETSA officers here on the fact that it is a statutory authority; I am basing it on the fact that no money from Consolidated Account goes to ETSA. In fact, Standing Orders require us to examine the expenditure from Consolidated Account, not to draw distinctions as to whether organisations are statutory authorities or Government departments.

I have indicated that I have brought some material with me. I do not propose to call before this Committee officers from ETSA in order to preserve the *status quo* in that situation. However, I am willing to take questions regarding ETSA and, if I cannot answer them, I will take them on notice. Mr Chairman, you no doubt have a date in mind by which such answers need to be provided to the Committee.

The CHAIRMAN: We are looking at 7 October.

The Hon. E.R. GOLDSWORTHY: That partially negates the operation of these Estimates Committees, where we want to front officers and ask them questions that are important to the taxpayers of this State; and there is nothing more important at the moment than ETSA. The reason we have not asked previously is that references that appear in

the Auditor-General's Report this year have not indicated the complexity of what is going on in terms of ETSA's finances.

The CHAIRMAN: I take issue with the Deputy Leader regarding the purpose of the Committee. The Committee's purpose is for members to ask the Minister questions about his responsibilities. Whether the Minister wishes to bring along any officers is totally in his hands. If he wants to field all the questions, that is quite permissible.

The Hon. E.R. GOLDSWORTHY: 'Field' is the operative word. We are looking for information but I think that there will be a lot of fielding today and not much fact. However, if that is your ruling, away we go.

The CHAIRMAN: Does the Minister wish to make an opening statement?

The Hon. J.H.C. Klunder: No. However, I will respond to the comments by the Deputy Leader to indicate that it was his Government which set up the Standing Orders of this Committee and, if he wants to go beyond those Standing Orders, this is not the appropriate place to do so. He should bring the matter before the House and seek to change Standing Orders.

The Hon. E.R. GOLDSWORTHY: I am not seeking that and the Minister knows it. I am seeking information.

The CHAIRMAN: That is a question for another arena.

The Hon. E.R. GOLDSWORTHY: I refute that allegation. I am seeking information, not to change Standing Orders. Under the Standing Orders, it would be quite competent for the Minister to bring ETSA officers along here, particularly as they are now under his direct control. Will the Minister detail the major financing arrangements entered into by ETSA during the last financial year? (Page 469 of the Program Estimates.)

The Hon. J.H.C. Klunder: I want to make the point that there is clearly a disagreement between the Deputy Leader and me with regard to this. He cannot ask for information that is outside the Standing Orders and the Standing Orders deal only with information regarding expenditure from Consolidated Account. Under those circumstances, none of the questions dealing with that need to be answered unless the Deputy Leader is prepared to draw a long bow and suggest that my salary includes some component of being responsible for ETSA. That seems to me to be a very long bow to draw. I do not have with me the specifics of all of the arrangements that ETSA has entered into. The Deputy Leader is quite right: a number of questions regarding ETSA which seek detailed information will have to be taken on notice, and I take that question on notice.

The Hon. E.R. GOLDSWORTHY: That is as I thought, Mr Chairman. Will the Minister say whether ETSA intends to enter into any further major financing arrangements this financial year? Will the Minister detail them?

The Hon. J.H.C. Klunder: If the Deputy Leader wants me to give details of future arrangements, he must know that he is playing on a particularly sticky wicket. I am not prepared to give that sort of information.

The Hon. E.R. GOLDSWORTHY: In relation to the financing arrangements entered into by ETSA last financial year and the previous year (1986-87), what has been the overall cash benefit arising from them? Is any further cash benefit expected this financial year?

The Hon. J.H.C. Klunder: It strikes me that questions of this type could very well have been put on notice, rather than the honourable member's seeking information here and now. All I can indicate is that those arrangements have been particularly profitable to the State. I do not have the exact detail of how much, but I will get that information for the Deputy Leader.

The Hon. E.R. GOLDSWORTHY: All of which indicates the futility of this exercise.

The Hon. J.H.C. Klunder: It indicates the futility of asking questions here which could have been taken on notice.

Members interjecting:

The CHAIRMAN: Order! I call the member for Victoria to order. I point out from the outset that this Committee will be conducted in the same way as these Committees have been conducted over the years. We are not in Parliament: we are participating in a Committee that is examining the Estimates, and I expect that the Committee will conduct itself in that way.

Mr HAMILTON: What are the implications for South Australia of the recently reported petroleum discoveries at Taloola, Sturt, Tantana and James?

The Hon. J.H.C. Klunder: The discoveries at James to the north-east of the Moomba gas field and Tantana to the west have caused a rethinking of the way in which gas and oil producers look at the South Australian oil and gas scene because, where oil was not previously expected, it has now been found. That discovery will cause a great deal of rethinking about the types of structures from which oil can be recovered in the future. I will ask Mr Laws to expand.

Mr Laws: The discovery at James is approximately 150 kilometres north-east of Moomba and those at Sturt, Tantana and Taloola are about 70 kilometres to the south-west. The amount of reserves in those fields is not known precisely, but it is hoped that recoverable reserves will exceed two million barrels. These discoveries are the result of work done by the producers in reviewing the prospectivity of the area and the best places in which to explore for oil. They are now looking more on the flanks of the Cooper Basin because the theory is that much of the oil found in the overlying sediments of the Eromanga Basin has in the past leaked from the underlying Cooper Basin. Gas and condensate have leaked from around the flanks of the Cooper Basin into the overlying sediments of the Eromanga Basin where much of the gas and LPG components have been stripped away by the fresh water which flows through these sediments leaving liquid which we now call oil but which is really the remnants of gas condensate which has leaked from the edges of the basin.

A number of prospects can be followed up in James to the north-east and Tantana to the south-west. We should see more seismic surveys later this year and an increase in the drilling program next year over what was considered to be likely a couple of months ago.

Mr HAMILTON: What is South Australia's position as a petroleum producer in relation to total Australian production; what is the status of petroleum exploration in South Australia; and what is the likelihood of additional offshore petroleum exploration activity in the foreseeable future?

The Hon. J.H.C. Klunder: Australia produces 549 000 barrels of crude oil per day and South Australia produces 34 000 barrels. This means that South Australia produces 6.3 per cent of the Australian total. Australia produces 67 000 barrels of LPG per day and South Australia produces 16 500 barrels, which is about 25 per cent of total production. Australia produces 15 000 million cubic metres of natural gas per year and South Australia produces 5 300 cubic metres, or 35.5 per cent. So South Australia produces a respectable proportion of the total Australian production of gas, one-quarter of the LPG, and a fairly low level of crude oil, although the discoveries at James, Tantana and so on are an encouraging sign for this State.

With regard to the second part of the question, concerning the status of petroleum exploration, 88 exploration appraisal wells were dug in 1988, and 5 300 kilometres of seismic work was undertaken, the total value of which was \$90.3 million. By comparison, last year (1987) 59 wells were drilled and 4 500 kilometres of seismic work was done, at a total cost of \$66.8 million. Of course, despite a worldwide weakness in oil prices, exploration has increased in South Australia due to a need to improve our gas reserves. The preliminary 1989 exploration program is expected to decline below the 1988 level, due to the expectation of continued weak oil prices. Also, the fall in share market prices at the end of 1987 has reduced the ability of small to medium Australian exploration companies to raise risk capital for exploration activity.

The lack of exploration has, in fact, meant that a number of licences in high risk areas will probably be surrendered. The current estimate of work in 1989 is 62 wells and 2 500 kilometres of seismic work, at a cost of about \$70 million. The program could be increased by exploration success in either petroleum exploration licences 5 and 6 or in the Otway Basin. Offshore exploration has remained at a low level, with only one current permit, EPP 23 in the Otway Basin, operated by Cultus Petroleum. The recently gazetted area, S 88/1, to the north of EPP 23, attracted two bids, both of which are disappointing, in the sense that the two people involved are thinking in terms of drilling a well not until the fourth year from the time that they get the licence.

Mr HAMILTON: What is being done to assist companies in respect of exploration in the Otway Basin?

The Hon. J.H.C. Klunder: We have done a fair bit of work on this. The State Energy Research Advisory Committee (SENAC) and Cultus Petroleum have shared, on a 50-50 basis, \$100 000, which was approved for a project to study seismicity and oil strandings in the Otway Basin. The history of this involves the very fortuitous situation of a small tremor in December 1986 leading to the stranding of about 1 000 tonnes of bitumen on the south coast of Kangaroo Island. A seismograph station has been built for Mount Gambier and will be installed when we find a suitable site. Some \$70 000 of the funds for the project will be devoted to setting up further stations in the South-East to accurately locate more small tremors. It is hoped that the tremors will indicate where subterranean oil traces or finds are in this area. This will enable us to accurately locate where oil might be dug up through an EPP program.

Mr HAMILTON: Can the Minister advise how recent electricity and gas price rises for South Australian consumers compare with CPI movements?

The Hon. J.H.C. Klunder: I will deal with only the past few years, beginning with 1985-86 when there was a 2 per cent reduction in the price of electricity, which is a 10 per cent reduction in real terms. At the same time there was a reduction in the gas price of about .4 per cent but, of course, the real reduction was much larger than that.

The Hon. R.G. PAYNE: A remarkable achievement!

The Hon. J.H.C. Klunder: Yes. In 1986-87 the electricity price rose by 6.8 per cent and the gas price by 6.4 per cent; in 1987-88 the electricity price rose by 5.5 per cent and the gas price by 8.4 per cent; and in 1988-89 we estimate that the CPI will rise by 6 per cent and that the electricity price will rise by 4 per cent and the gas price by 4.2 per cent. I point out that the sum total of the figures means that gas and electricity prices in this State have dropped in real terms over the past four years. In fact, over the past four years the electricity price has dropped in real terms by about 7 per cent and the gas price by about 3 per cent. That is a

remarkable achievement because, by and large, oil and gas prices are on an upward trend throughout the world.

The Hon. E.R. GOLDSWORTHY: I refer to page 469 of the Program Estimates, which states:

Future electricity generating options and the timing of additional capacity are being reviewed... Power Station Selection Task Force continued to evaluate long term options. Planning for an energy demand management strategy continued.

There is also mention of power station selection. It indicates that a lot of Government revenue is used to assist ETSA with respect to future expenditure decisions. If the Minister persists with his view that ETSA is not linked directly to State revenue, I suggest that he look at where some of this money is being spent. In that regard I refer the Minister to page 31 of the SAFA annual report and the following extraordinary item:

The amount of \$23 million is an amount received from the Electricity Trust of South Australia which represents SAFA's 25 per cent share of the present value of the overall benefit arising from the restructuring of financing arrangements for the Northern and Torrens Island power stations.

That \$23 million flowed from ETSA to SAFA, which is under the direction of the Treasurer. In effect, it flowed directly into general revenue because at page 26 of the report, under 'Income and Expenditure Statement for the year ended 30 June 1988', it is claimed that SAFA returned an operating surplus of \$256 million. Added to that is the benefit from restructuring the Northern and Torrens Island power stations financing arrangements, which amounted to \$23 million. That sum is added to the nominal profits of SAFA to give it a total return of \$279 million, which then goes into the general revenue of the State. We are also told that \$205 million was used to support this year's budget and that \$74 million will be used to support next year's budget.

A number of questions arise from that. We have \$23 million that ETSA has in effect given to SAFA as SAFA's share of the so-called short-term benefits of this deal. Why was it decided to use these funds from ETSA to prop up the State budget? Who decided that 25 per cent of this benefit was an appropriate contribution for ETSA to make to the finances of the State?

The Hon. J.H.C. Klunder: I have to say that the question is out of order on two separate counts. First, it asks me to answer a question about an agency that does not draw on the consolidated account, which is a matter I have already raised. Secondly, the question asks about inflow to the consolidated account rather than outflow—

The Hon. E.R. GOLDSWORTHY: Speak up and more slowly—I cannot hear you!

The Hon. J.H.C. Klunder: The Deputy Leader is asking me to deal with the question of inflow to the Consolidated Account rather than outflow from the Consolidated Account, which is what these Estimates Committees are about.

The Hon. E.R. GOLDSWORTHY: We can talk about income, too; that is how little you know. One budget paper is headed 'Receipts'.

The CHAIRMAN: Order! The Chair has not ruled the question out of order.

Members interjecting:

The Hon. J.H.C. Klunder: I was not going to ask you for a ruling, Mr Chairman. I was just drawing your attention to the fact that this question is a peculiar one.

The Hon. E.R. GOLDSWORTHY: One of these books is headed 'Receipts'.

The Hon. J.H.C. Klunder: Mr Chairman, I think I may have to adopt a rule that if I am interrupted too many times I will refuse to answer the question.

The Hon. E.R. GOLDSWORTHY: That is the best way out for you.

Members interjecting:

The Hon. J.H.C. Klunder: Now that we have some peace and quiet after that latest outburst of interruptions from the Opposition bench, I can indicate that the Deputy Leader has missed his chance to ask questions about SAFA and its interaction with the Consolidated Account, which comes within the province of the Premier rather than of the Minister of Mines and Energy.

The Hon. E.R. GOLDSWORTHY: What about ETSA?

The Hon. J.H.C. Klunder: The agreement between ETSA—I will ignore the extra interruption from the Deputy Leader—and SAFA was a commercial arrangement between the two organisations. ETSA profited from the arrangement; SAFA profited from the arrangement to the extent of a reported \$23 million, which sounds a pretty reasonable benefit. What SAFA does with money in regard to the Consolidated Account falls completely outside my portfolio, and I do not intend to answer that.

The Hon. E.R. GOLDSWORTHY: That is not a satisfactory answer from the Minister in charge of ETSA, which is responsible directly to the Minister for its operations. This Government put ETSA under the Minister's control and he is telling us that he is not interested in the fact that ETSA paid \$23 million into consolidated revenue. I will persist: did the board of the trust approve the use of funds?

Members interjecting:

The CHAIRMAN: Order! I ask the member for Mount Gambier to cease his interjections. It is hard to hear with the crossfire going on in the Committee. I will give him every opportunity when his turn comes around.

The Hon. J.H.C. Klunder: I did not hear the question.

The Hon. E.R. GOLDSWORTHY: I asked whether the trust—the board—approved this use of its funds.

The Hon. J.H.C. Klunder: I fail to see how anything of that magnitude could have got through the board without its approval. It is not a question that I can answer absolutely. If the honourable member wants me to get an answer for him, I can do so.

The Hon. E.R. GOLDSWORTHY: Yes, I do want to know that. It deals with money being shuffled around from ETSA to general revenue. Of course I want to know, or I would not have asked the question. Did the Premier or the Minister direct the board that the funds be used in this way?

The Hon. J.H.C. Klunder: I was not a Minister at that time and I certainly cannot answer that question from personal knowledge. As I indicated, this whole series of ways of getting extra money for the State to which the Deputy Leader is referring was an agreed process between SAFA and ETSA. Clearly, appropriate consultation would have had to take place.

The Hon. R.K. ABBOTT: I refer to page 468 of the Program Estimates. What is the role of the Department of Mines and Energy in the South Australia-Victoria State border water sharing agreement?

The Hon. J.H.C. Klunder: In the South-East, water flows in the unconfined limestone aquifer from Victoria to South Australia. The agreement between the States aims to equitably distribute withdrawals of groundwater so that neither State is disadvantaged and the resource is not unduly stressed. A knowledge of the water budget for the groundwater system is therefore required as a basis for allocating the resource. The Department of Mines and Energy is carrying out investigations to determine aquifer properties and from them to estimate the amount of groundwater that actually crosses the State border. In conjunction with CSIRO, work is also

in hand to quantify recharge to the aquifer which is equated to the 'safe yield' of the system. Demand for water for irrigation is high on the South Australian side of the border and allocations cannot be increased unless the results of the Department of Mines and Energy work show that large withdrawals can be tolerated by the groundwater system without huge impacts on the Victorian side. Increasing groundwater salinity due to irrigation itself is another aspect which is receiving some attention in the border zone.

The Hon. R.K. ABBOTT: I refer to program 4 at page 470 of the Program Estimates. What external funding has been obtained for research and development by the Oil, Gas and Coal Division of the Department of Mines and Energy during 1987-88, and to what use have those funds been put?

The Hon. J.H.C. Klunder: Federal Government funds totalling \$80 000 have been obtained and spent on National Energy Research, Development and Demonstration Project 820 in which borehole log data and cored reservoir material have been re-evaluated.

Software for analysing borehole measurements has been developed and used with laboratory measurements of cores to accurately quantify the nature of Eromanga Basin oil reservoirs and the fluids that the reservoirs contain. The final report has been completed and sent to the Federal Government for editing. Results of the study are now being used by the department to calculate the oil reserves of fields in the Eromanga Basin.

Federal Government funds totalling \$138 000 and State Government and Santos funds totalling \$57 000 are being supplied through NERD&D, project 1033, and State Energy Research Advisory Committee (SENAC) project 2/86. This work, like the Eromanga study, is dealing with laboratory measurements of core data and analysis of borehole log data. However, the latter two projects are involved in analysing Permian age gas reservoirs to enable accurate estimation of gas reserves to be made in those sediments. As gas is an important component of the State's energy supply, it is essential to have an accurate reserve estimate and knowledge of the rate at which the gas can be produced. Work is continuing on the gas reservoir project and a final report it is hoped will be available early in 1989.

The Hon. R.K. ABBOTT: What benefits are obtained from borehole logging services?

The Hon. J.H.C. Klunder: Borehole logging is a technique whereby electronic probes are lowered down boreholes and different parameters of the hole and formation are recorded against depth. The 'log' of parameters versus depth is then interpreted. One can gain information from borehole logging in various ways, namely, borehole conditions and problems, casing conditions, mineral deposit location in terms of both quality and quantity, aquifer identification and location, geological correlation (other information about the area), groundwater movement within the borehole, geo-technical parameters of various kinds, and saline water intrusion.

Logging provides rapid answers that would otherwise be very difficult to get. The services offered by this department are used by the department, other South Australian Government agencies, drilling contractors, mining companies, and private individuals. Typically a landowner who has a water well that develops problems will contact the department to carry out an evaluation; logs are run and interpreted and the data made available to the contractor who will carry out whatever remedial work is required. In this way the groundwater resources of the State are used more effectively and economically, and aquifer pollution, minimised. It is

therefore a useful situation for the department to be involved in.

It is reasonable to say that the department has knowledge and expertise in groundwater well logging which is second to none in Australia, and it has been instrumental in establishing standards for equipment and techniques in this area.

Mr D.S. BAKER: Will the Minister explain the meaning of the word 'defeasance' in financial operations?

The Hon. J.H.C. Klunder: It is a method of minimising risk; in fact, making sure that there is no risk to a particular situation.

Mr D.S. BAKER: Supplementary to that, the public is becoming aware that ETSA's balance sheet has been tidied up, and I note in the programs that other mining operations may go on with ETSA, like the Lochiel/Sedan lignite deposits, and this type of tidying up of balance sheets may occur. I find it difficult to get an explanation of what defeasance actually does. The explanation that the Minister gave is totally inadequate. If he cannot give an explanation, will he, by 7 October, get a detailed explanation of 'defeasance'?

The Hon. J.H.C. Klunder: The honourable member asked me what defeasance was, and I gave him an explanation. If that is not the question he wanted to ask he should have asked a different one. I point out that it is not a matter of Sedan and Lochiel being utilised by ETSA; ETSA looks after Lochiel and Sedan is now Shell Australia. I want to correct that particular point.

The defeasance situation does not apply to mining or things of that nature. In fact, it is an accountant's way of making sure that risks associated with the financing of something are defeased (or nullified) by other financing and accounting methods.

Mr D.S. BAKER: I have another supplementary question. The line in the Auditor-General's Report (page 279) states:

In March 1988, ETSA entered into an arrangement to defease these assets and liabilities to a trust.

That was the explanation I required.

The Hon. J.H.C. Klunder: The defeasance mechanisms have dealt mainly with the questions that the Deputy Leader raised earlier of getting outside groups to purchase, for a length of time, certain assets of the trust and the trust then leasing them back. Risks that are associated with that kind of arrangement are defeased by other methodologies, so that there is in fact no risk to the trust.

Mr D.S. BAKER: Mr Chairman—

The CHAIRMAN: The Chair has been fairly generous. We have had two supplementaries to the first question, which would give five questions in all.

The Hon. E.R. GOLDSWORTHY: The Auditor-General's Report at page 279 has half a page of very interesting material which is difficult to understand.

Members interjecting:

The Hon. E.R. GOLDSWORTHY: No, the Auditor-General does not comment. He just repeats what he has been told.

The CHAIRMAN: Order! Let us hear the question.

The Hon. E.R. GOLDSWORTHY: The report talks about arrangements for sale and lease-back of pretty well all the trust's assets over a couple of years; and then it talks about defeasance. It got this large sum of money, over \$500 000, from the sale of these assets and then leased them back. Then, the report states:

As a result of those two arrangements, ETSA acquired assets and liabilities, each of \$555 million.

Then the report contains the sentence to which the member for Victoria referred:

In March 1988 [this year], ETSA entered into an arrangement to defease these assets and liabilities to a trust.

The report then goes on to explain that the trust is, in effect, SAFA, which is headed by the Treasurer. We are seeking an explanation of what that means. SAFA has taken over those assets?

The Hon. J.H.C. Klunder: As I understand it, SAFA has undertaken both the assets and liabilities. I am not an expert in this area. I understand the system as it worked and the advantage to South Australia. I understand that the risk to ETSA is in fact nil as a result of defeasance arrangements. If the honourable member wants the detail of that situation then I will ask ETSA if it can provide it for him on notice. I note two things. First, the Leader of the Opposition apparently was briefed on this, and I am surprised that some months ago he did not pass that information on to the Deputy Leader. Secondly, as the previous Minister has already indicated, the Auditor-General has not qualified the report in any form or shape with regard to either this or any other matter regarding ETSA; so SAFA, ETSA and the Auditor-General are all perfectly happy that this arrangement is *bona fide*.

The Hon. E.R. GOLDSWORTHY: That is not what we are on about; we want to understand what is going on. I do not know of the briefing to which the Minister refers. All we have been told to this point is that the details of these leasing arrangements are confidentially commercial. We want to know what these statements in the Auditor-General's Report mean. Will the Minister supply a written report by 7 October in answer to that question?

The Hon. J.H.C. Klunder: I am perfectly happy to do so to the extent that it is not confidential and commercial.

Mr D.S. BAKER: On page v of his report, the Auditor-General states:

Last year, I expressed concern at a growing tendency for some public sector activities to become removed from parliamentary scrutiny, despite the fact that public funds are involved or that a contingent liability rests with the Government, either directly or indirectly through guarantees it has given. The establishment of subsidiary bodies (companies, joint ventures, trusts, etc.) by some public sector organisations and the constitution of some Ministers of the Crown as bodies corporate has provided the legal opportunity for this situation to develop.

On page 279 of the same report, the Auditor-General commented:

In March 1988, ETSA entered into an arrangement to defease these assets and liabilities to a trust. The trustee of the trust is the Treasurer of South Australia. Administration of the trust is undertaken by the South Australian Government Financing Authority.

Has this effectively removed it from the scrutiny of Parliament?

The Hon. J.H.C. Klunder: On page v, the Auditor-General does not refer to ETSA as being an 'example of removal from public or parliamentary scrutiny' so, on that basis, the answer would have to be 'No'. The Auditor-General did not think so.

The Hon. R.G. PAYNE: I draw attention to pages 463 and 468 of the Program Estimates, and the line 'Underground water—exploration, assessment and protection'. Reference is made to rehabilitation of bores in the Great Artesian Basin and the South-East. On page 463, it can be seen that a sum of \$270 000 was allocated in 1987-88 but, in the event, \$300 000 was expended, and it is proposed to provide \$300 000 for the current financial year for this very important activity of the department with respect to the State's and the nation's fossil water resources. Can the Minister or his advisers indicate how many bores were dealt with?

Mr Johns: The department has been engaged in rehabilitation of wells in the Great Artesian Basin since 1977. This is a continuing program of plugging wells that have failed

because of the failure of casing. The activity also relates to abandoned exploration holes, particularly seismic exploration holes, and a number relate to the pastoral industry. In 1977, the department cemented off 32 holes and brought under control five of those for pastoral purposes. In 1978, seven holes were cemented off and 20 mineral exploration holes were rehabilitated.

The figures for the remaining years are as follows: 1979, one; 1980, five; 1981, two; 1982, six; 1983, four; and 1984, five. In 1985, four holes were repaired, in 1986, 10 were repaired and, last year, eight holes were rehabilitated. The department is about halfway through repair of bores in the Great Artesian Basin and it is estimated that about 48 wells are to be rehabilitated. At the present rate of activity, that looks like being another 10 years of work. Over the past 10 years, the department's expenditure has ranged from about \$150 000 to \$300 000 annually.

The Hon. R.G. PAYNE: My next question concerns safety in and near the workplace (page 467 of the Program Estimates). Can the Minister give some details of the assistance that would have been provided by the Department of Mines and Energy during the previous financial year to organisations and individuals in matters relating to the use of explosives? From my time as Minister, I know that the blasting inspectorate was not heavily staffed but was extremely busy in providing training and advice across the State with respect to blasting practices and safety.

The Hon. J.H.C. Klunder: Personnel from the blasting and explosives section undertook a large number of projects in 1987-88. These included: blasting at Port Giles to assist the Department of Marine and Harbors demolish the damaged grain loading jetty; design and trial of an underwater steel pylon cutting charge for the Department of Marine and Harbors; blasting in the Belair railway tunnel for Australian National to assess effectiveness of this technique to lower the floor level; blasting to explode misfired charges and free the drill casing in a drill hole for an exploration company; and blasting marine growth on the West Lakes inlet grid for the Department of Marine and Harbors.

Technical advice and assistance was provided to: the Department of Marine and Harbors for the installation of demolition tubes in the construction of the Port Giles jetty; a quarry owner with the destruction of a quantity of unwanted explosives; an Urrbrae resident concerned about possible abandoned explosives in rock tipped for land fill; the Burnside council on the suitability of using explosives to split a large tree stump in Waterfall Gully; the Local Government Training Committee in the preparation of guidelines on the granting of permission to use explosives; Boral Resources in the preparation of a report on the likely effects of blasting on a proposed residential subdivision; and a blasting contractor on design and safety aspects for using explosives for small excavating works.

The Hon. R.G. PAYNE: From page 155 of the Estimates of Payments I note that the amount voted in 1987-88 for 'Underground water—operating expenses' was \$1.38 million, of which \$1.376 million was spent. The proposed expenditure for 1988-89 represents a small reduction to \$1.341 million. Is the Minister aware of an article in the *Farmer and Stockowner* of 7 September in which the Democrat member of the Legislative Council, the Hon. Mike Elliott, commented on a report from the Department of Mines and Energy warning, he claimed, that all South Australian farmland below 20 metres above sea level would be salinised within 50 years. If Mr Elliott was quoted correctly, his purpose seems to be to argue that the work done by the Department of Mines and Energy in relation to that report has been completely ignored. He points to certain conditions

which he attempted to put forward in an alarmist way. Can the Minister provide a more measured or balanced view of the work of that committee as distinct from the alarmist way in which it was treated by that honourable member.

The Hon. J.H.C. Klunder: There are some real fears that rising watertables will generally cause a loss of arable and grazing land, and that applies principally to the Murray Basin. The department has performed computer model studies which predict that the watertables in the Murray Basin will be raised as a direct result of increasing recharge due to removal in the past of the natural mallee vegetation, which was an efficient user of soil water. Work by the CSIRO has shown that recharge rates prior to clearing were about .1 millimetre a year, with a post-clearing rate of more than 5 millimetres a year. Thus, the watertable is rising at about 50 times the preclearing rate.

In areas where the watertable is already close to the ground surface, such as in the Murray Basin, this increased recharge rate has resulted in salination of the soil and the gradual development of saline claypans, especially in the vicinity of Coomandook. Where the watertable is deep, the observation bell network has not recorded a significant rise and the response to an increased recharge in such deep watertable areas is expected to exhibit a time lag of tens to hundreds of years, which is not a cause for immediate worry. However, there is great concern about areas where the watertable is already close to the ground, and the department is keeping a watching brief on that situation.

The Hon. E.R. GOLDSWORTHY: The Auditor-General's Report (page 279) states:

ETSA has defeated the total liabilities to the trust [that is, to SAFA or the Treasurer]. Because of the nature of the financial securities acquired it was only necessary to make available \$490 million of the assets to meet the cash flow requirements of the trust and fees to SAFA.

What is the nature of the financial securities acquired which enable this lesser amount to be required and for what period of time will the amount of \$490 million to meet the cash flow requirement of the trust be needed? Will it be for a period of 30 years or whatever is the life of this arrangement? My question is twofold: first, what is the nature of the financial securities which allows this situation to occur so that ETSA will get a one-off gain of \$53.3 million in the operating account this year and, secondly, over what period of time will the amount of \$490 million be used by ETSA for cash flow purposes?

The Hon. J.H.C. Klunder: I have already undertaken to provide a report which does not violate the commercial situation. This information will be part of that report if it is appropriate to provide it to the Deputy Leader.

The Hon. E.R. GOLDSWORTHY: I am sorry that I previously mentioned commercial confidentiality, because that is the screen behind which the Government has been hiding from day one when answering questions in this House on complicated financing arrangements. These matters are spelt out in the Auditor-General's Report; all we are asking is that they be explained. If they are confidentially commercial, the Auditor-General would not have commented on them. What does it mean? Obviously, the Minister does not know and nor does anyone else, even the stockbrokers whom we asked for an explanation.

My next question relates to an up-front gain of \$53.3 million which flows from the unexplained sentence immediately before that, that is, because of the nature of some unknown financial securities \$53.3 million has appeared this year on the operational credit side of ETSA for one year only. I do not know what we will do next year when this amount of \$53.3 million is not available. The report also states that ETSA has now removed these assets and

liabilities from its balance sheet. From here on in do these financing arrangements appear on the balance sheet or are they absorbed in the operations of SAFA having disappeared from ETSA's balance sheet?

The Hon. J.H.C. Klunder: I expect that that is the case. I am the Minister with some degree of responsibility for ETSA. All I need to make sure of in those situations is that ETSA benefits, leaving SAFA to make its own determination as to whether or not it will benefit. I cannot direct SAFA in that matter.

The Hon. E.R. GOLDSWORTHY: The Minister is quite happy that SAFA has taken over ETSA: that is what it amounts to. Why is it necessary for SAFA to give an indemnity in respect to these arrangements? The Auditor-General's Report further states that ETSA has been indemnified by SAFA with respect to the arrangement.

The Hon. J.H.C. Klunder: I can only assume that the previous Minister wanted to be absolutely certain that ETSA would not get caught with any indemnity whatsoever—any requirement to pay money—and consequently he protected ETSA in the same way that I would have done had I been in his situation.

The Hon. E.R. GOLDSWORTHY: There must be some degree of risk associated with these financing arrangements.

The Hon. J.H.C. Klunder: I do not know of any financial arrangement that does not carry some degree of risk. So, obviously there must be a risk and that would have been part and parcel of the negotiations between ETSA and SAFA as to who would get what moneys out of this deal.

Mr HAMILTON: Has the department undertaken any recent steps to locate future ore reserves to extend the productive life of the Port Pirie smelters? I understand that a special departmental review of lead-zinc prospects in South Australia was called for some time ago. Will the Minister comment on the present status of that review and any results in relation to these prospects? This matter impacts not only on the future of the Port Pirie smelters but also on other work available in Port Pirie as a result of the operation of the smelters.

The Hon. J.H.C. Klunder: The department has been concerned for some time about the necessity for continuity of supply of materials for the Port Pirie smelters. Earlier this year the department released a tender for an airborne geophysical survey covering over a 4 800 square kilometre area of Eyre Peninsula. The survey consists of magnetic, spectrometric and very low frequency electromagnetic radiation acquisition of areas of Eyre Peninsula. The areas covered were chosen having regard to the standard quality of the data which was currently available. Much of that data was originally gained in the 1950s by some of the very first airborne geophysical mapping done in Australia. Consequently, the quality of that data compared to modern standards is not particularly high, although presumably it was state of the art at the time it was gathered.

The department has recently reviewed those areas on Eyre Peninsula which are considered to be prospective for lead-zinc mineralisation. An area delineated over the eastern section of the proposed survey was chosen to carry out more closely spaced survey traverses by aircraft, for detailed exploration of possible undiscovered ore reserves. Two companies, Western Mining and Stockdale, have shown considerable interest in that area and they have funded additional infill flying over their own exploration licences in that area.

An information package, summarising South Australian lead-zinc prospects, has been prepared by departmental geologists and that is now available from the Department of Mines and Energy. The package resulted from an exami-

nation of about 950 Department of Mines and Energy and company reports and it is designed to encourage exploration for lead-zinc-silver to provide future feedstock for the Port Pirie smelters. This quite large body of information includes corporate mineral exploration work undertaken since the 1960s as well as Department of Mines and Energy projects, such as evaluation of mineralisation, including a major drilling program from 1961 to 1963 and exploration of the western flank of the Heysen Range in the Flinders Ranges National Park in 1983-85. Much past exploration has focused on commodities other than lead-zinc, particularly copper, and hence many lead-zinc prospects have yet to be evaluated.

The package comprises a summary report and four reports covering major geological provinces. In relation to Adelaide geosyncline and inliers, Stuart Shelf and Spencer Shelf, 143 prospects are summarised. Prospective geological settings include the Cambrian, Hawker and Normanville groups for Mississippi Valley type mineralisation, stratiform and structurally controlled mineralisation in several Adelaidean units, particularly the Tapley Hill formation, and the Mount Painter, Mount Babbage and Peake inliers. It also includes the Gawler Craton, where some 71 prospects are summarised.

Mr HAMILTON: What is the current estimation of the future of Port Pirie smelters, given the amount of lead-zinc and other products that are currently processed through that plant? What would be the life of that plant if no further commercial reserves are available for utilisation by the plant?

The Hon. J.H.C. Klunder: I call on the Director-General to respond.

Mr Johns: The Port Pirie smelter was designed and built to cater for the requirements of the Broken Hill ore body a little over 100 years ago. The life of Broken Hill is indeed limited. The time that could be put on that depends on a number of factors, not the least of which involves future prevailing prices for the various metals, lead and zinc particularly. In recent times the life of the reserves has been estimated at 15 to 25 years. In this regard, one must consider the lead times associated with discovery of minerals and bringing them into production. For example, Olympic Dam was discovered in 1975 and it has taken 13 years to bring that ore body into production. A similar sort of time frame could be applied to the discovery of, say, lead-zinc to provide for future requirements of Port Pirie smelters.

We think that the time is right to encourage exploration for lead-zinc for the smelters at Port Pirie. Today, the smelter does treat ores derived from other deposits in Australia, and from time to time ore is imported, as available, from overseas. There were some problems associated with supply at the smelters last year and, indeed, for several months all the requirements were imported. While I have canvassed some of the variables and things that contribute to an assessment of the life of the smelter at Port Pirie, there is no doubt that the reserves in sight at Broken Hill will be sufficient for 20-odd years, at present rates of production. Opportunities also remain for importing from interstate and overseas. We in the department are doing our best to encourage exploration elsewhere in this State for deposits which might contribute to a supply to sustain Port Pirie's future.

Mr HAMILTON: I understand that the Office of Energy Planning is supervising a national study on the use of compressed natural gas as a substitute fuel for diesel in powering locomotives. What is the reason for this project and what support does it have, particularly from bodies such as Australian National and other rail authorities? What

are the prospects for this scheme and the economies of scale with respect to the use of compressed natural gas?

The Hon. J.H.C. Klunder: Both the State and Federal Governments are actively supporting a general energy policy of substituting other fuels for liquid petroleum fuels where this process is practical. The substitution of diesel oil by natural gas, particularly in the transport sector, was identified as one of the priority areas in the 1987 round of projects to be funded by the National Energy Research Development and Demonstration Council. The project mentioned (and it is being supervised by South Australia) is one of six gas substitution projects which will help establish the technology for the use of compressed natural gas (CNG) and liquefied natural gas (LNG) in compression (diesel) engines.

The purpose of the project is to undertake a feasibility study to assess the economics and advantages/disadvantages of utilising natural gas as a locomotive fuel in Australian National's operations; to make recommendations as to the manner in which a pilot project could be undertaken if the study indicates this to be worthwhile; and to develop broad guidelines for the use of natural gas as a locomotive fuel which may be applied in similar operations elsewhere in Australia. The level of funding for the project is \$50 000.

The Hon. E.R. GOLDSWORTHY: What arrangement will be made next year to compensate ETSA with respect to the \$53.5 million up-front gain operating result this year that will not be available next year?

The Hon. J.H.C. Klunder: I will take that question on notice. In an earlier response I indicated that there is no reason why ETSA should not proceed along similar lines with respect to other of its assets during the coming year. So in terms of the coming year it may be that other money will be made available in the same up-front manner. Clearly, in the long term that is not a reasonable option. I will obtain further information for the honourable member.

The Hon. E.R. GOLDSWORTHY: Does ETSA intend to enter into an arrangement to sell more of its assets in the coming year, as occurred in the past 12 months? Most of ETSA's operating equipment has been dealt with in this fashion. Is ETSA considering selling its buildings and its transmission system?

The Hon. J.H.C. Klunder: I thought I answered that question a moment ago.

The Hon. E.R. GOLDSWORTHY: The Minister said that ETSA would be selling some assets in the next 12 months.

The Hon. J.H.C. Klunder: That may be so.

The Hon. E.R. GOLDSWORTHY: Which assets?

The Hon. J.H.C. Klunder: The exact nature of the assets has not been determined, if indeed it occurs.

The Hon. E.R. GOLDSWORTHY: What will it do when all the assets have been sold?

The Hon. J.H.C. Klunder: Cease selling assets, I presume.

The Hon. E.R. GOLDSWORTHY: Does the Minister agree that financial control of ETSA has been handed over to SAFA?

The Hon. J.H.C. Klunder: I am surprised at that question: the answer is obviously 'No'.

The Hon. E.R. GOLDSWORTHY: At page 279 of the Auditor-General's Report there is reference to the transfer of debt to SAFA pursuant to a determination by the Treasurer. SAFA administers all the financial arrangements which

are the major source of funds for the ETSA capital works program. There is also mention of requirements with respect to ETSA's cash flow, and that is now in the hands of SAFA. With respect to the transfer of debt to SAFA, the Auditor-General states:

Pursuant to a determination by the Treasurer under section 18 of the Government Financing Authority Act, liability for the following borrowings was transferred in June 1988 to SAFA... publicly issued debentures and bonds... overseas loans... loans from employee retirement benefit funds... and lease financing liabilities remained with ETSA at 30 June 1988.

However, ETSA's financing program is in the hands of SAFA.

The Hon. J.H.C. Klunder: If ETSA handed over its privately placed debentures, inscribed stock and promissory notes to a private organisation such as a bank, I doubt that the Deputy Leader would argue that the bank was controlling ETSA. In the same way, SAFA is looking after only the financial accounting aspect. The operation of the trust is still firmly in the hands of ETSA itself and there is no intention to change that.

The Hon. E.R. GOLDSWORTHY: I refer the Minister back to the arrangement detailed in the SAFA annual report where the spoils are shared, with SAFA taking 25 per cent and ETSA 75 per cent. SAFA has taken over responsibility for these complicated commercially confidential leasing arrangements so it is now calling the tune.

The Hon. J.H.C. Klunder: Basically the State is making very large up-front gains from what are in effect nothing more than book arrangements for its finances. If the honourable member is unhappy about the State making that sort of money, he should say so. In the meantime, money is coming into the State. There has been no movement in the control of assets and ETSA is operating in exactly the same fashion as it did previously.

The Hon. R.K. ABBOTT: How much oil and gas was found in South Australia during 1987, and what is the status of the 1988 exploration program?

The Hon. J.H.C. Klunder: SANTOS Ltd reported that 210 billion cubic feet (222 petajoules) of sales gas and 1.4 million barrels of recoverable oil had been added to reserves in PELs 5 and 6 by exploration and appraisal drilling in 1987. In 1988, SANTOS reported that as of 8 August a total of 165 billion cubic feet (174 petajoules) of sales gas and 1.8 million barrels of recoverable oil had been added to South Australia's petroleum reserves.

In addition to reserves added in PELs 5 and 6 during 1987, a gas discovery was made at Katnook No. 1, 10 km south-west of Penola in the Otway Basin. The reserves defined by the well are insignificant, but the discovery has confirmed the existence of gas reserves in a new area of South Australia. A total of four or five exploration wells will be drilled in the Otway Basin during the remainder of 1988 and early next year to evaluate the gas discovery at Katnook and to search for oil in the Otway Basin.

The Hon. R.K. ABBOTT: What is the significance of the 1987 gas discovery near Penola, and what exploration is taking place in that area?

The Hon. J.H.C. Klunder: I can give more details on that. The gas discovery at Katnook No. 1 in December 1987 was the first significant gas flow in the South Australian section of the Otway Basin. Carbon dioxide has been on production for a number of years from this area, but Katnook established that the western Otway Basin is capable of producing hydrocarbons. Ultramar Australia Inc., the operator of PEL 32, in which Katnook was drilled, is expected to present a new structural interpretation and a request for approval to drill an exploration well in the near future.

The next well will further evaluate the gas reserve and also look at the oil potential of deeper reservoirs. An additional well may then be drilled on a nearby prospect. The Department of Mines and Energy has mapped a recoverable gas reserve of 4.8 billion cubic feet in Katnook. At present, Ultramar sees the domestic and industrial gas requirements at Mount Gambier and the woodchip industry and power station at Snuggery as the most likely local markets for natural gas.

Hartogen Energy Ltd, the operator of PELs 8 and 27, to the west and north of Katnook respectively, intends to drill an exploration well in PEL 8, commencing in October 1988. Seismic will be recorded in PEL 27 at the same time and the first of two exploration wells in PEL 27 will spud in January/February of 1989. Offshore, Cultus Petroleum N.L.—as I have already indicated—has already completed a seismic survey and will drill an exploration well in the last quarter of 1989.

The Hon. R.K. ABBOTT: I refer to the deregulation program at page 470 of the Program Estimates. What has been the result of deregulation of the crude oil industry from 1 January 1988?

The Hon. J.H.C. Klunder: Deregulation has had minimal impact in South Australia. The most noticeable effects are that Santos, Esso and to a lesser extent Sagasco Resources are now selling their shares of Cooper Basin Production separately. Crude oil is sold by Esso on behalf of Sagasco Resources and itself, and by Santos on behalf of all other joint venturers. Condensate is sold separately by each of Esso and Sagasco Resources and by Santos on behalf of all other joint venturers. All other products (gas, LPG and ethane) are sold by Santos.

Prices received for crude oil since January 1988 have generally been 50c to \$2.50 per barrel lower than what would have been received had the import parity pricing arrangements still been in existence. This naturally impacts on the level of royalties received.

Mr D.S. BAKER: I refer to page 279 of the Auditor-General's Report, as follows:

In 1986, ETSA entered into arrangements for the sale and lease back of Unit 1 and Unit 2 boilers. During the year, ETSA has exercised its option to extinguish part of its liability (\$9.9 million) through an arrangement with a third party, South Australian Government Financing Authority (SAFA). Under this arrangement, ETSA has derived a financing gain of \$4 million.

Can the Minister explain that operation to me and how it has a financial gain of \$4 million?

The Hon. J.H.C. Klunder: This arrangement is similar to the others. I have already indicated that I will get such information as is not covered by commercial confidentiality, and I am happy to add that question to the list.

Mr D.S. BAKER: I refer to the transfer of debts to SAFA and note that SAFA has held publicly issued debentures of \$79 million, retirement benefit debentures of \$73 million, lease financing liabilities of \$41 million and overseas loans of \$59 million. Does the \$59 million include any losses on exchange rates that may have occurred, or is it a net figure?

The Hon. J.H.C. Klunder: That is a perfectly good question for the Premier.

Mr D.S. BAKER: It is to do with the Electricity Trust, which is under your jurisdiction. It is a perfectly good question for the Minister.

The Hon. J.H.C. Klunder: The question deals with SAFA's liabilities or otherwise overseas.

Mr D.S. BAKER: The report clearly states:

Publicly issued debentures and bonds (\$79 million), overseas loans (\$59 million), loans from employee retirement benefit funds (\$73 million), and lease financing liabilities (\$41 million) remained with ETSA ...

I would have thought that, if the Auditor-General is correct (and we assume he is), this matter is covered under the Electricity Trust and it should be answered by the Minister.

The Hon. J.H.C. Klunder: I need to withdraw my previous answer. I was looking at a slightly different area and had some trouble catching up with the honourable member. There is more than one sentence on page 279 and it is not always easy to pick up which sentence members refer to. If they remain with ETSA, it has the responsibility for them. As to whether or not there are overseas traps in this sort of situation, I do not know: there probably are. Of course, one needs to be aware that ETSA, as South Australia's electricity utility, has remarkably little in the way of overseas loans compared to some other States. I guess that there is some element of risk with overseas loans and variation in the dollar.

Mr D.S. BAKER: Are there overseas exchange losses in that \$59 million at 30 June 1988? That must be a known figure. Will the Minister provide details?

The Hon. J.H.C. Klunder: Yes. I do not know the figure but, if there is such a figure, I am happy to take the question on notice.

The Hon. E.R. GOLDSWORTHY: Earlier I asked the Minister to ascertain when ETSA would be calling on the \$490 million of assets to meet the cash flow requirements. I refer the Minister to page 273 of the Auditor-General's Report where, in the third paragraph under 'Abnormal Items' and the heading 'Financing Arrangements', he states:

In 1986 and 1987, the trust entered into financing arrangements in relation to the Northern and Torrens Island Power Stations and their related fuel supplies.

It is the next statement to which I want to draw attention, as follows:

The amounts raised, totalling \$555 million, were mainly for future capital funding requirements, with a large proportion being held in the form of Government guaranteed financial assets as an interim measure. With lower than expected capital expenditures and strong internal funding levels, anticipated substantial usage of these financial assets has not eventuated.

Is my interpretation correct: this large sum of \$550 million has been raised by these financial arrangements; it has flowed to SAFA for its use as it sees fit in various financing arrangements; that money will flow to ETSA as it is needed for its capital requirements, which would have to be over a large number of years; but more money was raised by these arrangements than ETSA needed for its capital requirements?

The Hon. J.H.C. Klunder: I must admit to some degree of puzzlement in relation to that figure. I would have assumed that the \$53 million up front, and not the \$555 million, would have been the figure to be used for future expenditure on capital requirements.

The Hon. E.R. GOLDSWORTHY: The \$53.5 million is a once-off profit on this year's balance sheet.

The Hon. J.H.C. Klunder: Whichever way it goes, the honourable member has raised a point that needs to be looked at. I doubt whether the asset and liability, each of \$555 million, can be split into a liability paid by somebody else and an asset used for future capital growth. Therefore, I will obtain an answer for the honourable member on that.

The Hon. R.G. PAYNE: Page 468 of the Program Estimates refers to the ongoing assessment of groundwater resources being conducted throughout the department and the Engineering and Water Supply Department on behalf of clients. In view of the continuing study of groundwater resources, and taking into account the fact that water currently supplied through the mains is 71c a kilolitre, is there a possibility of increasing the use of groundwater in the

Adelaide metropolitan area for such purposes as the irrigation of parks or playing fields?

The Hon. J.H.C. Klunder: Recent work undertaken by the Department of Mines and Energy indicates that there is some potential for the development of underground water in the Adelaide metropolitan area for such things as the irrigation of school ovals and parks. However, there are already a large number of users in that area, especially golf clubs, ICL, and the South Australian Brewing Company. The department is monitoring the effects of existing withdrawals and expects to be in a position to soon predict trends in water quality deterioration which are anticipated as a result of the many old, badly corroded bores that exist.

The Hon. R.G. PAYNE: I mentioned previously that a number of officers in the department are concerned about explosives and safety in the workplace, and underground mining is an area where this is involved. An article in the August 1988 issue of *Mining Review* refers to the fact that only a limited number of women are employed in underground mining in Australia. In fact, at least three Australian States—New South Wales, Queensland and Tasmania—would need to make legislative changes before women could be employed in underground areas. That is not the case in Victoria, Western Australia, South Australia and the Northern Territory, where laws covering employment underground apply equally to men and women. I understand that few women are employed underground and on occasion I took up this matter verbally with the joint venturers at Roxby Downs. Are any women employed in underground mining operations throughout South Australia?

The Hon. J.H.C. Klunder: I admit that I did not meet any when I went underground at Roxby Downs. I will ask my departmental officers to respond.

Mr Fenton: To my knowledge there are no women employed permanently underground. Women who go underground do so as samplers, geologists, or whatever, but basically they are based on the surface. As the honourable member said, there is nothing to stop women being employed underground. I think that a tradition has built up over the years, and it will have to grow out gradually. This State has been amongst the forerunners with respect to legislation that allows women to work underground and, in fact, over many years various women's lobbies have informed me that they are pleased that women can work underground.

The Hon. R.G. PAYNE: Page 48 of the Estimates of Receipts indicates that territorial royalties in 1987-88 were estimated to be \$35.740 million but in fact were \$35.054 million; and the 1988-89 estimate is \$38.048 million. In reply to the member for Spence, the Minister pointed out that there had been some fall in the price of oil and hydrocarbon products generally. Is that likely to substantially reduce that estimated figure?

The Hon. J.H.C. Klunder: The increase is due to the fact that royalties will be collected from Roxby Downs and Poona, by and large, although there will be some other effects.

Mr Laws: The petroleum royalties are estimated at at least six monthly intervals during the year. The estimate depends very much on oil prices, and that is why the estimate often proves to be incorrect. Earlier this year there were problems with the weather in the Cooper Basin which prevented the trucking of oil from a number of fields which are not linked to Moomba by pipeline. As a result, there was a decrease in the amount of oil production in the Cooper Basin which affected the estimates. We consider that the petroleum share of the estimated receipts for 1988-89 to be fairly reliable at this time.

The Hon. E.R. GOLDSWORTHY: Page 273 of the Auditor-General's Report states:

The amounts raised, totalling \$555 million were mainly for future capital funding requirements, with a large proportion being held in the form of Government guaranteed financial assets as an interim measure.

Of course, that is being held by SAFA. The report continues:

With lower than expected capital expenditures and strong internal funding levels, anticipated substantial usage of these financial assets has not eventuated.

This indicates that a lot of money that is not required has been raised for ETSA's capital funding. That leads me to another report which has no doubt been drawn to the Minister's attention this morning as a result of something I said publicly. I refer to an internal ETSA report on the feasibility of upgrading the Playford B Power Station to extend its life, which would reduce even further ETSA's capital requirements. The report states:

In accordance with a request from PPE to AGMC in a departmental letter of 3 July 1986, an assessment has been made of capital costs and manning levels required to extend the life of Playford B station to the year 2010 under various operating conditions.

The report goes on to examine four possibilities for upgrading Playford B station to extend its life. With respect to option 4, which would require the greatest upgrading, the report states:

Playford B station operates to the year 2010 at or near full capacity with upgraded control and surveillance system.

The report discusses what is required for this upgrading to take place and suggests that more work needs to be done, as follows:

Option 4 involves identical refurbishment to option 3 with an additional capital investment for an upgraded control and surveillance system. Capital costs and reduced operator manpower associated with this system have been extracted from Kinhill-Stearns Rogers report 'Feasibility Study to Upgrade Control and Surveillance at Thomas Playford Power Station Section B' of October 1982, updated to 1986 prices. Relevant sections of this report are included in Appendix C.

However, this interesting conclusion is reached:

It is considered that option 4 has serious implications with regard to industrial relations, consequences of which have not been considered in this report.

The option refers to a reduction in manpower. In other words, if this upgrading is done, the station's life could be extended to 2010, which would save the necessity for this third unit at about \$450 million. As mentioned in the Auditor-General's Report, the \$555 million that has been raised is much in excess of ETSA's needs. It will give SAFA about \$500 million to play with until 2010.

The Hon. J.H.C. Klunder: This is a fairly complex issue and the honourable member has probably raised it as a result of an anonymous letter that he, I and a number of others received.

The Hon. E.R. GOLDSWORTHY: Have you seen the report? That did not come with the letter.

The Hon. J.H.C. Klunder: I have seen bits of the report but I have not read it all. I will deal first with one of the last items raised by the honourable member. He argued that there is a problem with staffing levels. Modern power stations use fewer staff than old power stations and refurbished old power stations. The claim that it is a staff driven exercise is spurious on the basis that people who would resist a drop in staffing levels would be even unhappier about MPS3 than they would be about a refurbished Playford B station. I need not worry too much about that part of the honourable member's statement.

Playford B is a peak station, not a base-load station. That means that it is not sufficiently economic to warrant being

used as a base-load station and that the amount of time spent on standby while being maintained has risen above the acceptable levels for a base-load station. The thrust of the honourable member's argument is that ETSA, faced with a choice of putting in a new power station at \$450 million or spending \$20 million on refurbishing an old power station, has chosen to spend \$450 million. I find that sufficiently ludicrous as a proposition to not be concerned about it.

The Hon. E.R. GOLDSWORTHY: Some of ETSA's engineers do not think it is ludicrous.

The Hon. J.H.C. Klunder: The honourable member can believe what he wants but I cannot imagine for the life of me that ETSA would ask the State to expend \$450 million extra in order to give engineers a new toy to play with, which is what the honourable member has hinted at. The Abbott and Anderson report did not try to compare the refurbishment of Playford B with the option of building MPS3. It is an internal report on whether and under what conditions Playford B could have its life extended.

These sorts of reports are carried out on all power stations because the extension of a power station's life has some positive or negative economic ramifications. Graphs can be drawn showing whether a refurbished station, in its total costing—the cost of refurbishing, staffing and fuel—will be more or less economical to maintain than a power station that is built from scratch. Having considered this report, ETSA came to the conclusion that whereas it may or may not be possible to extend the life of Playford B, that would be in terms of its role as a peaking station rather than as a base-load station. Consequently, the comparison with MPS3 is totally spurious.

The Hon. E.R. GOLDSWORTHY: I do not know that it is. Some ETSA engineers believe that it can make a significant contribution to the grid. In view of the greatly diminished growth in ETSA's load—it is about half what was predicted five years ago and the increase is small by any standard—what contribution will the interstate link make to supplying the power needs of South Australia? Using the report, calculations and predictions of the group set up by former Minister Payne to investigate power options for South Australia, I calculated that the interstate link would make a contribution of about 15 per cent to our grid. Having looked at the agreement between the States and having spent all that capital on building the line, we are compelled to use it, and I said that at the time we embarked on this course. It is absolutely stupid to build an interstate connection and put it to minimal use.

The CHAIRMAN: I ask the Minister to consider the question over lunch and give his reply immediately upon resuming.

[Sitting suspended from 1 to 2 p.m.]

The Hon. J.H.C. Klunder: The Deputy Leader's question deals with the rate of growth in ETSA demand, which is an area where figures can easily confuse and where predictions are only predictions and consequently often are found to be wanting later in the period. As an example of how one could consider various predictions and even growth rates that have occurred and realise how different they are depending on the period over which one takes them, I have in front of me a table that shows that in 1982-83 there was a 7 per cent increase in the actual demand; in 1983-84, 5.3 per cent decrease; in 1984-85, 6.5 per cent increase; in 1985-86, 2.3 per cent increase; in 1986-87, .04 per cent increase; and in 1987-88, 5.3 per cent increase.

By taking different combinations of time, one gets a different result. For instance, if one takes the past four years

one gets an average increase in demand of 3.5 per cent, whereas for the four years prior to that (from 1982-84 to 1986-87) there is an increase in demand of less than 1 per cent. Merely by taking a group of years that differs by as little as one year from another group, one can get an enormously different demand situation. Peak loads will climb, but the forecasting of demand is a perilous undertaking. The fact that it is necessary to forecast demand does not detract from the fact that often in retrospect it is incorrect.

The Deputy Leader then asked a question about the effect of the interconnection on all this. The agreement reached for the interconnection with Victoria involves opportunity electricity transfers between the two States. The projects involved South Australia connecting into the Victorian system at Portland via double circuit, that is, a 275 kilovolt line from the south-east of the State which in turn extends back to Adelaide. Project construction phase is proceeding on schedule with a budgeted outlay of \$200 million, about \$25 million having been spent at this stage. Commissioning trials are expected to commence from December 1989 and commercial interconnection operations are scheduled for March 1990. The grid will provide reserve sharing benefits to the State of about 300 megawatts, the equivalent of gas turbine peaking plant capacity (I use the words 'peaking plant' advisedly). It is therefore about 300 megawatts out of the total capacity of the State of about 2 500 megawatts and therefore about 12 per cent of capacity and not 12 per cent of consumption.

The Hon. E.R. GOLDSWORTHY: A peaking capacity of 300 megawatts, or 12 per cent of the total, is a significant contribution to the energy requirements of South Australia at peak load. The agreement also provides for South Australia to do a deal with the other States as regards the base load if it wishes to do so, although the terms do not seem favourable to me. In view of the significant contribution of 300 megawatts, and as I did not suggest that Playford necessarily become a base load station, although it has the capacity, when power is required and the power station has been upgraded, to contribute significantly to the State's requirements, will the Minister explain what he means by 'base load'? Torrens Island is presently being downgraded as Port Augusta A and B come into production. Does the Minister still persist in the view that we need to start building the third unit at Port Augusta at present?

The Hon. J.H.C. Klunder: ETSA has taken into account the interconnection. Indeed, it would be foolish to assume that it had not done so in forecasting the need for other power stations. As the Deputy Leader has indicated, the availability of Playford being in a continued peaking capacity has nothing to do with the requirement for future base load stations. Indeed, the availability of an interconnection of 300 megawatts of peaking capacity does not in any way rebound on the requirement for a base load station.

The only reply that I can give the Deputy Leader is that which I have given before: that the current date that is assumed for the need for a new base load station in South Australia is 1996 (that is NTS 3). I will give the same variation on the reply as I have given before: it will be economics that dictate whether it comes on stream earlier or later, because the costs either way are phenomenal in the expenditure of \$450 million by the State.

The Hon. E.R. GOLDSWORTHY: How long does the Minister expect the building of the new third unit to take?

The Hon. J.H.C. Klunder: I have thought of it not from that point of view but as regards a number of gates on the road ahead. There are certain dates by which we must make decisions on letting contracts and starting building. I am assured by ETSA that those gates are not yet in the imme-

diate future: they could be as much as 18 months away at this time, so we have some time up our sleeve to determine the most appropriate time to build the power station.

The Hon. E.R. GOLDSWORTHY: In view of the lack of information that was available this morning, can I renew my call for officers of ETSA to appear before this Committee? After all, officers from Samcor, the State Transport Authority, the Totalisator Agency Board and the South Australian Superannuation Fund have appeared before the Committee (the last named officer did not answer any questions, but he did appear). If this Committee is to get the information required by the public, I ask the Minister that officers of ETSA appear with him here.

The Hon. J.H.C. Klunder: I am prepared to enter the whole debate that was held this morning all over again if that is the wish of the Deputy Leader, but I remind him, as the former Minister of Mines and Energy reminded him, that the situation this year is the same as it was last year and in the previous year. Although there have been no changes to legislation during that time, by and large the same amount of information was available on ETSA last year as is available this year in the Auditor-General's Report. So, there have been no changes, yet the Deputy Leader requests a change that would go beyond the scope of Standing Orders as they stand at present, and therefore I cannot accept his request.

The Hon. E.R. GOLDSWORTHY: That is baloney. Why should Samcor, TAB, STA and the Superannuation Board be represented here to answer questions, but not ETSA? ETSA is now under ministerial control, whereas it was not three years ago. The people asking the questions last year did not require the officers to attend, but this year we do because, during the year, even with persistent questioning of the Government, we have not been able to get to the bottom of ETSA's financial arrangements.

The Opposition and the public want to know the answers and the only people who can provide them are those running the accounts in ETSA. So, to suggest that, because this has not been past practice we are trying to do something that is not appropriate, is plainly absurd. The simple fact is that we did not require them last year but this year we do.

The Hon. J.H.C. Klunder: On two occasions today I have drawn the distinction between ETSA and a number of other statutory authorities. If the Deputy Leader wishes to check why those other situations are different, he should raise the matter with the relevant Ministers. The Standing Orders of this House with regard to Estimates Committees indicate—and I will repeat this for the third time—that the Committee should deal with the proposed expenditure from the Consolidated Account. A number of agencies, of which ETSA is one, do not draw money from the Consolidated Account. On that basis I have made a distinction between bringing them in and not bringing them in.

The Hon. E.R. GOLDSWORTHY: They do draw money from the Consolidated Account and I pointed that out to the Minister this morning.

The Hon. J.H.C. Klunder: I thank the Deputy Leader for bringing up this matter and I suppose we will have to have this battle all over again in the next part of this Estimates Committee dealing with the Department of Woods and Forests which also, except for one or two minor items, does not draw money from the Consolidated Account but from a deposit account. I suppose, in order to be consistent, I will have to draw that to the attention of the Committee when we have the changeover to Woods and Forests as a result of the Deputy Leader having raised the matter in relation to ETSA.

The Hon. E.R. GOLDSWORTHY: I draw the Minister's attention to the fact that an amount of \$5.7 million was paid to ETSA from the Consolidated Account for electricity concessions to eligible customers receiving pensions and other social security benefits. So, ETSA does draw funds from consolidated revenue and pays funds into consolidated revenue in numerous ways, as we all know.

Mr HAMILTON: Can the Minister provide details of the operation of the power co-generation units installed at the Queen Victoria Hospital and what is the potential for the future use of such units in hospitals? I am interested to know what is likely to occur with the Queen Elizabeth Hospital, as many of my constituents and those of the member for Spence use that hospital. What is the future use of such co-generation units?

The Hon. J.H.C. Klunder: The Queen Victoria Hospital system uses a small Nedalo unit, imported from Holland, which consists of a natural gas fuel to reciprocate an internal combustion engine directly coupled to a generator and a heat recovery unit covering the engine cooling jackets, oil and exhaust flows. The unit produces about 20 kW of electricity, a remarkably small amount by State standards, which is fitted into the hospital's main switchboard to offset purchase of electricity, as well as 40 kW of heat which is used to provide hot ablation water for the hospital. The fully installed cost of that system was about \$35 000 and, with present gas and electricity prices and with about two-thirds of the recoverable heat actually being used, the system provides a return on investment of about 20 per cent in real terms, which is equivalent to a pay-back period of about five years.

A study of the market for small scale co-generation units in South Australia and Australia was commissioned by SENRAC in 1987. The results showed a substantial potential market for the units in South Australia and elsewhere in terms of local manufacture of such units for the next demonstration. Under the management of the Government Energy Management Program a local firm called Cavill Power Products was selected to design and construct a small co-generation system. The unit, which will be installed at the Parks Community Centre, is due for completion in October this year and the electricity generated by that unit will be fitted to the main fuse board and the hot water will be used for the main indoor swimming pool.

Mr HAMILTON: I understand that several hospitals have been surveyed under the Government's Energy Management Program. Has any of this work taken place in country hospitals and, if so, which hospitals? What have been the results of those surveys?

The Hon. J.H.C. Klunder: The Government Energy Management Program has conducted energy surveys and produced reports for a number of country hospitals, including Clare and District, Angaston and District, Stirling and District and Port Pirie. In addition, a report has been completed on boiler redevelopment at the Whyalla Hospital. The aim of these surveys has been to establish the energy demand and costs for each hospital and to determine economically viable measures to reduce those costs.

The findings of those reports contain a number of recommended measures to reduce the cost of energy at those hospitals. These include the replacement of distillate fuel boilers with LPG fuel boilers, the installation of low energy fluorescent lighting, the installation of a programmable time switch for the air-conditioning plant, and the replacement of oil-fired boilers in the central plant with unmanned decentralised natural gas fuel boilers and modifications to air-conditioning controls. The cost to which the honourable member refers amounts to about \$720 000, with an annual

saving of about \$360 000, with a pay-back period of about two to two-and-a-half years.

Mr HAMILTON: What progress has been made in estimating the seismic risk in the Adelaide metropolitan area?

The Hon. J.H.C. Klunder: The Sutton Institute of Earthquake Physics was formed by the Department of Mines and Energy and is working on the practical and theoretical aspects of the problems outlined by the honourable member. New digital earthquake recorders have been purchased with loan funds and are currently being tested. These will be installed to improve earthquake location estimates in the Adelaide area. An old analogue station is being upgraded to digital form and a new analogue station is expected to be installed in the observatory being built at The Heights High School. A portable recorder and sensor have been set up to record vibrations down observation wells in the near-city areas. With an increased number of permanent and portable stations it is expected that many more epicentres will be recorded, leading to a better understanding of fault activity in the Mount Lofty Ranges.

The more recording stations the easier it is to find the epicentre of earthquake activity in the same way as one can find the source of a radio broadcast more easily by having a number of different receiver stations which can be plotted to coincide at a point. The more stations you have the smaller the area in which the activity has started is likely to be. It is a triangulation method and the more triangular lines one has the smaller the area that can be defined as the epicentre.

The new digital recorders may also be used later to measure the response of major buildings to vibration, and to reveal any problems that could occur during a major earthquake. On the theoretical side, a joint publication is planned with Flinders University, which will include some work on seismic risk.

The Hon. H. ALLISON: Did the Minister's response to a previous question about the South Australian-Victorian watershed refer only to unconfined aquifers, or are the confined aquifers also part of that South Australian-Victorian watershed control? His previous response referred only to Victorian-South Australian unconfined flow.

Mr Johns: It covers both the confined and unconfined aquifer systems.

The Hon. H. ALLISON: So the Minister's response was relatively shallow!

The Hon. J.H.C. Klunder: Only in terms of where you are likely to find water.

The Hon. H. ALLISON: In response to two previous questions, relating to page 468 of the Program Estimates, the Minister's response, and also that of his Director-General, only partly answered those two questions. Both of the questioners seemed satisfied, although I noticed that the question asked in relation to rehabilitation of bores in the Great Artesian Basin and in the South-East elicited a response only so far as the Great Artesian Basin was concerned. I recall that in the late 1960s and early 1970s, under the Hall and Dunstan Governments, some \$5 million to \$5.5 million—at currency valuation applicable at that time—was allocated towards two programs. One was a program of tight bore drilling, on a relatively small grid around Mount Gambier, as well as a much wider spread of grid bores in the area extending beyond Mount Gambier.

To what extent are the Department of Mines and Energy and the E&WS Department responsible, either individually or in a joint program, in this regard? I recall that a large number of bores were sealed off, with just a few kept available for observation into the aquifer, at either the upper or lower watertables. We now see on page 468 of the Pro-

gram Estimates the statement made three times that rehabilitation of flowing bores in the Great Artesian Basin and in the South-East will continue. It also indicates that a general review of groundwater resources in the South-East confined aquifer in the South Australian-Victorian State border zone will continue. How many bores in the South-East will be rehabilitated in any way by the department, either alone or in conjunction with the E&WS Department? What is the reason for this renewed interest in water flows in the South-East?

The Hon. J.H.C. Klunder: The previous question asked by the member for Mitchell referred only to the Great Artesian Basin. I again refer this question to the Director-General.

Mr Johns: I suppose the perception initially involved a concern to repair bores in the Great Artesian Basin which were seen to be resulting in a net loss of water to that system. More recently, that concern has extended to other areas, and that includes the South-East, particularly the Kingston area, where there is recognition of the failure of casings, as in the Great Artesian Basin. We must recognise, of course, that in the South-East we are dealing with much more permeable aquifers, so that a lot of the water that is lost from the confined aquifers in fact finds its way to the surface and is then being returned to the unconfined aquifers. In that sense, there is not a net loss to the system; it is being retained in the area where the leakage occurs. However, notwithstanding that, in the long term the leakage results in a loss of reservoir pressure, and it really is a wasted resource. I do not have the figures at my finger tips, but I could provide details of the number of bores that have been sealed in the South-East.

The Hon. H. ALLISON: The thrust of my question, I suppose, is whether the E&WS Department is carrying out a completely separate control scheme in relation to water pollution factors in the South-East, as distinct from the Department of Mines and Energy's relatively small effort, mainly involving casings.

Mr Johns: The department is responsible for the physical aspects of drilling, well completion and in assessment of the resource. The E&WS Department's role is one of management. So, while we liaise with the E&WS Department, the CSIRO, the Department of Agriculture, as well as the local communities, in the end the department is ultimately responsible for the physical aspects of rehabilitation.

The Hon. H. ALLISON: One must bear in mind the fact that the South-East literally lives on its water supply, and there are a number of livestock-producing companies, for example, there are extensive piggeries, and also agencies such as the Woods and Forests Department and private concerns that are treating timber products with arsenical compounds, a number of which have been licensed relatively recently. To what extent is the Department of Mines and Energy responsible for assaying the short-term, long-term problems which might be associated with greater water pollution? Does this relate just to E&WS Department management or is the Department of Mines and Energy being asked to sink bores in strategic places to ascertain long-term water quality?

Mr Johns: I can assure the questioner that we are not doing anything in isolation from the other interests in the region. The studies of ingress of pollution from either point source or from whatever source are being undertaken jointly by the authorities involved. Whatever we do is undertaken with the knowledge and agreement of the other parties. This relates to all departments and councils, and over a large part of the South-East local committees are responsible for underground water matters, in terms of licensing for with-

drawal and usage. So, the local communities have a strong understanding and input into the work that is being undertaken, to assure the long-term availability of underground water.

The Hon. H. ALLISON: I am not criticising the Minister in any way, but it concerns me that the Director-General can make such a response. I have tried to get responsible answers from the Waste Management Commission, local government, and the department and there seems to be a grey area about who has ultimate responsibility for water control, and that includes the E&WS Department. Despite the best intentions, the decision as to who has final control has yet to be made. There has been buck passing in regard to my questions to a multiplicity of agencies, and perhaps that is something the Minister and the Director-General can take up with other agencies, including the Waste Management Commission.

Page 468 of the Program Estimates deals with the investigation of groundwater resources. I understand that it has been recommended that a number of piggeries be removed from the Mount Lofty Ranges and the Barossa Valley (or at least that would be the department's first option) to reduce water pollution. Is that type of animal husbandry a major source of pollution of the watertable in those areas?

The Hon. J.H.C. Klunder: The business of looking at the effects of piggeries might be better raised later, because the Department of Woods and Forests has been checking whether, if one passes whey through a pig first, the whey becomes less of a problem to the groundwater. I ask the member to raise the matter later when we deal with that part of my portfolio.

The point he makes that there may not be a clear central direction concerning the issues that he has raised is one that I am happy to take on board and discuss with my colleagues to see whether there is a possibility of streamlining the situation.

The Hon. H. ALLISON: Is the Minister going to say whether piggeries have been a major source of pollution in the Mount Lofty Ranges? The question is related to the fact that the department will continue investigation of groundwater resources. There is no mention of the Woods and Forests Department. In fact, that department is not handling the problem. In the South-East, it is being done with the department's consent and in that area piggeries have been moved in. It is not the same question at all.

The Hon. J.H.C. Klunder: I have no particular knowledge of that aspect of my portfolio as yet.

Mr Watts: I am a member of the Mount Lofty Ranges Review Steering Committee and the question of pollution is high on its agenda. The department is involved because of its interest in extractive minerals in that area. Many studies are in progress to define sources of pollution, including piggeries, hobby farms and fertilisers.

The Hon. H. ALLISON: And cattle and sheep grazing?

Mr Watts: A whole range of detailed inquiries is proceeding. Although there are many threads to the investigation, they have not yet been pulled together. The committee is due to report in March 1989 and the result of the study will be available. It is at an investigative stage now. As I recollect fertiliser entering streams is a major problem.

The Hon. H. ALLISON: The Department of Agriculture claims that effluent from one pig is equal to the effluent from 10 human adults, and so potential pollution from a piggery is much more excessive than from a normal household. That information is available from another Government department and not from a private source.

The Hon. R.K. ABBOTT: I refer to program 5 on page 471 of the Program Estimate; it is noted that the department

intends to publish *Natural Building Stones in South Australia*, continue investigations of brick clay resources in the Mount Lofty Ranges, and monitor mine and quarry sites to ensure compliance with tenements conditions and progressive rehabilitation of disturbed areas. Most of Adelaide's construction materials come from deposits within or adjacent to the Mount Lofty Ranges. What is the department doing to ensure the continued availability of these essential commodities in the context of the current review of land use in the Mount Lofty Ranges?

The Hon. J.H.C. Klunder: The Department of Mines and Energy has undertaken investigations into supplies of crushed stone, construction sand, and brick clay. Studies indicate that there are sufficient reserves in the existing stone quarries for the next 75-85 years, and large unworked deposits have been identified to the south which should be protected from other land uses to ensure they are available in the future.

Construction sand reserves in the major deposits at Golden Grove, Gawler and Maslin Beach are adequate for 60-70 years. Some additional deposits have been identified in the Sandy Creek-Rowland Flat areas, and these will be required when the deposits at Gawler are depleted, since Gawler has smaller deposits than the other two areas.

The department last financial year completed a drilling program of 95 holes on sand deposits near Freeling but concluded that these deposits are too fine for construction purposes. Much of the sand currently under investigation on Fleurieu Peninsula also appears to be too fine. These studies stress the importance of known deposits, particularly those at Golden Grove. Consequently, the department is commencing work on a management plan to ensure that recovery of construction sand from Golden Grove is maximised and to endure coordinated rehabilitation of worked-out areas.

Golden Grove is also Adelaide's most important source of brick clay, with a life of about 50 years. Departmental auger drilling and mapping programs currently in progress have identified alternative sources both to the north and south of Adelaide to cater for Adelaide's long-term requirements. It needs to be stressed that Adelaide is singularly fortunate in having long-term supplies of those materials so close to the city.

The Hon. R.K. ABBOTT: There has been considerable discussion of the greenhouse effect and how it might affect South Australia's coastline. Has the department done any work that might be relevant to this so-called problem?

The Hon. J.H.C. Klunder: Oddly enough, and contrary to recent newspaper reports, there is no scientifically accepted proof, to date, of a greenhouse-induced sea level rise. Over the past few years, the department, with some assistance from local universities, has been mapping along and collecting shallow subsurface information in South Australia's coastal zone.

Some of the results of this are interesting. Apparently on Adelaide's coastline from Brighton to Port Gawler there has been a steady rise in sea level over the past 6 000 years at a rate between .02 millimetres to .04 mm per year. That does not give any immediate cause for concern. It is not related to the greenhouse effect but is due to the natural subsidence of the Adelaide Plains and may in fact be accelerated in some areas, for instance, Port Adelaide and West Lakes by additional subsidence due to building activities and so on. Even so, the quantum of change there is such that Adelaide will not have to worry about it for some considerable time. By contrast, the sea level is falling relative to the land surface in the northern Spencer Gulf region,

and around Eyre Peninsula it has been relatively static over the past 6 000 years.

Given this background knowledge of South Australia's coastline it is clear that there is no immediate evidence of the greenhouse effect although, of course, it should not be discounted. What the department's work is illustrating is that the greenhouse effect on sea levels should not be confused with natural processes and that, when selecting sites for sea level monitoring stations, careful consideration must be given to the past history of those sites, that is, whether or not there has been a history of either subsidence or uplift over the past 6 000 years.

The Hon. R.K. ABBOTT: Under the Roxby Downs Indenture (Ratification) Act the Minister of Mines and Energy has responsibility for the Roxby Downs municipality. Why does the municipality have only four employees to service the needs of that new town?

The Hon. J.H.C. Klunder: The Roxby Downs municipality is responsible for the normal range of local government functions, such as rating, planning, building applications, maintenance of roads, streets and reserves, and the social welfare of residents. Unlike most towns it actually has extra functions, and these include the management of the town's power, water and sewerage services.

In fact, when I was at Roxby Downs last week the employees in the municipality office were somewhat concerned about the fact that in three successive months they had had to send out three bills for power, water and sewerage, and they had a feeling that this might not make them excessively popular with the townspeople.

Under the terms of the Indenture, during the initial years of the project the State and the joint venturers are required to pay 50 per cent of the annual shortfall in the municipality's income. Therefore, it is of interest to all parties—ratepayers, the State and the joint venturers—to ensure that the municipality fulfils its various responsibilities as efficiently and effectively as possible.

In relation to the municipality's staffing, that has been achieved by appointing specialist personnel with considerable prior local government experience and, secondly, by using outside expertise wherever possible. For example, the South Australian Community Recreation Association (SACRA) has been contracted by the municipality to operate the town's swimming and recreation centres. In other words, the municipality has been established as a very lean and efficient organisation and it ought to remain so to facilitate a future transition from an administrator run municipality to an elected council system and to set the new council on its feet in the most economical and efficient manner possible.

Mr D.S. BAKER: In the defeasance arrangement between ETSA, SAFA and the third party (which was entered into in the past 12 months) was a tax indemnity given to that third party? If so, what is the likelihood of problems arising for ETSA in the event that the Commissioner of Taxation rules that debt defeasance profits are taxable?

The Hon. J.H.C. Klunder: The honourable member is showing a great deal more knowledge about defeasance generally by his question now than he claimed to have this morning. I wonder whether that is due to a rapid study program, or because he was asking questions—

The Hon. H. ALLISON interjecting:

The Hon. J.H.C. Klunder: In response to the interjection, I point out that I have no ETSA staff with me. In fact, that has been a point of contention between me and the Deputy Leader for some time.

The Hon. E.R. GOLDSWORTHY: You do not want them here because it might embarrass the Government.

The Hon. J.H.C. Klunder: The honourable member is now starting to make some of his more outrageous statements, and it is nice to know that he is back in form.

The Hon. E.R. GOLDSWORTHY interjecting:

The Hon. J.H.C. Klunder: If the honourable member wants me to explain that for the fourth time, I am perfectly willing to do so, but it seems to be a terrible waste—

Mr D.S. BAKER interjecting:

The Hon. J.H.C. Klunder: Well, if the member for Victoria can persuade his colleagues to stop interjecting, I may be able to answer his question.

The Hon. E.R. GOLDSWORTHY interjecting:

The Hon. J.H.C. Klunder: Here we go again. As soon as I put that point, the Deputy Leader immediately interjects.

The Hon. E.R. GOLDSWORTHY: Get on with the answer.

The Hon. J.H.C. Klunder: The answer is very simple. I have already undertaken to give honourable members such information as is not covered by commercial confidentiality. No matter how long they keep niggling around the edges, that will be my answer. I will give it to them in writing at the appropriate time, and that ought to stop attempts to see whether it is possible to get little bits of information ahead of that time.

The Hon. E.R. GOLDSWORTHY: Give information: we came here to receive information, not to be fobbed off by a Minister who does not know the answers.

The CHAIRMAN: Order!

Mr D.S. BAKER: The Auditor-General's Report at page 268 states:

On 30 June 1988 an agreement was finalised with the trust's insurers for a settlement of \$105 million with respect to the 1983 Ash Wednesday bushfire losses. This settlement will enable the trust to discharge its estimated liability for claims received.

I also note that the Auditor-General mentions in the accounts that it can now discharge its liability. Will the Minister assure us that all claims will be settled, or if claims amount to \$105 million will some people not be paid for losses incurred in the fires? When does the Electricity Trust expect to finalise these payments? It is now some five years after the event.

The Hon. J.H.C. Klunder: A single sentence is crucial to understanding the time frame of these claims. It is as follows:

If ETSA had attempted to settle claims without the agreement of its insurers it would have been in breach of the terms and conditions of the policies, thereby forfeiting the right to obtain any indemnity at all.

Consequently, the time frame has not been of ETSA's choosing. That needs to be clearly understood by all those people who have claims against ETSA for various matters. In relation to whether or not all claims will be settled, that is pretty hard to answer since all claims are not in yet. The question whether the amount ETSA got from its insurance will or will not be exceeded by claims paid out is also incredibly difficult to answer because, again, all claims are not in yet. The honourable member is asking me to punt on the basis of insufficient information, and that is not the kind of thing I should be doing.

The Hon. E.R. GOLDSWORTHY: The Auditor-General's Report (page 268) states:

This settlement will enable the trust to discharge its estimated liability for claims received.

I understand that very few claims in the South-East have been settled. That page of the Auditor-General's Report refers to the Electricity Trust, which is under the Minister's

control and in relation to which he will not provide officers to answer questions.

The Hon. J.H.C. Klunder: The honourable member keeps on niggling.

The Hon. E.R. GOLDSWORTHY: I will until I get someone down here who knows the answers.

The Hon. J.H.C. Klunder: The only way to deal with the Deputy Leader is to ignore all his silly niggling from the sidelines and try to deal with his questions, but it is irritating because he goes on and on.

The Hon. E.R. GOLDSWORTHY: It is very irritating when you want information and you cannot get it.

The CHAIRMAN: Order! The Chair requests that the Committee return to the Estimates.

The Hon. J.H.C. Klunder: The sentence to which the honourable member refers is as follows:

This settlement will enable the trust to discharge its estimated liability for claims received.

It is a statement of fact. It makes no comment about the ability to deal with the liability for claims that are yet to be received. Since we are not in position to know how many there are and the costs involved, I cannot give the honourable member an answer in terms of whether the claims will eventually exceed the money that ETSA has from its insurers.

Mr D.S. BAKER: Supplementary to that—

The CHAIRMAN: No, this will be the member for Victoria's last question.

Mr D.S. BAKER: My last question?

The CHAIRMAN: If the honourable member wants to make it that way, he can do so because, if the Chair names him, that will finish all discussion on this Committee for the rest of the day and Parliament will meet at 9.30 tomorrow. I am prepared to go that far if the honourable member continues along those lines.

Mr D.S. BAKER: Mr Chairman, if you check the question I asked and the answer, you will note why I am asking a supplementary question.

The CHAIRMAN: It is not for the member to determine how many questions he will have: it is for the Chair, and the Chair says that this is the honourable member's last question.

Mr D.S. BAKER: The question that I asked was that, if the settlements exceeded the \$105 million—and the Minister has acknowledged that all claims are not in—will those other people be paid for Ash Wednesday losses? That was a very simple question, which was not answered.

The Hon. J.H.C. Klunder: That will be a matter for the court to decide. If a court decides that payment is to be made, it will be made.

Mr D.S. BAKER: That is absolute rubbish.

The Hon. J.H.C. Klunder: Clearly, if someone were told that they would not be paid because ETSA's liability insurance payments had been exceeded, that person would automatically go straight to the nearest court, which would decide whether that payment should be made. I do not know whether it will get to that. I will not give answers on information that I do not have.

The Hon. R.G. PAYNE: I refer to the program relating to safety in and near the workplace (page 467 Program Estimates). Occupational health and safety should take the highest priority. Mines and quarries, where the possibility of mishap and/or accident is quite high, fall under the Minister's purview. Can the Minister provide accident statistics for mines and quarries for 1987-88 and indicate how they compare with the previous three-year period? Will the Minister indicate the number of occupational health and safety inspections carried out in 1987-88?

The Hon. J.H.C. Klunder: One person, a Coober Pedy miner, was fatally injured in a mining accident during 1987-88 when the roof of underground workings collapsed. There were 109 accidents, involving a loss of three or more working days, which were reported to the Chief Inspector of Mines. The breakdown of that figure is as follows:

Harmful contact	19
Slipping or falling	28
Falling materials or objects	13
Mobile plant and equipment	15
Machinery (stationary)	7
Winding, hoisting, cranes	1
Rock falls	3
Electric shock and burns	2
Suffocation and noxious gases	1
Materials handling	13
Entrapment	1
Other	6
	109

Comparing those statistics with the previous three years, the figures are as follows: in 1984-85, there were three fatal accidents and 123 reportable accidents; in 1985-86, there was one fatal accident and 124 reportable accidents; in 1986-87, there were three fatal accidents and 111 reportable accidents; and in 1987-88, as I said, there was one fatal accident and 109 reportable accidents.

With regard to inspections made by the Department of Mines and Energy with respect to occupational health and safety to ensure compliance with special lease conditions and for environmental rehabilitation, the figures are as follows:

Occupational Health and Safety	938
Tenure	431
Rehabilitation	302
	1 671

Comparing those with inspections in the previous three years, it can be seen that, in 1984-85, there were 1 325 inspections; 1985-86, 1 475 inspections; and in 1986-87, 1 527 inspections, so there has been a steady growth in the number of inspections over the years. It might also be useful to have some idea of the scientific measurements taken in mining and quarrying operations, as follows:

Dust	316
Noise	1 194
Radiation	760
Toxic Fumes	3
Wet and Dry Bulb Temp. (Humidity)	24
Free Silica analyses	138
	2 435

That compares with 840 measurements for 1985-86 and 1 259 for 1986-87.

The Hon. R.G. PAYNE: My next question concerns page 468 of the Program Estimates in relation to the 1987-88 specific target and objective that assessment of ground water resources in the Oak Valley area (Maralinga lands) and for the Wilmington town water supply was undertaken and assistance was provided in establishing water supply wells in the Pitjantjatjara homelands. I have had a long association with the Pitjantjatjara homelands and I wonder whether the Minister or his advisers can provide details with respect to the water supply wells that have been provided in those lands.

Mr Johns: Over a long period, the department has made studies of water occurrence in the arid lands. With regard to the areas referred to, the department has made, and is continuing to make, recommendations on drilling for water supplies for whatever use, domestic where possible. Recognising the aridity of the area, there is a problem in providing water not only of adequate quality but of adequate supply.

Although I have no figures to establish how many wells have been drilled, I can assure the honourable member that we have had a certain amount of success in providing water supplies in areas where previously one would have wondered whether water was obtainable.

The Hon. R.G. PAYNE: At page 471 of the Program Estimates, an objective for 1988-89 is stated, as follows:

Continue investigation of gold deposits—Tarcoola, Earea Dam, Glenloth, Lake Labyrinth, Royal Charlie, Nillinghoo and Mongolata.

During my term as Minister, I had the opportunity to visit at least some of those localities and, although one does not exactly trip over gold in those areas, there is some gold there. Some of the gold is hard to get out of the ground, but the fact that investigations are to be continued into these gold deposits indicates a degree of optimism and faith that South Australia can become a more significant gold producer than it has been in the past. In this State we have had a long association with gold mining over a long period, although gold production has been small. Why is it intended to continue to investigate these deposits?

The Hon. J.H.C. Klunder: One of the things that interests me when I examine statistics of gold recovered in the various States is that, whereas Western Australia produced 78 000 kilograms of gold last year, South Australia produced only 1.5 kilograms. So, there is a great difference in the gold availability of those two States. Obviously, we have prospects of much higher gold recovery this year and in future years because of the existence of Roxby Downs and Poona mines. I will call on Mr Wildey to explain why these investigations are to continue.

Mr Wildy: Compared to Western Australia, South Australia has not had much success in gold mining, but private enterprise has shown much interest in exploring for gold throughout Australia and naturally we want to capture some of that money for South Australia. Therefore, as part of the program to do that we wanted to ensure that we, as a department, had all the information possible about all those mineralised occurrences containing gold throughout the State. So, there is an ongoing program to document and survey those areas in detail, so that we have a sensible amount of information with which to attract and encourage exploration companies to come to South Australia to search for gold.

That is why we continue to detail this knowledge about those deposits. Who knows? We may well come up with one yet. There has been success in areas such as Tarcoola, which at present is a source of much exploration by Broken Hill Company Pty Ltd and other companies. In the longer term we can be mildly optimistic that something good will come from the search that is being conducted there.

The Hon. H. ALLISON: At page 469 of the Program Estimates under 'Energy Planning—Natural Resources', there appears the following objective for 1987-88:

Power Station Selection Task Force continued to evaluate long-term options.

Is one option being considered the phasing out of the Snuggery substation as a result of the South Australia-Victoria link or will that substation be retained as an emergency supply for the South-East in the event of the State supply being cut off?

The Hon. J.H.C. Klunder: I have not an immediate answer for the honourable member as to the future of Snuggery. I will obtain a considered reply.

The Hon. H. ALLISON: When the Snuggery power station was commissioned by the then Minister of Mines and Energy (Hon. Hugh Hudson), I noted the use of three 747 jumbo jet engines, either Pratt and Whitney or Rolls Royce, which ran on aviation kerosene. That fuel was relatively cheap then, but subsequently it has become one of the

dearest sources of power generation. With the discovery of gas at Katnook, would one alternative be to examine whether those three engines could be converted to use natural gas rather than aviation kerosene?

The Hon. J.H.C. Klunder: I assume that ETSA would have considered that aspect, but I am happy to draw the matter to its attention in case it has not yet done so.

The Hon. H. ALLISON: At page 470 of the Program Estimates, reference is made to the investigation of coal deposits and their assessment for the establishment of coal-fired electricity generating stations and possible coal gasification. Does part of the department's brief include consideration of the serious issue of the greenhouse effect? Brown coal is being burnt in South Australia whereas anthracite, which is about 98 per cent carbon, is a smokeless coal generating great heat. Further, black bright coal contains little water and is a relatively smokeless fuel. By comparison, brown coal is a relatively dirty source of energy and much more must be burnt than is the case with anthracite and black bright coal.

So, there is a possibility that the consumption in the Southern Hemisphere of large quantities of brown coal may contribute more than one might otherwise have imagined to the greenhouse effect and also to the acid rain condition where carbonic acid, sulphuric acid and carbon dioxide have implications in respect of the essential greenhouse effect exhaust emission. Does the department's brief extend to an assessment of the impurities, and does it advise the Electricity Trust of the desirability or otherwise of having CO² scrubbers and flue gas desulphurisation installations on its yet to be constructed power stations?

The Hon. J.H.C. Klunder: The department and ETSA are concerned about the high sulphur and other impurity levels in the various forms of South Australian coal. A large part of the thrust towards the new technologies of fluidised bed and circulating fluidised bed is directed at being able to use those fuels in such a way as to not have those impurities go into the atmosphere afterwards. I will ask Mr Jansson to give a more considered answer to the honourable member's question.

Mr Jansson: It is true that the brown coals in South Australia contain large amounts of impurities (such as sulphur and salt) and a lot of moisture compared to Eastern States' coals. It is also true that the amount of carbon dioxide that is released from the burning of brown coal is more than that released from the burning of black coal. This is because of the high moisture content of brown coals which often contain in excess of 60 per cent moisture and more heat must be generated to drive this moisture off. However, the amount of carbon dioxide produced to generate the same amount of electricity from brown coal would not be as much as 200 per cent of the amount of carbon dioxide produced from black coal. The question of the greenhouse effect would be addressed in more detail in any environmental impact statement to justify the using of any of these coals.

Mr HAMILTON: What savings does the Government achieve through the operation of the Government Energy Management Program?

The Hon. J.H.C. Klunder: The Government Energy Management Program has been exceedingly successful. The total estimated savings for the year exceed \$8 million. Under this program departments and agencies are able to retain a portion of their savings for other uses; so, the direct budget savings to the Treasury for the year 1987-88 were \$3.3 million, and this figure represents the actual moneys retained by Treasury that would otherwise have been allocated to departments and agencies to fund their energy bills.

Cumulative savings are estimated to be about \$23 million over the three years of the program. The direct budget savings to date are about \$6.2 million, and this has been achieved at the direct cost to Government of about \$1.5 million over the past three years. These savings have been achieved through improvements to lighting, heating, ventilation, air-conditioning, plant and building facilities; improved lighting and control of equipment in processing plants and workshops; improved control and optimisation of vehicle use; and modified composition of passenger vehicle fleets.

Mr HAMILTON: To what extent are the recommendations of the working party to review energy pricing and tariff structures being implemented? How does the current gas price payable to the Cooper Basin producers compare with the price payable in the past year, and what movements in the price are anticipated in future years?

The Hon. J.H.C. Klunder: In June this year State Cabinet approved the implementation of the working party's recommendation from the time of the next ETSA and Sagasco tariff increases. The approval was given after a lengthy period of public consultation about the recommendations which were released for public comment by October 1987. Written submissions were received from 11 organisations or individuals concerning the working party's proposals and some alterations were made as a consequence of those submissions. ETSA and Sagasco tariff increases took effect in July and the restructured tariffs were introduced at that time.

The main features of these new tariff structures are that the tariffs are much simpler; a supply charge has been introduced rather than a minimum charge to most tariff classes; there has been a lowering of off-peak electricity rates, particularly for rural and industrial customers; and there has been a reduction in average electricity prices paid by small—that is, less than 2 500 kilowatt hours a month—industrial and general purpose customers. These restructured electricity and gas tariffs represent the first stage of a long-term development plan which seeks to simplify tariffs and relate them more closely to the cost of supply. The Office of Energy Planning will continue to coordinate the implementation of the tariff development plan.

The gas price payable to Cooper Basin producers was \$1.62 per gigajoule on 1 January 1985; on 1 January 1986 it was \$1.52; on 25 April 1987, \$1.60; and from 1 July 1988, \$1.73, which is equivalent to \$1.35 in January 1985 dollars. That means that the price in July 1988 was more than 15 per cent lower in real terms than the price in January 1985.

Mr HAMILTON: Is the South Australian Government addressing the issue of a long-term decline in national liquid fuel self-sufficiency and what investigations are being undertaken in order to secure South Australia's long-term energy supplies?

The Hon. J.H.C. Klunder: A recent report of the joint Commonwealth-States working group recommended the further encouragement of substitution of LPG for gasoline in automotive applications as well as short-term measures to compensate for Australia's declining self-sufficiency in liquid fuels. The absence of an original equipment LPG vehicle is an impediment to the wider use of automotive LPG because all cars have been converted to LPG rather than starting off as LPG equipped. Past efforts to market an original equipment LPG vehicle have not succeeded, but there is a body of opinion which considers that it may now be a feasible proposition.

Consequently, South Australia is pursuing, with other States and the Commonwealth, a proposal for a jointly funded study into the engineering and marketing require-

ment for so-called original equipment LPG vehicles. In particular, this study will determine whether such a vehicle could be marketed successfully and the conditions under which that could be achieved. It is proposed that a study be undertaken into this in the first quarter of 1989.

In regard to the second part of the honourable member's question, which dealt with the measures being undertaken to secure South Australia's energy supplies in the longer term, there are a number of these, and they fall into several time frames. In relation to the short term—the zero to 10 year time frame—there is the investigation of the availability and price of natural gas from the South Australian Cooper Basin and from interstate—from Queensland, Northern Territory and Gippsland. There is also the natural gas task force, which was established in mid-1986, and that is currently negotiating with potential suppliers to secure competitive contracts for future gas supplies for South Australia, such that adequate continuing coverage of contracted gas is maintained.

The Government is committed to the construction of a third 250 megawatt unit at the Northern Power Station, and mining studies for Leigh Creek have been undertaken to optimise the cost of mining the coal, in the long and short term, while taking into account the fact that additional Leigh Creek coal could be required to fuel further power stations in the future. The review of interstate coal prices, interconnection and assessment of the economic impact of importing interstate energy is continuing.

In relation to the medium term—which is the 10 to 20 year time frame—a joint evaluation of the Lochiel and Sedan coalfields has been undertaken to determine which coalfield would result in the lowest cost power if used in the 500 megawatt conventional power station—which I presume will be commissioned some time next century. That evaluation is due to be completed by the end of this year. Circulating fluidised bed combustion testing of both Bowmans and Leigh Creek coal is being undertaken for potential application in the late 1990s or early next century, only for electricity generation. The test results, design and cost data derived from the tests can be applied to Sedan and/or Leigh Creek coal as well, based on the knowledge of those coals.

Coal gasification of Bowmans coal is being assessed for potential application next century, for electricity, combined cycle or for synthetic fuels or coal chemicals. It is expected that the results will apply to Lochiel coal also, and perhaps to other coals. In the longer term, it becomes a bit of a crystal ball exercise, but in the 20 year plus time frame, I suppose the best one can do is to keep an overview of all the possibilities, particularly in the fields of renewable energy, nuclear energy, in both fission and fusion situations, magneto-hydrodynamics, and so on. It really is a matter of keeping an eye on the research, rather than on anything else. An analysis of the potential needs and energy sources in the context of a range of external factors that will apply—and we have already dealt with the greenhouse effect—will also be undertaken.

The Hon. E.R. GOLDSWORTHY: In relation to the interstate power line grid, I refer to the following report in the Southern Regional Extra Edition of the *Stock Journal*, under the heading 'Massive power line payouts':

ETSA is gearing up for a massive compensation payout to landowners for damage caused by the construction of a power line. The line, from Tailem Bend to the Victorian border, has reached Black Range, but wet conditions have slowed the progress to a crawl. ETSA has already paid councils road damage compensation of \$6 000 out of a budget of \$30 000 for that purpose.

But the greatest payout will go to landowners, with the level of damage increasing as the teams encounter waterlogged ground. Farmers around Keith are incensed at the operation of the construction company, with vehicles being towed through paddocks

by bulldozers. The farmers are seeking compensation for monetary losses resulting from damaged fences, soiled stock and mistreatment, as well as from intangible factors like soil erosion and degradation.

And that report continues on and on. I was interested to receive today ETSA's regular bulletin on the Tungkill-Cherry Gardens power line. I think I have also seen some bulletins on the South-East. However, no mention has been made of the matters raised in that press report. Does the Minister have any information on the damage being done in these wet conditions or on the likelihood of compensation having to be paid to these people involved?

The Hon. J.H.C. Klunder: As the honourable member may be aware, his colleague from Victoria brought a deputation to the previous Minister of Mines and Energy. Issues dealing with compensation and problems that the farmers were experiencing were quite extensively canvassed at that meeting. I understand that ETSA believes that when it causes damage it should compensate for that damage.

The Hon. E.R. GOLDSWORTHY: It has not done anything yet.

The Hon. J.H.C. Klunder: Apparently, ETSA has contacted property owners who have made allegations and also other people who are likely to be seeking compensation to explain that any damage caused during the construction of the line will either be rectified by ETSA to the property owner's satisfaction or compensation will be paid to allow property owners to rectify the damage themselves.

Furthermore, it was agreed that on completion of all construction activities, easement officers will contact property owners to finalise compensation for any damage to the property and any land management difficulties resulting from the damage. I understand that some claims for compensation have been received and processed. Compensation has been paid for the period from November 1987 to June 1988 for damage to crops, a water pipe, a vehicle, and for stock losses. My latest information is that no claims have been received since June 1988 but that property owners have indicated that claims will be made. ETSA will continue its normal practice of contacting property owners prior to each new stage of work on a property and it will be available during all stages of the construction to discuss any aspect of the construction work.

The Hon. E.R. GOLDSWORTHY: I asked the Minister whether he knew what it was going to cost. I indicated that \$30 000 had been allocated for compensation. Part of my question was: does the Minister have any estimate of the cost and, if not, will he get it for me in these voluminous reports that are to come by 7 October?

The Hon. J.H.C. Klunder: I do not have any idea of what future claims are likely to arise or what future costs will be engendered. I imagine that ETSA would have made a sum available for this purpose. If the honourable member wants to know what that sum is, fine, but clearly if that amount is exceeded it will be paid.

The Hon. E.R. GOLDSWORTHY: The Minister is either not listening or avoiding the question. I have just said that the sum provided is \$30 000. That is clear. I am asking the Minister to get an estimate and let me know when he sends back those replies by 7 October—if that is the date—as to what it is going to cost.

The Hon. J.H.C. Klunder: Is the honourable member asking me with regard to past claims which have been processed or in relation to future claims?

The Hon. E.R. GOLDSWORTHY: The total—those settled and those not settled—an estimate.

The Hon. J.H.C. Klunder: If the honourable member is asking for an answer about claims which as yet have not been settled, I am a bit amazed.

The Hon. E.R. GOLDSWORTHY: You were able to work your up-front \$5 million for the bushfires, and I would have thought that this was a relatively simple job compared to that.

The Hon. J.H.C. Klunder: I have indicated to the Deputy Leader that if ETSA has a figure that it has set aside for future claims, I will get him that figure.

The Hon. E.R. GOLDSWORTHY: In the appendix to the 'Budget and the Social Justice Strategy' there is a run-down of the initiatives to be implemented throughout the State to alleviate social injustice. On page 31 under 'Mines and Energy' it states:

Energy information is to be supplied to disadvantaged groups, rural communities and schools.
Energy emergency relief.

Obviously, these items would not appear if there was not some assessment of need. Will the Minister list the disadvantaged groups to be assisted under the program?

The Hon. J.H.C. Klunder: I am not sure that that is based on groups. The system is aimed at helping individuals who run into one-off difficulty with the payment of their electricity bill. That is a totally different matter than providing across-the-board relief for groups such as the electricity concession for pensioners.

The Hon. E.R. GOLDSWORTHY: Reference is made of rural communities, disadvantaged groups and schools. Which ones are they, and how much will they get?

The Hon. J.H.C. Klunder: From memory, the Deputy Leader is putting two such programs together.

The Hon. E.R. GOLDSWORTHY: I want the detail.

The Hon. J.H.C. Klunder: There are two separate headings and, as I suspected, the Deputy Leader was running them together. One heading deals with information to those groups and the other deals with energy emergency relief, which is to individuals.

The Hon. E.R. GOLDSWORTHY: I promised the Southern Region of Councils that I would raise the matter of alternative energy use. Its letter headed 'Harnessing and Use of Methane Gas' states:

I am transmitting details of the Victorian Government's *Cogeneration and Renewable Energy Incentives Package*. I am also sending an extract from a paper entitled 'Management of Landfill Gases—Generation, Method of Collection, Potential Uses' . . . , senior engineer with the Sydney Metropolitan Waste Disposal Authority. Apart from some details on projects being undertaken in New South Wales, the paper illustrates a far more active role by the New South Wales Government than is the case here—

he means South Australia—

combining with the Victorian SEC example. It appears to me that, while the South Australian Government will fund bodies like SENRAC, they are not currently offering assistance to individuals and companies which need capital to explore and refine the practices required to extract and use methane from open landfill sites. Our site, for example, has a life as a dump of some 30 years, while estimates of its useful life as a gas producer go 20 years beyond that.

They are looking at 50 years. They then point out that Falzon Bricks, a company operating close to an area known by the Minister, developed a process using methane from a rubbish dump for burning brick kilns. Can the Minister advise me of the program for such energy use? Will he throw light on the claim by this group that South Australia lags behind the Eastern States in harnessing this source of alternative energy?

The Hon. J.H.C. Klunder: Certainly, the Victorian Government has put forward a very attractive package for co-generation and is encouraging co-generation. I would like to think that the Deputy Leader, with his political philosophy, would not be happy with co-generation unless it was cost effective. The situation is that, while ETSA has the capital equipment and has to have at least a spinning reserve

in order to take on board co-generation, the difference in cost to ETSA is only the cost of the extra fuel required to have the spinning reserve on production or not on production.

That means that the differential in cost which ETSA would be able to offer to co-generators is relatively small and may not return a reasonable amount for their efforts. Certainly, in the case I looked at about two weeks ago that was the situation; the person who wanted to do the co-generation could not provide the capital equipment and make a reasonable profit out of the cost that ETSA would save by having him on board. There is a further problem that no-one is entirely sure how reliable new supplies are and consequently ETSA cannot afford to drop its supply capacity on the basis of there being other people in the system who can co-generate. I have been told that not much can be added to that answer, and so I will not ask officers to comment further.

The Hon. R.K. ABBOTT: One of the department's objectives for this financial year is the coordination of approvals of the Poona prospect, a new copper/gold development in the Moonta area. When will the new copper/gold mine at Poona be in production? Can the Minister advise of the size of the Poona prospect?

The Hon. J.H.C. Klunder: The copper/gold mine at Poona, five kilometres north of Moonta on the Wallaroo road, is expected to be producing copper/gold concentrate by the end of October this year. The history of that is instructive and I will go some way in to it. The present orebody was discovered by WMC/Norgold in 1985 using geophysical exploration methods, followed by auger, percussion and diamond drilling. The joint venturers proved up 206 000 tonnes of 6.45 per cent copper and 1.08 g/tonne gold. In June 1987 the joint venturers decided to sell their interest in the Moonta area.

The AMALG Syndicate was the successful bidder and has since taken in Melita Mining NL as a joint venturer. The joint venturers applied to the former Minister on 3 May 1988 for a mining lease, enclosing a copy of the definition of environmental factors. Environmental clearance by the Deputy Premier and Minister for Environment and Planning was given on 17 May 1988. The mining lease was approved on 3 August. At the present time, 8 metres of overburden has been removed and the top of the orebody has been exposed. Construction of the concentrator at Kadina is progressing to schedule. The foundations are complete and the structural steelwork and bedding of crushers, pumps and cyclones, etc., are continuing.

When the mine comes into production in October only five months will have elapsed since application for a mining lease. To obtain all approvals (including environmental clearance), develop the mine and construct and commission the concentrator all within five months compares very favourably with approval mechanisms in Victoria and New South Wales. With electrolytic refined copper production starting at Roxby Downs in September, we have the rather astonishing situation of two new South Australian copper mines coming into production within two months of each other.

The Hon. R.K. ABBOTT: Has the annual report on the performance of Wellfield A been received from the joint venturers in the Olympic Dam project and, if so, how is the wellfield performing?

The Hon. J.H.C. Klunder: The report has been received and vetted by officers of the department. Performance is actually better than predicted in the original environmental impact study. Production rates have been increased, reaching a maximum of 11.6 megalitres per/day in February

1988, and are currently in the range of six to nine megalitres per day. The centre of withdrawals has been moved towards the north-west with the commissioning of more production wells. Drawdown increased by 3.5 metres at a distance of 5 kilometres from the nearest production well during the peak production period. There have been no dramatic reductions in spring or bore flows which can be attributed to increasing production from the wellfield to date.

The Hon. R.K. ABBOTT: What is the status of geological mapping in South Australia?

The Hon. J.H.C. Klunder: It is an interesting situation. During 1987-88 a special geological map of the Gawler Ranges region was published and five other maps were printed or were awaiting printing as at 30 June. The Gawler Range map and the Yardea 1:250 000 scale map, which has just been printed, both cover an area of ancient volcanic rocks about 1 600 million years old. Since publication of the Gawler Range map, BHP has taken up two large exploration licences over these volcanics to explore for gold, and several other companies have shown interest with at least one company seriously considering exploration. Both the Gawler Range and Yardea maps and the recently completed Kimba and Elliston 1:250 000 geological map sheets are within the Eyre Peninsula aeromagnetic survey area and will complement interpretation of that data. A drill hole completed in June near lake Newland (just north of Elliston) will also aid in the aeromagnetic interpretation.

In regard to other regions, the Olary map sheet was completed ready for publication and field work has been completed on Kingoonya and Curdimurka. A four-day helicopter survey was undertaken on Barton in largely inaccessible sandhills on the margins of the Great Victoria Desert, and that survey achieved in four days what would normally have taken several weeks in specially-equipped vehicles.

Including the abovementioned geological map sheets but excluding those awaiting printing, 15 maps are being worked on by the regional geology and drafting branches. Forty-seven 1:250 000 geologic maps have already been published over the past 30 years or so leaving only one large region that has not yet been mapped. That region is the Nullarbor and Great Victoria Desert areas of the far west of South Australia and planning has begun to tackle that region in the next few years. It must be realised, however, that geology is a dynamic science so that in addition to mapping these unmapped areas, a considerable effort must be put into revising or updating many of the old maps.

The Hon. H. ALLISON: My question concerns the Wind Energy Program, interim report and methodologies established (page 469). Can the Minister say how this program is progressing and give some idea of possible locations for the establishment of wind energy generation plants? Can he give some indication of whether the noise factor has been overcome?

The Hon. J.H.C. Klunder: The Wind Energy Program commenced in mid-1984 as a joint program between the Department of Mines and Energy, ETSA and the Bureau of Meteorology to collect wind data at a number of sites across the State and to enable to coordinated evaluation of the potential yields and particularly the expected economics of wind-based electricity generation. The program has been supervised by the Office of Energy Planning and ETSA.

Following a detailed review of potential sites across the State, the first monitoring units were installed on Fleurieu Peninsula in mid to late 1985 as a pilot program, and additional units were progressively added in late 1985 and early 1986. About half of these sites are currently supplied with electricity from the ETSA distribution system. The

remainder are near remote townships, communities, etc., currently supplied with electricity by diesel generator sets. Based on early results from the monitoring to the end of 1986, the program committee selected 10 sites (five remote, five in the area covered by the ETSA grid) and carried out a detailed evaluation of the economics of generating electricity from wind energy at each of these.

The results came in a report, which was completed in June 1988. For grid sites, computed delivered energy costs ranged from just under 7c/kWh to 14c/kWh. The remote area costing study gave delivered energy costs ranging from 17c/kWh to 38c/kWh, with the variation reflecting the differing annual average wind speeds between remote sites. Comparisons are made in the report and these show that the cost of the effective electricity delivered to the grid is about double the value of conventional generation systems and in remote areas the costs are 25 per cent higher than diesel generated electricity in the best case (Coober Pedy) and about 35 per cent in others.

In broad terms the report concluded that, at this stage, it appears unlikely that electrical energy generated from wind and delivered to the ETSA grid will be competitive with energy delivered by a conventional power station for the foreseeable future. However, for an isolated remote area electricity supply system it may be competitive in the near future with energy delivered by a diesel generator in some situations. In future, expecting a medium-term rise in the cost of oil, that would mean a rise in the cost of diesel and, consequently, one would expect that wind generation in remote areas would gradually become more and more competitive with the alternative cost of providing diesel generated power.

The Hon. H. ALLISON: Has the noise factor with wind vanes been overcome? If it is just a minor issue, it is not really relevant at this stage.

The Hon. J.H.C. Klunder: No, it is not relevant at this stage.

The Hon. E.R. GOLDSWORTHY: The Minister would have received a copy of a letter, as I did, from Eco-Tech inquiring when the results of the South Australian wind energy monitoring program are to be released.

The Hon. J.H.C. Klunder: I expect that it will take about a month.

The Hon. E.R. GOLDSWORTHY: Page 467 reveals that one of the specific targets is to ensure that radiation safety measures comply with the relevant Acts and codes of practice. What is the precise role of the Health Commission at the Roxby Downs mine? My understanding of the arrangements was that Mines Department safety inspectors will monitor mine safety and that the Health Commission's role will be behind the scenes, to check radiation badges and that sort of thing.

The Hon. J.H.C. Klunder: Before passing that question to an officer to answer, I welcome the Deputy Leader to that situation where he is now asking for information that is available from people who are present.

The Hon. E.R. GOLDSWORTHY: You lead with your chin, you dope. If the other people had been here, they would have been able to give the information. What a stupid and provocative comment.

The Hon. J.H.C. Klunder: The only reason I am leaving this is that I am too polite to interrupt the Deputy Leader in mid-interruption.

The CHAIRMAN: Order! I invite the Committee to come back to the Estimates before us. The Deputy Leader has asked a question and we are awaiting a reply.

The Hon. J.H.C. Klunder: I will bow to your ruling, Mr Chairman, and not reply to the latest round of interjections from the Deputy Leader—

The Hon. E.R. GOLDSWORTHY interjecting:

The Hon. J.H.C. Klunder: —although I am reluctant to do so and am a little irritated that the Deputy Leader is interrupting even as I am bowing to your ruling.

The CHAIRMAN: Order! The Chair is grateful that the Committee is now coming back to the Estimates.

The Hon. E.R. GOLDSWORTHY interjecting:

The CHAIRMAN: It is a pity that the cane has been disbanded. That is all I can say.

The Hon. J.H.C. Klunder: If the Deputy Leader would like me to keep quiet until 5 o'clock so that he may continue interrupting, I am willing to do so, but I find it a little irritating to be bowing to your ruling, Mr Chairman, and finding that I am being interrupted even now by the Deputy Leader.

The CHAIRMAN: Order! I ask the Deputy Leader and the Minister once more to come back to the Estimates before us.

The Hon. J.H.C. Klunder: In that case, I will ask the relevant officer to deal with the question.

Mr Fenton: The short answer is that the Department of Mines and Energy officers have the direct day-to-day control. However, there are basically three Acts involved in the Olympic Dam radiation assessment. First, there is the Roxby Downs (Indenture Ratification) Act together with the various radiation codes that must be complied with. Secondly, the Mines and Works Inspection Act controls all operations on mines anywhere in the State, including the Olympic Dam mine. Thirdly, the Radiation Protection and Control Act is administered by the Minister of Health. The codes of practice refer to the appropriate authorities. For instance, the health code is administered through the Department of Mines and Energy and the South Australian Health Commission.

By administrative agreement those have all been sorted out but, basically, wherever a matter relates to the health of a person, the agreement of the Health Commission must be obtained before approval is given under the relevant parts of the code. So, if a Part provided that the Minister of Mines and Energy must approve a monitoring program, I would have to submit it to the Health Commission for agreement and, if it is agreed to, we could give approval.

In the terms of the Radiation Protection and Control Act, following the recent amendments the company must have a licence to operate and that licence is under the sole control of the Health Commission. However, regarding day-to-day operations, the radiation aspects are dealt with by me in Adelaide, by the Senior Inspector of Mines, and by the Senior Scientific Officer at Olympic Dam. They do all the monitoring work necessary and send reports to me and copies of those reports to the Health Commission.

Health Commission officers visit Olympic Dam and monitor the situation at infrequent intervals. They are the overall check on the health aspects. If any major monitoring programs are to be conducted, Health Commission officers will work with our people. This procedure seems to be working satisfactorily. We have the full cooperation of the Health Commission, especially the Senior Health Physicist (Mrs Jill Fitch). They are all working well to ensure that the company complies with the code, which is the situation at the moment.

The Hon. E.R. GOLDSWORTHY: Regarding the licence fee to be paid before operations at the mine can go ahead, what sort of licence fee has been paid in the past to license a mine to operate, and what is the background to the licence

fee payable by the company in this case as a licence to mine in terms of the legislation recently passed? At that stage, the Minister would not say what the fee was, but it has since been made public. Is the fee in line with past fees charged to companies in respect of their mining operations? Bodies such as the Conservation Council say that we have been done in the eye in this regard.

Mr Hill: The licence fee has involved a fair amount of negotiation between the company, the Health Commission, the Department of Mines and Energy, the Crown Law Department, and the Premier's Department. The fee has been fixed at \$100 000 a year and there is an escalator provision based on the non-farm escalator published in the eastern States. This means, in effect, that each year the licence fee will be increased by an amount that seems equitable both to the Government and to the joint venturers. The size of the fee is considerable because of the importance that is placed on ensuring that the company pays a fair sum for the work that is being done by the Government to supervise a complex mining and metallurgical process.

The Hon. E.R. GOLDSWORTHY: How does the fee compare with the fee charged in the past for the commencement of mining operations?

Mr Hill: This licence fee is charged under the Radiation Protection and Control Act, not under the Mining Act. That is the main difference between it and earlier licence fees.

The Hon. E.R. GOLDSWORTHY: So we are breaking new ground?

Mr Hill: Yes.

The Hon. R.G. PAYNE: At page 470 of the Program Estimates, under '1987-88 Specific Targets/Objectives', the following objective appears:

Final draft petroleum regulations have been circulated to industry for comment.

That is not listed as a target for 1988-89. What stage has been reached with respect to the proposed petroleum regulations?

The Hon. J.H.C. Klunder: I will ask Mr Laws to respond to that question.

Mr Laws: The new petroleum regulations have been drafted to replace the existing ones which date back to 1970. The draft was released to industry in the middle of last year. Negotiations with industry, which included the Cooper Basin producers, the Australian Petroleum Exploration Association (as the industry representative) and the Department of Environment and Planning, took some time. One of the reasons for this was that industry throughout Australia has problems in transporting equipment and machinery from State to State because of different regulations in each State.

The South Australian initiative to bring in new regulations was seen as a good time to establish uniformity of regulation between the States, so that regulations in one State were not inconsistent with those of another State—a situation which hampers industry in transporting equipment across State boundaries. For that reason the negotiations took longer than normal; however, they are now complete and the regulations are in final draft form.

The Hon. R.G. PAYNE: Have the other States been involved to the extent that they are satisfied with the South Australian draft petroleum regulations?

Mr Laws: All States, together with the Commonwealth Bureau of Mineral Resources, have been consulted on the regulations, and they have been modified to suit interstate circumstances. These new draft petroleum regulations will hopefully form the basis of a uniform set of regulations across Australia. That is not to say that regulations in other States will not be different because in some States matters which are covered by petroleum regulations are covered

under different Acts and some States have different regulations with respect to production and reporting requirements. However, regulations for drilling and seismic equipment will be as uniform as possible.

The Hon. R.G. PAYNE: On page 470 of the Program Estimates one of the targets for 1988-89 is the assessment of South Australian oilfields for enhanced oil recovery. The scheme which comes to mind is the Tirrawarra field which involved the possibility of 3 million barrels of oil if the scheme functioned fully and successfully, involving the use of ethane being pressurised into reservoir locations to further produce oil from the field mentioned. It is a sensible and forward thinking step for the department to assess other fields for enhanced oil recovery because the State stands to benefit from any royalties which result from additional production.

The Hon. J.H.C. Klunder: This is taking place at the Tirrawarra and Moorari oilfields. Tirrawarra is the largest field in the State and contains 13 915 000 cubic metres or 87.5 million barrels, 20 per cent of which is recoverable under primary depletion. The smaller Moorari field contains 1 814 000 cubic metres or 11.4 million barrels with a similar recovery effect under primary depletion. In 1984 a pilot gas injection scheme was initiated to test the effectiveness of pressure maintenance and admissible process in the Tirrawarra sandstone. These tests were deemed successful as production declines for offtake wells were arrested with the introduction of gas injection. In the light of this success the scheme has expanded so that presently there are five gas injection wells and 19 offtake wells on Tirrawarra; with one injector and four offtake wells on Moorari. Expansion in the near future will see the Tirrawarra No. 60 well converted to an injector, thus introducing a further three offtake wells into the scheme.

Under this development scenario Santos expects that a further 1 573 000 cubic metres (or 9.9 million barrels) are recoverable due to the implementation of the enhanced oil recovery project. This will mean that the recovery of oil will be increased from 20 per cent of the primary depletion to 35 per cent under the EOR scheme. Patchawarra central separator gas has been used as injection gas since the commencement of the project. Since May 1987 ethane gas has been used as the predominant injection gas. This has served to relieve pressure on the Moomba/Lower Daralingie bed storage reservoirs. However, unless otherwise approved, ethane injection is to cease on 31 December of next year.

It is estimated that the production of 210 000 cubic metres (or 1.32 million barrels) to the end of 1987 was attributable to gas injection. In this time 332 million cubic metres (or 12 BCF) of Patchawarra central gas and 110.7 million cubic metres (or 4 BCF) of ethane was injected. The Tirrawarra EOR scheme is the first usable gas project in Australia.

The Hon. E.R. GOLDSWORTHY: Page 470 of the Program Estimates states:

Decreasing access to land available for petroleum and mineral exploration and development.

A letter from the Chamber of Mines and Energy says in part:

The Chamber of Mines and Energy is concerned about the current rate of mineral exploration in South Australia.

It goes on to talk about the time taken to develop Olympic Dam, and then states:

Exploration drilling and other activities in the State have fallen each year since 1981. Applications for exploration licences made in 1980 over parts of the Pitjantjatjara lands have still not been determined. Some months ago, the chamber discussed with the department changes to the exploration licence provisions of the Mining Act to encourage more active exploration and finalisation

of EL applications over Aboriginal land with the Minister. No positive action has yet been taken on these matters.

I am simply asking: what is happening?

The Hon. J.H.C. Klunder: There are some restrictions on access to land in South Australia for petroleum-mineral exploration, brought about largely through the Aboriginal land grants and the expansion of the parks system. There are, of course, countervailing situations where there is a multiple land use through regional reserves, which has been pioneered here, so that more than one use of the land is able to coexist with other uses. I guess what the honourable member is indicating is a slowness of response by Aboriginal communities. I am unable to speak for them; I am only able to say that, yes, they are relatively slow to respond—presumably they have their own reasons for that, and certainly their experience with white people over the past 150 years has probably taught them a degree of caution. The various Aboriginal land rights Acts include some provisions for dealing with deadlocked situations once they are brought to the Minister's attention—but it has not yet come to that.

The Hon. E.R. GOLDSWORTHY: That really does not answer the question, but I will press on. What are the department's programs for 1988-89 for regional geological mapping, geographical surveys, and analysis of data supplied by exploration companies?

The Hon. J.H.C. Klunder: I think I have already, at least in part, answered that question, in terms of talking about the mapping that has taken place—in response, I think, to a question from the member for Spence on the status of geological mapping in South Australia. Is there anything in particular that the Deputy Leader wishes to know that has not been referred to already?

The Hon. E.R. GOLDSWORTHY: I want to know what the department's programs are in 1988-89 in these activities.

Mr Johns: I take it that the question relates to company regional mapping.

The Hon. E.R. GOLDSWORTHY: I shall read part of the letter that refers to this, as follows:

The Department of Mines and Energy can play a very active role in identifying new areas with exploration potential through regional geological mapping, geophysical surveys and analysis of data supplied by exploration companies.

And then other issues are referred to in the letter. I am asking about the department's programs in these areas for 1988-89.

Mr Johns: Further to the information that I supplied previously about the stages of departmental mapping, at this moment the activities of the department are centred on Eyre Peninsula, in particular. This includes not only geological mapping but the conduct of an airborne survey, which has just been completed. We expect that the results will be made available late this year or early next year. We consider that this will go a long way towards stimulating exploration on Eyre Peninsula. I am subject to correction on this, but, indeed, by virtue of the conduct of those activities, I believe we have granted about eight new licences in that region. This has not only encouraged interest in those areas but also the companies themselves have contributed to the conduct and the cost of the geophysical survey. Other activities are being promoted in the Aboriginal lands in an attempt to upgrade our knowledge of the geology of those lands, not only to stimulate company interest but at the same time to help the local people get a better appreciation of the prospectivity of those areas.

The Hon. E.R. GOLDSWORTHY: It is further indicated on page 470 of the Program Estimates that arrangements for the supply of natural gas for South Australia until 1992 have been finalised. I think that was done by the previous Minister. It further states:

Additional reserves must be established or secured for future requirements . . . Estimates of South Australian gas reserves completed using newly developed guidelines and algorithms.

So, having completed the estimates of gas reserves, what are algorithms, and what are the impediments to writing further contracts after 1992? Contracts up to 1992 were put in place by the previous Minister, and the 1992 date has been mentioned *ad nauseam* now for some years, but we are interested in what will happen after 1992 and what the algorithms have told us about the reserves.

The Hon. J.H.C. Klunder: I call on Mr Laws to respond.

Mr Laws: The passage in the program description about the arrangements for the supply of natural gas until 1992 having been finalised is a reference to the passage of the Natural Gas (Interim Supply) Act, some three years ago. Of course, negotiations are continuing with the natural gas task force to put new contracts in place, to replace that legislation. As at the beginning of this year, South Australia still had sufficient reserves to meet demand until that time. The new algorithms which were developed related to a lot of research work that was carried on under some NERDDC-funded work, which was referred to earlier.

These algorithms are, in fact, formulae which are used to interpret data from well logs, to make more precise calculations of the gas reservoir porosity, gas reservoir percentage fill of gas, and matters of that type. We did that work not only for the gas reservoirs of the Cooper Basin but also for the oil reservoirs of the Aramanga Basin. I guess, in summary, one could say that the work we did on the oil reservoirs suggested that the reservoirs of oil had been underestimated somewhat, while the work we did for the gas reservoirs suggested that there had been some small amount of overestimation, because of the algorithms which had been used previously.

The department has gone out and done much research to develop algorithms specific to the conditions existing in South Australia. The algorithms used before were more of a global nature that could be applied in any basin. We have developed ones that are more specific and we are using these refined algorithms to make better estimates of the reserves. We have had many discussions with Santos on specific fields and reservoirs. In some of those fields we agree on the reserves and on some we do not. The department is being a little more conservative in the method of estimation than Santos.

The Hon. E.R. GOLDSWORTHY: The Program Estimates suggest that the estimates of gas reserves have been completed. What reserves does the Minister believe that we have?

Mr Laws: Reserves of sales gas existing within the subject area accepted by the unit parties as being economically deliverable is 2 723 billion cubic feet as at 1 January 1988. In addition, there are other reserves of sales gas that have not yet been accepted within the unit which are present within the subject area and there are other reserves of gas in the Murta and Patchawarra south-west blocks in addition to that. They are relatively minor quantities compared to the volume of gas already accepted by the unit.

The Hon. E.R. GOLDSWORTHY: I refer to page 470 of the Program Estimates under 'Specific targets/objectives'. One of the achievements claimed is significant, and is as follows:

Estimates of South Australian gas reserves have been completed using newly developed guidelines and algorithms.

Is that something the department has done? Is it Santos's estimate? In my experience, it has tended to be optimistic. Were the calculations the result of the department's work?

Mr Laws: The department has completed a thorough review of all reserves in South Australia.

The Hon. E.R. GOLDSWORTHY: What do they add up to?

Mr Laws: As experienced in the past, our numbers are less than those of Santos. We are actively discussing it with Santos on a technical basis. We have had meetings to try to resolve the different estimates. We have succeeded in a number of cases where Santos has adjusted its reserves to be more in line with our estimates and in some cases we have still not reached agreement, and we have not yet published our quantum of reserves.

The Hon. E.R. GOLDSWORTHY: That is why I am asking. If it is completed, why should we not know?

Mr Laws: They have not been made publicly available. We hope to do that once we resolve some of our major differences over estimates with Santos. Going back to the passage of the Natural Gas (Interim Supply) Act when the department gave evidence on reserves, there is the same order of magnitude of reserves existing today.

Mr HAMILTON: How many petroleum tenements existed at 30 June 1988? What are the immediate future prospects for additional tenement activity?

The Hon. J.H.C. Klunder: I can give immediate answers about the number of tenements. Petroleum exploration licences number 14 and they cover an area of 325 797 square kilometres, approximately 32 per cent of South Australia's land surface. As to PPLs, we have 35 covering 3 234 square kilometres, about 3 per cent of South Australia's land surface. We have two PLs totally 1 619 kilometres in length (they are pipelines) and we have one EPP, which is the offshore tenement. It covers an area of about 5 414 square kilometres.

As to the immediate future prospects for additional tenement activity, I have to say that the industry is somewhat depressed at present due to low oil prices and the gradually improving US\$ exchange rate. Indications are that several licences will be surrendered in the near future unless suitable farming partners can be found.

The next renewal of PELs 5 and 6 is due in February 1989, when Delhi/Santos must surrender another 52 000 km². It is hoped that the area surrendered will be attractive enough to encourage other explorers to the Cooper Basin, or be taken up by Delhi/Santos as new licences with greater work commitments. PEL 8, adjacent to PEL 32 in the south-east where the Katnook discovery was made in December 1987, expires in April 1989. Indications are that the PEL 8 area will be applied for again, by some or all of the existing licensees as two or more separate licences.

The remainder of 1988 and early 1989 should see PPLs granted over the Sturt, Taloola, Tantanna and James discoveries. As to PLs, the gas pipeline from Port Pirie to Whyalla will be administered as an extension to Pipeline Licence No. 1.

Mr HAMILTON: I now have some questions about Roxby Downs. Given that production mining and milling has commenced at Olympic Dam and the population of the area has grown to about 3 000 people as anticipated for the initial project, what action has the Government taken to expedite the provision of a sealed access road to the project and to Roxby Downs? Also, Government buildings in Roxby Downs are distinctive with verandahs and breezeways reminiscent of an earlier era. Can the Minister explain why this design was selected, or is it just on purely aesthetic criteria?

The Hon. J.H.C. Klunder: Under the Roxby Downs indenture the State and joint venturers are responsible for half the cost of the new sealed road connecting Olympic Dam to the Stuart Highway and Pimba. The indenture required that the State begin construction of this road when requested to do so by the joint venturers and complete the

road as soon as practicable. The necessary action regarding the calling of tenders, etc., was taken by the State as soon as the formal request to begin was received from the joint venturers in late 1987. Actual construction commenced in April 1988. The current temporary gravel road will continue to service the major access route to the project and Roxby Downs during the construction period.

In order to expedite the roadwork and maintain close control over expenditure, a road group comprising representatives of the project managers (that is, the Highways Department), the joint venturers and the Department of Mines and Energy has been formed. The group meets monthly to monitor progress to date, discuss any problems and agree on any significant construction variations that may be necessary. The road is presently on schedule with some sections already having been sealed. Completion of the project is scheduled for April 1990. I receive papers from time to time that require me to reimburse the Highways Department for work it has done, and that is the way I keep up with what has been happening.

In relation to the architecture of the Government buildings, which is something that was brought to my attention on at least three occasions when I was in Roxby Downs last week, it is fascinating that a township that is basically two years old has in it Government buildings that tend to suggest the 1950s and the 1960s in their architecture and so provide a much longer visual history of the township than it actually has. There is no doubt that the people at Roxby appreciate this, and as well as the fact that it makes the township look as though it has roots and has been there for some time; that it was not hastily slapped together at the last minute.

Functional concerns were uppermost when the general architectural concept was decided for these buildings, but there was a clear regard to aesthetics and environmental sensitivity. For maintenance reasons, brick was chosen as the major construction material and features such as the wide shady verandahs and an overway between different sections of buildings (I think they are called breezeways) were constructed with the intention of providing some area of shade in what is a relatively hot climate.

The report I have says that these considerations have resulted in a visually pleasing and cost effective public and civic facility of which the State can be proud and which fully meets the State's obligations under the Roxby Downs indenture. Of course, it sets a standard for future buildings which, if followed, will ensure that Roxby Downs develops into one of the most attractive country towns in South Australia.

The Hon. R.G. PAYNE: I think that Mr Peter Hill deserves a mention, too. He was a member of the coordinating committee.

The Hon. J.H.C. Klunder: Indeed, he does. I am sorry I did not mention that.

Mr HAMILTON: What time schedule is envisaged by the Government for the introduction of electrical appliance energy labelling in this State?

The Hon. J.H.C. Klunder: That Bill passed through the House only recently with the support of the Opposition and an amendment from the Deputy Leader. This scheme will give effect to appliance labelling for refrigerators and freezers only in the first instance in South Australia. It is similar to appliance labelling programs that currently operate in Victoria and New South Wales. As a consequence of the Bill having been passed in August, ETSA and the OEP are now preparing regulations that will enable the labelling of refrigerators and freezers manufactured in this State to proceed from early 1989. These regulations are likely to be

similar to those that exist in Victoria, and the labels required in this State would be identical to those required for New South Wales and Victoria.

The Hon. E.R. GOLDSWORTHY: Earlier an officer told the Committee that the department's estimate of gas reserves is considerably less than that of Santos. When these reserves are agreed, does the Government anticipate writing a contract for a continued gas supply? Over what period does the Minister expect that that contract will run?

The Hon. J.H.C. Klunder: This is a matter for the National Gas Task Force and I ask Mr Noble to make some general comments.

Mr Noble: A contract for five years supply from 1 January 1989 is in the final stages of negotiation. It has taken a longer time than we had anticipated, and one of the reasons for that is the difference in the reserve's estimates between the department and Santos. We are not only looking at putting a new five year contract in place: we are also negotiating with the producers to put in place a heads of agreement arrangement that will have the effect of extending that contract as new discoveries are made. The producers are making a commitment via that heads of agreement contract to extend the initial five year contract with the aim of it being a 10 year contract by about 1992.

The Hon. E.R. GOLDSWORTHY: Page 469 of the Program Estimates indicates the continued evaluation of a possible petrochemical plant. I take it that that means that ethane, which is being stored for possible petrochemical use, will not be sold. What is the current position regarding that project?

Mr Noble: Comment was made earlier that ethane is currently being used in the enhanced oil recovery project, which has the advantage whereby the producers can make money out of using the ethane in that way but, at the same time, it can be retained because it is ultimately recoverable from that process. This has the advantage, from the Government's point of view, of retaining the ethane for the possible petrochemical plant that the honourable member mentioned. Discussions have continued for many years and are still continuing with at least two possible proponents that I am aware of but, at this stage, they have not advanced to a concrete, specific proposal.

The Hon. E.R. GOLDSWORTHY: Is the department doing any follow-up work on uranium enrichment, which was initiated in the 1970s by the Dunstan Government and was advanced during the period 1979 to 1982 to the point at which South Australia could have had an enrichment facility? Some members of the ALP want to discuss the issue while others do not, so the matter has been deferred to the next Federal conference. Has all of the work done by two Administrations come to nought or does the Government have a continuing interest in the subject? Alternatively, as part of the compromise to allow Roxby Downs to go ahead, has this proposal been sacrificed along with a couple of uranium mines? What is the status of uranium enrichment and what is the Government's attitude, if any, to it?

The Hon. J.H.C. Klunder: Uranium enrichment in South Australia is not Government policy but that is different from maintaining a watching brief on all aspects of the uranium industry. I do not have any objection to that and, as far back as 10 years ago, Premier Dunstan made it plain that, regardless of what happens in South Australia, the Government would always maintain a watching brief on the industry to ensure that the most up-to-date information is available to it.

The CHAIRMAN: There being no further questions, I declare the examination of the votes completed.

Minister of Mines and Energy and Minister of Forests,
Miscellaneous, \$61 200

Chairman:

Mr D.M. Ferguson

Members:

The Hon. H. Allison

Mr D.S. Baker

Mr M.R. De Laine

Mr G.M. Gunn

Mr K.C. Hamilton

The Hon. R.G. Payne

Witness:

The Hon. J.H.C. Klunder, Minister of Mines and Energy and Minister of Forests.

Departmental Advisers:

Mr P.M. South, Director, Woods and Forests Department.

Mr D.R. Mutton, Assistant Director, Support Services.

Mr R.F. White, Assistant Director, Commercial.

Mr D.J. Geddes, Assistant Director, Research and Development.

Mr R.M. Cowan, Assistant Director, Forest Operations.

Mr D.M. Curtis, Finance Executive, South Australian Timber Corporation.

Mr GUNN: I am pleased to have the opportunity of asking a number of questions about the operation of the Woods and Forests Department and the South Australian Timber Corporation and on one or two other related matters. Opposition members have a number of grave concerns about comments made in the Auditor-General's Report and we would not discharge our responsibilities as members of this House if we did not raise a number of these issues at length, because it is the taxpayers of this State who will be called upon to meet any shortfalls in future, and they are the ones who are supposed to benefit by the activities of Government. I draw to the Minister's attention comments on page 414 of the Auditor-General's Report, as follows:

For several years, I have expressed concern that, unless the corporation could significantly increase its revenue from investments, losses would continue to accumulate. That position still exists. At 30 June 1988, the accumulated losses of the corporation amounted to \$16.8 million, compared with \$3 million at the same time last year. That deterioration of \$13.8 million arose from—
an operating loss for 1987-88 of \$3.8 million;
an extraordinary item—a provision for a potential investment loss of \$10 million.

At the bottom of the page, he continues:

Taking into account the firm's most optimistic valuation (shortfall of \$900 000) and the corporation's total investment of \$10.3 million, there is an overall shortfall to the corporation of \$11.2 million.

What action will the Government take within the next financial year to rectify the problems of the Timber Corporation if the Minister believes that it cannot trade out of its difficulties? Is he prepared to take the hard decisions and wind up the operation in the interests of the taxpayers of this State?

The Hon. J.H.C. Klunder: Clearly, the operations of Satco have been disappointing over the past few years and I make no secret of that. Further, the operations of IPL New Zealand have been disappointing: it made a considerable loss

last year and was still making a considerable loss in the last month of the year. From memory, the loss in June was \$100 000, but the situation is changing. The officers of Satco, especially those dealing with IPL (New Zealand), have held for some time that a number of external conditions applied, such as the change in the New Zealand dollar rate of exchange against the Australian dollar, which made it difficult for IPL (New Zealand) to trade its way out of its problems.

Over the last month or so, however, the value of the New Zealand dollar has changed back to the value that it had some years ago and, if the officers of Satco and IPL (New Zealand) are to be given credence, that should make a big difference to the trading position of IPL (New Zealand), especially over the past few weeks. A time lag always operates in this sort of situation and it is interesting to note that IPL (New Zealand), having incurred a loss of about \$100 000 in the last month of the financial year 1987-88, showed a loss of only \$1 284 in July 1988, which represents a significant turnaround from the results of the previous month.

I have received only today the trading figures for August this year, and I indicate my appreciation of the work done in New Zealand by the people working there, especially those who got these figures out in time for the meeting of this Committee so that Committee members might have the latest information. During August a profit of \$48 616 was made, so the trading situation, albeit only over a short trend line, has changed remarkably largely because some of the external conditions that were operating against the organisation for some time have changed in a favourable direction.

So, if the honourable member asks me what the situation will be, I cannot give him a clear answer on what the next 12 months will bring. However, the prognostication looks much more favourable than it has looked for some time. Since IPL (Australia) is making a profit (and has been for some time) and IPL (New Zealand) is now hopefully fighting its way back into the black, the situation in 12 months time may not be as bleak as it has been hitherto.

Mr GUNN: What is the projected profit? Both in New Zealand and Australia, the organisation obviously has a budget to which it tries to work, and the administration must have projected figures on the likely profit. It is important that this Committee have some idea of the future direction of this organisation. In view of Satco's poor performance hitherto, has the Minister considered disposing of all or part of the corporation?

The Hon. J.H.C. Klunder: The option of disposing of assets that are not making a profit is one that is always open to the Government. However, I was reluctant to take that option before the corporation had a chance to prove its capacity under reasonable conditions. The return to reasonable conditions has, at least up to the moment, meant a return to profitability, although I am under no illusion as to the length of the task ahead in terms of offsetting some of the losses that have been made.

Earlier, the honourable member requested information on prospective trading results for 1988-89. IPL New Zealand has budgeted for a trading profit of \$700 000 for the year, whereas its trading losses over the past two years have been as follows: 1986-87, about \$4.5 million; and 1987-88, just over \$2 million. Again, the longer-term trend line, if one can trust those figures, tends to show that the organisation is making every effort to trade its way out of problems. In the past it has not had these favourable characteristics (for instance, a more favourable exchange rate) so the reduction of its trading losses has been due mainly to an increase in

efficiency that has been achieved by reducing manpower and stocks.

Mr GUNN: Over the past two years, the Woods and Forests Department, according to the Auditor-General, has not conformed to Australian accounting standards. In referring to this matter, the Auditor-General has suggested that what would normally be a loss has been converted into a profit by certain accounting practices. Can the Minister assure the Committee that the Woods and Forests Department and other departments under his control will conform to the normal accounting standards by which everyone else in the community is expected to abide?

The Hon. J.H.C. Klunder: I am happy to give the honourable member information on forestry accounting as practised by the Woods and Forests Department, but I wish to give it to him in context and, if that takes a little longer than the average reply, I apologise. However, it is important to give the full information at this stage if for no other reason than to avoid questions afterwards.

Forestry accounting is unique because it must account for a renewable asset which has a long production cycle and undergoes a physical change during that cycle. The prime objective of any forestry accounting system should be reliably to reflect forestry assets, output and performance. A variety of accounting practices has evolved for forestry purposes, four of which are used in Australia. These are the cash method, the stand method, the sustained yield method, and the valuation method. Only one of those (the valuation method) meets the criteria that I have just given.

The cash method of accounting, which consists of recording cash receipts and payments in lieu of measuring revenue earned and expenses incurred over a period, is used by some State forestry services. This method does not produce any periodic measure of performance (profit) or record the asset value of the growing timber. It is considered to be the least valuable of any of the methods. The stand method, which is sometimes referred to as the unit or venture method, is based on identifying separate planting units of a forest. All costs of establishment and maintenance are recorded for each planting unit over its life.

Proceeds from the sale of log are credited to relevant planting units and the accumulated historical costs are charged against this revenue at the time of clear felling. The main disadvantages of this method are that you may have to wait 50 years or more for a result and asset values usually bear little resemblance to the current value of the forest.

The sustained yield (perpetual) method is based on a forestry concept that plantings and harvesting may be regulated so that the volume harvested approximates annual growth through orderly replanting to maintain a series of successive age classes. Under this method, annual expenditure on forestry operations is treated as a cost incurred to maintain a constant forest resource. This expenditure is offset against annual income from harvesting to determine a profit or loss. The main disadvantages of this method are that it is only applicable to forests which have obtained sustained yield and the value of the forest is frozen at its historical cost at the time of reaching sustained yield.

I am sure that the honourable member can see what happens during a bushfire when a large amount of the sustained yield situation is dis-equalibrialised, that is, taken from its normal equilibrium situation. The valuation method is the most recently developed accounting method and was the result of the findings of a working party at the University of Waikato in New Zealand. This method provides for an annual valuation of the forest at current market value. Any change in forest value represents a gain (or loss) in that year.

All forest expenses incurred in the year are treated as a cost in obtaining the incremental growth in the forest and are offset against the revaluation revenue to obtain the profit or loss. Its main disadvantages are that market based valuations are complex and may be beyond the resources of smaller organisations and that the method currently departs from Australian Accounting Standard 10. On the other hand, it has a number of advantages which include: it is applicable to both mature and development forests; it recognises the physical growth of the forest; it recognises changing money values; it accounts for changes in the planned end use of the forest; it eliminates the need for arbitrary allocations between operating and capital expenditures; it provides a better measure of management's performance; and it is currently the only accounting method which meets the prime objective of reliably reflecting forest assets, output and performance.

Prior to 1978, the Woods and Forests Department used the Stand Method. The method was abandoned due to its deficiencies as a management control tool and lack of relevance in reporting the results of the organisation. From 1978 until 1983 the department used the sustained yield method. During that period the department's forests were considered to be within 1 per cent of sustained yield and hence the method was deemed suitable for reporting current results. The only real disadvantage of the method was that the forest asset was frozen at its 1978 value.

Following the Ash Wednesday fires of February 1983, the department's forests were no longer in a state of sustained yield as about 20 per cent of the resource had been destroyed. It was also planned for replanting to be carried out over about 10 years. As a result of this, the sustained yield method of accounting was no longer applicable and a revised accounting treatment had to be introduced. The approach taken was to capitalise that portion of re-establishment and maintenance costs that related to the replanting of fire damaged areas. In addition, a proportion of overhead costs and interest, deemed attributable to fire replant areas, was also capitalised. This method of accounting had deficiencies. In particular, it was difficult to find an objective basis for the allocation of overhead and interest costs. These problems were expected to compound as the situation became more complex with time.

In early 1986, the department became aware of work being done at the University of Waikato to develop a generally accepted uniform and consistent method of accounting for forest assets and output. A copy of the report of this working party, which included representatives from private forestry companies, universities, the New Zealand Forest Service and professional accounting bodies, was received by the department in May 1986, and the departmental executive approved an investigation into whether the method may prove suitable for adoption by the department. The findings were that the method was well suited to the department's operations and it was agreed that it should be introduced for the 1986-87 financial year. The step was not taken without consultation with the Auditor-General's office.

Although it is the department's policy to prepare its accounts in accordance with applicable accounting standards issued by the Australian accounting bodies, the method of accounting adopted by the department for its forestry operations departs from the Australian Accounting Standard 10, 'Accounting for the Revaluation of Non-current Assets', to the extent that the non-current portion of the inventory item, growing timber, is not credited to an asset revaluation reserve.

Inventories are usually classified as current assets and are not subject to AAS10. A separate Australian Accounting

Standard 2, 'Valuation and Presentation of Inventories in the Context of the Historical Cost System', covers the accounting treatment of inventories. Growing timber, because of its long production cycle, is classified into both current and non-current components. Application of AAS10 would result in valuation changes in the non-current portion of growing timber being treated differently to valuation changes in the current portion and all other inventory items. It is the department's opinion that the application of AAS10 would therefore result in a misleading presentation of the forestry activities for the year.

Notwithstanding the foregoing, the Auditor-General qualified the department's 1986-87 accounts due to the departure from AAS10. In a letter to the Director subsequent to the audit, the Auditor-General stated:

The accounting treatment of this matter is not a simple one and there are differing opinions as to whether the method your department has adopted or the recording of the increment in an asset revaluation reserve is the correct one.

The Auditor-General draws attention to a difference of opinion rather than indicating that the standard is wrong. In November 1987, officers of the Woods and Forests Department and the Auditor-General's Department attended an International Forestry Conference on Financial Management Systems in Albury, New South Wales. Also attending were representatives of all State forest services, the forest services of New Zealand, the United Kingdom, Canada, the United States of America and Fiji, and also representatives of major private forest owners in New Zealand. An outcome of that workshop was agreement that the valuation based accounting method is seen as the most appropriate for the forest industry. So, there is wide agreement amongst States and private bodies that this is an appropriate mechanism.

Following the workshop, major private Australian forest owners were approached to canvas their interest in exploring issues related to accounting for forestry activities. It became obvious that there existed considerable dissatisfaction with current accounting methods and standards. As an example Softwood Holdings Ltd in its annual report for 1986-87 made the following statement:

Compliance with the many accounting standards caused the directors and management of the company concern in presenting the accounts of the group in accordance with these standards. In particular, the treatment of a growing asset such as the plantations owned by the group is not adequately catered for in the standards and suitable flexibility should be allowed in the adoption of such standards.

Amongst Australian forest growers contacted, there was a real interest in pursuing the valuation accounting approach. Subsequently, a meeting was held with the Auditor-General to discuss these developments and the approach to be taken with the department's 1987-88 accounts. It was agreed that the Auditor-General would write to the Chairman of the Public Sector Accounting Standards Board and the Accounting Standards Board of the Australian Accounting Research Foundation, to request a review of the appropriateness of Accounting Standard 10 in relation to forestry activities, and that the department would meet with the director of the Australian Accounting Research Foundation to discuss the possible development of a standard for forestry accounting. The foundation has now undertaken to review the principles that should apply to accounting for all types of regenerative assets, including growing timber. This indicates that industry standards are under review.

The process of reviewing and developing accounting standards takes some time. So there was no likelihood of a revised standard being in place prior to the preparation of the 1987-88 accounts. Further discussions were held with the Auditor-General and it was agreed that the department would again produce its accounts using the same method

as in 1986-87. The Auditor-General indicated he would feel obliged to continue qualification of the accounts until the foundation's report is completed and promulgated. However, in his report to Parliament, he fully supported the annual revaluation of the forests and clearly acknowledged the growing support within the forestry industry for the method used by the department.

To date, the valuation accounting method has been adopted in New Zealand by Fletcher Challenge (New Zealand's largest company), New Zealand Forest Products (New Zealand's largest private forest holder) and the newly formed New Zealand Forest Corporation. In the United Kingdom it has been adopted by the Forestry Commission. In Australia it has been adopted by the South Australian Woods and Forests Department and was also used by the SEAS Group Ltd for its 1986-87 accounts. It should be noted that the accounts are not qualified by the auditors of the company. Two other State forest services are currently working towards adopting the method in the near future. A number of private forest owners in Australia have indicated interest in adopting the method as soon as problems with AAS 10 have been resolved. Again, I apologise for the time it has taken to give what is, in effect, a report, in response to the honourable member's question, but I thought it was important to put it on the record.

Mr HAMILTON: I note from the program description at page 481 of the Program Estimates that the incidence of deliberately lit fires remains high and is of continuing concern. It also states:

Public pressure demanding maximum fire suppression capability at reasonable cost emphasises the need for effectively integrated suppression and control activity throughout the entire community.

Further, 1988-89 specific target/objectives are:

Continue the development of joint fire control and training with other agencies adjacent to the southern South Australian/Victorian border. Prepare fire management plans for forest reserves in the central, northern and South-East regions. Establish operating procedures for use of foam and fire retardant.

I was born and raised in the South-East and I understand the need for planning and for fire prevention and the dangers that fires present. What planning and initiatives have been undertaken for the 1988-89 fire season?

The Hon. J.H.C. Klunder: It is not generally known that one of my first jobs as Chairman of the Public Accounts Committee was to take the committee down to Mount Gambier to inquire into the efficiency and effectiveness of the Country Fire Service. We arrived there and held our hearing on a particular day in 1983 when the Ash Wednesday bushfire was actually occurring. I had to abort the hearing halfway through, despite the objections of the people there who wanted to continue the hearing, and I had to tell them to go and get on with fighting the fire. Although I do not have the honourable member's long experience from having lived down there, with the ever present fear and worry about bushfires, I was there at a time when bushfires were at their greatest level for some considerable years. I call on Mr Cowan, who lives in the South-East and who has a first-hand knowledge of the situation, to provide a more detailed response.

Mr Cowan: There is very good cooperation between the forest owners in the South-East—indeed in the entire Green Triangle region—and this involves not only the Woods and Forests Department and the private forest owners of the South-East but also the Victorian Department of Conservation, Forests and Lands. A conference is held twice a year at the beginning of the fire season to determine what the plans for the season should be, and another conference is

held at the end of the season to go over how the season has gone and to determine how things might be improved.

A conference is to be held next month, and one of the items on the agenda concerns the use of aircraft in the Green Triangle region for the suppression of fires—not only for spotting fires. It is probably one of the last areas in which the use of aircraft for fire suppression is financially justified. Because the area is flat and the roads are mostly good, it has been financially worth getting water to the seat of a fire by trucks rather than by the more haphazard method using aircraft. With the value of the asset going up and with the cost of aircraft coming down, certainly in this next season we will have to do some trials in relation to a cost benefit analysis of the use of aircraft—both helicopters and fixed-wing aircraft.

In summary, there is good cooperation and we are happy with the way that private enterprise joins in with us. The Woods and Forests Department is probably the biggest and the best organised, and it certainly has the most capital equipment and the most people—but then we have the largest area, anyway. The same thing applies to the central and northern regions, though, of course, in a much smaller way, because, in proportion, we are much smaller land owners and the cooperation there is largely with the CFS. Our use of aircraft is, again, combined in with the CFS, and mostly for spotting purposes. However, the cooperation works well.

Mr HAMILTON: Will the Minister provide the Committee with information on the financial performance of the Woods and Forests Department?

The Hon. J.H.C. Klunder: It is noteworthy that the Woods and Forests Department receives no appropriation from the Consolidated Account for payments of a recurrent nature. Funds appropriated for capital works are, in fact, loans and are fully redeemable with interest being paid to Treasury. For many years the department has been a net contributor to the Consolidated Account, with returns from operating profits and through the servicing of loans.

Over the past 13 years, Treasury has received \$57 million in contributions and interest payments and, to add further, an additional \$22.4 million was paid into consolidated revenue from profits prior to 1975. A major proportion of the department's timber product is now sold outside this State, which means that there is an export income producer. As would be expected, the Ash Wednesday fires of 1983 impacted on the department's short-term profitability. Salvage, log storage and re-establishment costs have been high, but unavoidable, if the industry, both private and public, was to survive in the short term and to be in a position to grow in the medium to long term. Of course, at any stage the Government had the option to ensure a net cash inflow into the company, merely by cutting back on the accelerated replanting program. That would have fixed any hassles in the short term, but of course would have produced great difficulties in the long term—and for that reason the Government has not taken that line.

The losses in the plantation areas have for the next 20 years or so reduced the available cut from the forests and have therefore impacted on the volume of material that can be produced and sold. I think the department has demonstrated a sound profitability. In the 13 year period mentioned above, profits have been reported in all years, apart from 1982-83, when the book value of losses of Ash Wednesday were written off in the one financial year as an extraordinary item. The operating profit for that year was still \$3.5 million. One would appreciate that the historical valuation method used in 1983 did not reflect the true value of the forests and other assets destroyed, since they were

historic, and their replacement therefore is, in dollar terms, very much greater than the \$27.1 million that was identified in the accounts of that year. In fact, the estimate is that the value was of the order of five times that.

The \$11 million loan (interest free for three years) from the Commonwealth Government to assist in salvage and related operations was only a drop in the ocean as financial assistance in the recovery program. From an investment by the State of \$16.8 million, the department has built up the value of its assets to nearly \$600 million through the dedicated efforts of staff and employees over many years and this provides a sound base for the future of the industry in the State. Forestry is by nature a long-term investment. Properly managed, it provides a renewable resource in perpetuity. As an investment, it has the ability to ride out cyclical downturns in economic activity. Although from time to time, the cyclical nature of the industry may cause short-term problems when superimposed on major restructuring programs such as post-Ash Wednesday, the direction and future of the department is very sound, in my opinion.

Mr HAMILTON: At page 482 the following reference is made:

Establishment of procedures for technical evaluation of data collected from Sirex wood wasp infestation observations in the central forest region.

What procedures have been carried out in the past? How is the Sirex wasp being contained? What is the extent of the infestation? How long before eradication of the wasp is likely? Is it likely?

The Hon. J.H.C. Klunder: Sirex wasp (*Sirex noctilio*) is a European wood wasp that was introduced into New Zealand in the early 1900s and into Australia in the early 1950s. I guess that it was a failure of the program that customs follows to try to reduce the importation of pests. It prefers pinus radiata, which it kills, and causes timber to degrade by tunnelling through the timber. It attacks suppressed and stressed trees when Sirex population levels are low, but can attack and kill most sized pinus radiata if the population builds up. The most susceptible age classes attacked are trees ages 8 to 30. The Woods and Forests Department has about 27 000 hectares in this age group in the South-East (a little under half of our pinus radiata plantations). Sirex was first found in Woods and Forest Department plantations in 1980, and there has been a serious build-up over the 1986 and 1987 summers. These presumably stressed the trees and made it easier for the Sirex wasp to take hold. Control of Sirex has been achieved in Tasmania and parts of Victoria through a multi-pronged attack with biological control agents. The three major control agencies are *Ibalia*, *ryssines* and *nematodes*.

Ibalia has been introduced over the past seven years and is well established. *Magarhyssa*, another parasitoid, is now beginning to build up in numbers after disappointing early attempts to introduce it to the South-East. *Nematodes* have been used in small quantities since 1980 and are apparently the best chance for short-term Sirex control. The program of inoculation of infested trees was stepped up as a result of the Sirex build-up. In the first program, completed by October 1987, nearly 150 000 trees were treated in the region. A further program in autumn and early winter 1988 treated another 70 000 trees. It is a very large-scale program.

In addition, a comprehensive monitoring program was put in place to determine the effectiveness of the inoculation. To date results have been very encouraging, showing that the nematode and wasp parasites are widespread in the region. Further, 7 600 trap trees prepared to attract Sirex to specific locations were included in the autumn inoculation program. Just over \$1 million was spent on Sirex control by the department in the 1987-88 financial year.

Sirex has now been discovered in the central region and a program of control based on experience and information gained in the South-East has been implemented. This control program will, we hope, prevent Sirex becoming a problem in the region. Quarantine restrictions on movement of material from the South-East to the central region have been lifted as it is clearly a case of shutting the door after the horse has already bolted.

Mr HAMILTON: In terms of logging, how much is being salvaged?

The Hon. J.H.C. Klunder: Clearly, there is a loss in dealing with the trees that have been infested. As I indicated earlier, trees die if successfully attacked by the Sirex wasp. To mitigate the loss of timber (which I presume is the intent of the question) salvage logging has been carried out to recover principally saw log and, to a lesser extent, pulp log. Such salvage operations are by necessity more expensive, in that they are dealing with a flawed log and the department therefore receives a lesser return for such logs.

During the winter and spring of 1987, Sirex salvage operations recovered 37 500 cubic metres of log from dead and dying trees. A similar program has been undertaken during the winter of 1988 with 23 000 cubic metres salvaged to the end of August and an estimated final figure of 31 000 cubic metres for the current program. It is likely that further salvaging of Sirex affected trees will be necessary in 1989.

Mr D.S. BAKER: It is fair to say that the performance of the Department of Woods and Forests and Satco has been nigh-on short of disaster for the past few years, and this year is no exception. The Minister claimed that these organisations had assets of \$600 million yet their commercial operations sustained a \$1 million loss. If it was not for the cooking of the books with AAS10 to bring in that increment, it would have made a loss again this year. It seems that, every time the department or Satco touches commercial operations, they incur a deficit of taxpayers' funds. What is the Minister going to do about the commercial operations of the department and Satco? If they do not perform, will he consider selling them to private enterprise?

The Hon. J.H.C. Klunder: The member for Victoria seems incredibly keen for private enterprise to get its hands on these operations. I wonder why, as private enterprise is not noted for buying things that are not going concerns. Certainly, I object to his term about cooking the books with regard to AAS10 in the department—

Members interjecting:

The CHAIRMAN: Order! The Committee has been going well. The question has been asked, the Minister is about to answer, and I do not want interjections to upset the work of the Committee.

The Hon. J.H.C. Klunder: Of course, the department's operations have suffered from the after-effects of the Ash Wednesday fire and, for the honourable member to use that as a way of denigrating the department, disappoints me. As I indicated earlier, I can fix the cash flows in the department tomorrow if the honourable member wishes me to, merely by cutting back on the replanting program, but that is something that he does not want me to do, I am sure, because it would affect the long-term viability of South-East forests.

To attack the department on that basis seems relatively unfair and it is probably done for a different agenda than from the one he is bringing up. As to Satco, and as has been stated by me recently, its results have been disappointing. One of the first replies I gave dealt with IPL(NZ), and I hope that situation is showing some glimmer of hope. In terms of the commercial loss, and I think that that is

probably the third question that the honourable member managed to get in to his single question—

Mr D.S. BAKER interjecting:

The Hon. J.H.C. Klunder: I am not asking the Chair to make a decision on it; I am merely commenting about the number of questions that the honourable member managed to ask in a single question. In terms of the profitability of the department, particularly the Commercial Division, I think I can give some reasons why that has occurred. There has been a prolonged and significant market downturn in the timber industry that was still evident during the first part of the financial year. That was not something that was under the control of the Woods and Forests Department. The costs associated with the recovery from Ash Wednesday and the significant need for capital to re-establish burnt forests at a rate of almost double the sustained yield planting rate further drew on the resources of the department. There were constraints on commercially oriented Government operations in times of stringency, that is, there were some difficulties in getting capital available to improve efficiency, upgrading and expansion.

Climatic conditions, as I have already indicated, resulted in the creation of a stressed forest which was more liable to attack by the Sirex wasp. The cyclic nature of the conditions I have just mentioned will influence profitability from time to time. The department has not yet financially recovered from the Ash Wednesday fires. Prior to this date the profitability of the department was very good, with contributions being made to consolidated revenue every year since 1954.

The losses to the department, which I have also already indicated, are estimated to be about \$120 million due to the Ash Wednesday fires. No grants were made to the department to assist in the recovery from the Ash Wednesday disaster. As a result, borrowings have had to increase substantially and other critical projects have had to be delayed. The commercial operations (sawmilling) incurred a loss during 1987-88 of just over \$1 million, despite an increased turnover. The increased turnover resulted from an improvement in market conditions towards the end of 1987, and that has continued into 1988. To achieve outputs to match market demands—and that is essential because once one loses a customer because one cannot provide him with what he wants, he will go elsewhere and may not come back—additional shifts were initiated and the amount of overtime worked significantly increased. These actions had an impact in the short term on the cost of production but, as I have indicated, they were utterly necessary to meet customer needs.

The price received for the finished products did not improve as quickly as the market demand and there was a significant lag in that situation. Budgeted selling price was not achieved for a four weeks sales period until the end of the financial year. The final result was affected by an abnormal item, which was the bringing to account for the first time of a provision for annual leave outstanding; and that amount was \$875 000. That sort of money had been accruing as a cost to the department for that time but had not been put on the books, and it was done in that particular year as a single item.

The Commercial Division contribution, excluding the abnormal item and prior to the allocation of service division expenses, was \$93 000 more than in 1986-87. As mentioned in the Auditor-General's Report, efforts are being made to reduce the operating costs and to improve production efficiency. Some of these I have already given in response, I think, to either the member for Victoria or Mount Gambier in relation to a question asked in the House. The actions

that have already been taken include the restructuring of management within the Commercial Division with resultant improvements in delegation and decision making at operating unit level; improvements in occupational health, safety and rehabilitation; improvement in productivity in dry milling through the introduction of high speed moulders and dockers; improvement in grading the products through a grader training and accreditation program to ensure appropriate mix of first grade and merchantable grade products; and the introduction of stellate-tipped saws into the Mount Gambier sawmill.

I mentioned earlier that there had been some difficulties in getting the capital works program up because of the scarcity of money, and I am pleased to be able to tell the Committee that the approved capital works program for 1988-89 will enable significant productivity gains to be made. The following projects, all with good returns on investment, are planned to commence in 1988-89: the edger optimiser at the Mount Gambier sawmill (and from memory the pay-back period on that is in the order of two to 2½ years); an upgrade of the Nangwarry sawmill; stress grader and handling equipment at both the Mount Gambier and Nangwarry sawmills.

The marketing information system is currently being reviewed prior to upgrading to improve customer service and provide better information for management decision making. A total quality management program is being introduced into the Commercial Division and consultation with the relevant trade unions is under way to ensure their support for the program. Management is fully aware of its responsibility to improve divisional performance, and I am pleased to report that in the past six months significant improvements in the Commercial Division's contribution have been achieved. In the past six 4-weekly results available (that is, the period since the mills recommenced full production after the Christmas/New Year closure), the Commercial Division has achieved a contribution of \$2.38 million. Unless there is some unforeseen market downturn there can be some degree of confidence that the budgeted contribution of \$3 million for the Commercial Division during 1988-89 is an achievable figure.

Mr D.S. BAKER: I support the Woods and Forests Department's growing trees and creating forest areas in this State, and I think that that is the role it should perform; and I might add that it is a role that it performs very well. However, the Auditor-General has been making comments ever since I have been in this place about the marketing of the product, which has been a proven disaster in relation to the return on capital. It worries me that we are still using Ash Wednesday in relation to its performance. I would have thought that if ever there was an opportunity for a greater throughput of the mills it was because of Ash Wednesday and not in spite of it. In any business operation throughput gets efficiencies. Unfortunately, even in the past 12 months, with all the extra timber to process (which was the best timber ever harvested in the South-East), the commercial operation still made a loss. How far will the Minister allow these commercial operations to make losses before he takes some action to sell them? It is common knowledge that they have been trying to sell the South Australian Timber Corporation off to private enterprise, which will not take it on. One day there has to be an end to it. How long will the Minister allow these commercial operations to make losses before he takes remedial action?

[Sitting suspended from 6 to 7.30 p.m.]

The Hon. J.H.C. Klunder: There is a philosophical difference between the honourable member and me with regard

to where Governments finish and private enterprise starts, and there is probably not much point in my trying to argue that. We just have to agree to differ. He indicated that he believed it to be common knowledge that the Government was trying to sell Satco. It was not common knowledge to me or to some of my officers. Another point I remember him making was that, as a result of the bushfires, there was excellent timber. While that is true, there was also a cost associated with putting it into storage and retrieving it later. I ask Mr South to deal with the detail of the question.

Mr South: Over the past decade, the Commercial Division of the Woods and Forests Department has had only two years in which it did not make a genuine profit. They were the years 1986-87 and 1987-88, and the reasons were that, after the 1983-84 fires, although there was a good market, the department needed to salvage all the standing trees that it could, so the machinery in the sawmills took a pounding for a couple of years in flat-out cutting. Following that period, the department was faced with two very competitive years, during which it could not afford to hold stocks against the marketplace. In addition, costs were associated with storage, as the Minister mentioned, and with the need to finance the replanting of the forests. This meant that the department was unable to capitalise its manufacturing plants at that time when some of the machinery should have been renewed on the grounds of wear and tear and technology.

This year is profitable and will remain profitable. It has been profitable to the extent of \$2.37 million since Christmas and, now that the plants are being recapitalised and made more productive, the fact that in only two years of difficult market conditions the Commercial Division did not make a profit demonstrates that it is a very profitable manufacturing operation.

Mr GUNN: Has the Government made a decision on the future of the Wanilla forest? As many hardwood species grow in the Wanilla area, why has the Government discontinued production of pressurised treated posts at Wanilla? Will the Government consider the installation of a trial chipping plant to test the feasibility of woodchip on Lower Eyre Peninsula?

The Hon. J.H.C. Klunder: Wanilla Forest Reserve was established last century. It has provided treated hardwood fence posts to the rural community on Eyre Peninsula. With the development of good roads, a treatment plant in the northern forest area and fast transportation, it is now as competitive to deliver fencing material into the area. In addition, several factors led to a decision to close the treatment plant. It was old and needed major maintenance. There have been major changes to environmental legislation and the plant needed upgrading to comply. It is a doubtfully profitable operation if further capital is required.

At the time of closure, the department reviewed the whole position of Wanilla and decided that the objectives for its establishment and operation had been fulfilled, and that it should be disposed of. Disposal is in the hands of the Lands Department's Land Disposal Unit. All Commonwealth, State and local government organisations have been advised, and interest sought. The next step is to call for interest from the general public. Any party purchasing the reserve will have to abide by a number of land use requirements, significantly those supervised by the Engineering and Water Supply Department and Environment and Planning's Native Vegetation Act. No decision will be made without community involvement. I pass to Mr South that part of the honourable member's question about the trial chipping plant.

Mr South: It is fair to say that the volume of wood and rate of growth of wood in that area would not justify the

installation of a chipping plant. Of course, the volume is insufficient to transport to a point of utilisation. It is not really a viable position.

The Hon. H. ALLISON: During last year's Estimates Committees, the Minister gave one of the reasons for acquisition of IPL (New Zealand) as being the need to guarantee good quality sawlog for South Australia, particularly large section plywood logs. Can the Minister say what plans were formulated at the time of the purchase of Greymouth to export timber or timber products to Australia? What percentage of timber or timber products out of Greymouth were expected to be exported to Australia?

The Hon. J.H.C. Klunder: The market for lower grades of plywood is oversupplied most of the time and, therefore, very price competitive. High grade plywood—AC grade and Lamber—is in short supply and commands a good price. Large accounts are very difficult to hold unless one can provide a reasonable proportion of high quality plywood and a wide range of products. Being able to supply higher grades will act as support to the price structure of construction or other non-clear material. After the fire and pre-LVL, lower grades would have dominated Nangwarry production. IPL (New Zealand) can provide the supplementary high grades, which will help the Woods and Forests Department and Satco to hang on to its large customers, who might otherwise drift away from South Australian products.

The purchase of IPL (New Zealand) Limited was aimed at providing the product mix to maintain a strong position in the Australian market. Operating difficulties experienced in New Zealand, coupled with a strengthening New Zealand dollar over the past 12 months, delayed the full implementation of these plans. However, the strategy is still correct and, in the past 12 months, we have gained market share from 12.2 per cent to 13.1 per cent, and IPL (Australia) is now the second largest plywood producer/wholesaler in Australia. Recent trends in the New Zealand/Australian dollar exchange rate, if maintained, will enable us to consolidate this position even further. We also expect to bring veneer from New Zealand this financial year to supplement production of LVL which has gained significant market acceptability in the past six months. The requirement was never for logs from New Zealand to Australia, only for veneer and plywood.

The Hon. H. ALLISON: My question was what percentage of New Zealand product was expected to be exported to Australia and what percentage of the Greymouth product was exported to Australia? I link that question to the Minister's statement that these were essential to South Australia's requirements.

The Hon. J.H.C. Klunder: I do not have those figure at hand, but I ask Mr Curtis to explain.

Mr Curtis: The original intention, when IPL Holdings took its interest in the New Zealand operation, was for approximately 6 000 cubic metres of plywood to be shipped to Australia. In the first full year of operation (calendar year 1986), about 2 500 cubic metres was shipped into Australia, but in 1987 that figure fell away substantially, because of the difficulties caused by the exchange rate between the New Zealand dollar and the Australian dollar, to a volume of less than 1 000 cubic metres. This year, we expect that 2 560 cubic metres will be shipped into Australia, most of it coming in the second half of the year because of the significant improvement in the exchange rate.

The Hon. H. ALLISON: Can the Minister say what percentage of the total Greymouth production that 2 500 cubic metres exported would represent?

Mr Curtis: This year, 2 800 cubic metres, if achieved, will represent 15.5 per cent of the Greymouth production.

Mr GUNN: Regarding bushfire control, devastating fires took place in the Mount Remarkable area last summer and great difficulties were experienced by the local Country Fire Services and others in containing the blaze, which caused much concern over a wide area. A number of problems were encountered, including lack of access tracks, build-up of material, and problems with the chain of command. Can the Minister assure members that those access tracks and roads will be maintained and that positive action will be taken to reduce, by limited grazing, the amount of flammable material?

I understand that in the past that area was grazed and that it was only when an increase in rental made such grazing uneconomic that it stopped. Will the Minister have controlled burning off done at the appropriate time during the next few months in order to reduce the other fire hazards in that large area? As I understand that this area is not especially suitable for forestry use, has the Minister considered having that land made available for other uses?

The Hon. J.H.C. Klunder: That fire is the subject of a coronial inquiry, which makes it difficult for me to reply to the questions.

The CHAIRMAN: Then we will not proceed with them because the matter would be *sub judice*.

The Hon. J.H.C. Klunder: It is hard to answer, even though some aspects of the honourable member's questions are not the subject of the coronial inquiry.

The CHAIRMAN: If it is difficult for the Government, we will touch it.

The Hon. J.H.C. Klunder: I bow to your ruling on that, Mr Chairman.

Mr GUNN: What bushfire control measures does the department intend to take to prevent bushfire outbreaks in the Mount Remarkable forest reserve during the coming summer?

The CHAIRMAN: If an inquiry is proceeding at present, it may be subject to all sorts of things. The Minister may give a considered answer later and include it in *Hansard*.

The Hon. J.H.C. Klunder: I agree that that would be an appropriate course so long as the member for Eyre is willing to accept a reply on notice.

Mr GUNN: The matters that I raised are important. The situation to which I have referred was difficult and the community want to ensure that every possible step is taken to prevent a repeat exercise either this summer or in the future.

The Hon. J.H.C. Klunder: The honourable member and I do not differ in our assessment of the importance of the situation, but I am tied by the *sub judice* situation, and I should prefer to give him a considered reply in writing.

Mr GUNN: The department has considerable holdings in the Jamestown area (Bundaleer forest). What are the plans for that forest, and will there be further development in that area over the next 12 months?

The Hon. J.H.C. Klunder: I will need to pass that question to Mr South.

Mr South: The Bundaleer and Wirrabara forest reserves are the source of an allocation to one principal sawmill, perhaps one other salvage mill, and a couple of tiny mills. At present, the production from those forests is not under question, but the forest area in those places does not provide nearly the increment provided by the South-East forests.

Mr GUNN: Can the Minister say when it is expected that the South Australian Timber Corporation will be able to pay a dividend to SAFA on the money that SAFA agreed to convert from a loan into equity in the corporation?

The Hon. J.H.C. Klunder: I wish that I could give a definitive reply, but that will depend on the profitability of

two of the enterprises undertaken by Satco: first, the scrimber process which does not come into production until some time next year, and, secondly, IPL New Zealand which, as I indicated earlier today, is on an upswing towards profitability. So, I cannot answer the question, although I should dearly love to be able to do so.

The Hon. H. ALLISON: As the Minister earlier today was at considerable pains to separate statutory authority responsibility from Government responsibility, I wonder about the propriety of having the Woods and Forests Department's 16.5 per cent owned by SAFA to discharge a debt that was clearly incurred by a statutory authority, namely, Satco. That is according to the Auditor-General's Report in which, at page x, he states that SAFA has taken up an equity position in the Woods and Forests Department which is expected to return a dividend payment sufficient to compensate SAFA for interest forgone from the corporation. So, we have the two clear links, despite the earlier insistence by the Minister that statutory authorities and Government enterprises are separate.

The Hon. J.H.C. Klunder: I wonder if I may correct the member for Mount Gambier. My earlier statements did not differentiate between statutory authorities and Government departments: they were meant to differentiate between those organisations within Government that got their funding from the Consolidated Account and those that took their funding from accounts such as deposit accounts and were not funded by the Consolidated Account. I did that because the Standing Orders of this Committee only allow questions to be asked on expenditure from the Consolidated Account, and I therefore distinguished on that basis. I do not need to go into the details of the financial rearrangements involving SAFA, the Woods and Forests Department, and Satco.

In my opinion—and clearly that of the Auditor-General—it is reasonable that when an organisation changes loans to equity it should have some consideration for that. I assume that when Satco starts producing dividends the situation regarding SAFA's interest in the Woods and Forests Department may be again looked at.

The Hon. H. ALLISON: I ask the question because it poses a hypothesis that, given adverse trading circumstances for a period of up to six years and given a similar debt structure with this alternative being taken instead of capitalisation of the debt, SAFA could own 99 per cent of the Woods and Forests Department in that period. Would the Minister consider that sort of avenue as he has already taken that step with respect to one year?

The Hon. J.H.C. Klunder: I did not take that step; it was taken prior to my becoming Minister. I just overheard a comment from one of my colleagues that anybody who knows what is going to happen six years in the future ought to buy shares. I hope that the path that has been sketched in however lightly by the member for Mount Gambier will not need to be followed and that we can return to profitability or to at least a servicing of debt much more quickly than the six years envisaged by the honourable member. As that will obliterate the need for further considerations in the Woods and Forests Department to be given to SAFA in return for a changing of debt to equity, it is sufficiently problematical for me not to feel that I need to lay down guidelines as to what will happen. That can be done at the end of this year if necessary.

The Hon. H. ALLISON: It was put to me this afternoon that one of the reasons for the blue gum being planted by the Woods and Forests Department is because the Sirex wasp threat is far more serious than has been publicly acknowledged. I checked the Program Estimates and was reassured to find at page 475 that \$13.6 million has been

provided for softwood plantation management and only \$110 000 for hardwood plantation management, which indicates that that assumption is very much out of kilter. Can the Minister place the Sirex wasp threat in context in relation to the question that I was asked to put?

The Hon. J.H.C. Klunder: I think that the honourable member and I are in the same state of disbelief about this question. As he has indicated, page 475 bears out that belief that he and I hold that softwood plantation is still the way to go. In terms of the actual damage done by Sirex, I have some figures in the back of my head. I think that Sirex wasp decreased the value of the forest by \$5 million. Clearly, from that figure Sirex is a dangerous threat to the forest and must not be allowed to expand. If hardwood lots are being planted as a way to avoid this problem, that is news to me. I will ask the Director to comment.

Mr South: The purpose of the hardwood plantations being trialled in the South-East is purely one of providing short fibred wood for a pulp factory. APCEL's expansion is a well-known program. APCEL has been importing short fibred pulp, which is mixed with long fibred pulp obtained from our pine trees, to make a number of its products. When APCEL announced its expansion last year it said, 'If we are going to expand, we would like to think that we might have some short fibred pulp which we do not have to import.' Therefore, through the national afforestation program some trials of short fibred wood are being planted. It can do nothing but good to diversify the forest crops in the South-East, but at the moment I think South Australia is in the happy situation of needing to expand its softwood plantations on suitable sites to provide some short fibred pulp. There is no intention of replacing our saw log supplies by planting hardwood to get away from Sirex. Across the nation we will see hardwood plantations planted in short rotation crops purely for fibre for pulp.

Mr GUNN: Has consideration been given to amalgamating the Woods and Forests Department with the Timber Corporation? I understand that the Auditor-General referred to this matter in view of the fact that both organisations appear to be doing similar sorts of things, although one has got itself into considerable financial difficulties. Has the Minister considered restructuring the operations of the Woods and Forests Department and starting afresh?

The Hon. J.H.C. Klunder: I do not think that I can add anything to the answer that the Premier gave some time ago; namely, that the previous Minister and I have been too involved in the short-term problems to look at long-term solutions such as the one proposed by the Auditor-General. With all due respect to the Auditor-General, I cannot see myself actively considering that question until early next year. At that point we will need to look at the best solution for the Woods and Forests Department and Satco.

Mr GUNN: Last year I raised questions with the Minister's predecessor about access to forest reserves for recreational purposes. At that time considerable interest had been shown by groups concerned that some of the new regulations under consideration would be unnecessary, would prevent people from entering forest reserves at reasonable times and would impose undue restrictions and charges. Has the department come to terms with that issue and can the Minister give an undertaking that responsible members of the community will not be prevented access to designated areas of forest reserves?

The Hon. J.H.C. Klunder: This is a more complex situation than I first realised. Since 1974 public use of forest reserves in the central region has rapidly increased and has continued to increase as more people become aware of the

opportunities for recreation in the forest. I know a lot of schools have access for camping and things of that nature. Currently there are no regulations under the Forestry Act 1950, which makes effective public control quite difficult. In 1986 regulations were drafted by Parliamentary Counsel in accordance with departmental requirements, but these were constrained by limitations imposed by the Forestry Act. Further structural inadequacies of the Act were discovered on close examination of issues raised during public meetings throughout the State.

These inadequacies stem from the interpretation of the current Forestry Act which only provides for activities associated with the business of forestry and sawmilling. The department is proceeding with amendments to the Act to provide for public access to the forests and some structural and technical changes are likely to be presented at the same time. Draft regulations can then proceed if the legislation is assented to. I understand that a green paper, which proposes amendments to the Forestry Act, is likely to come before Cabinet late this year or early next year.

Mr GUNN: The Woods and Forests Department has a section that grows and produces plants for sale to the general public. I have a constituent who has taken a considerable interest in growing native plants, particularly plants that are suitable for the pastoral zone. Does that section of the department grow plants that are suitable for planting around pastoral homesteads? Are the officers involved in that section available to give the technical advice and guidance which is sometimes necessary to ensure that those plants, when established, will continue to grow (because in many cases they are grown in a pretty harsh environment)? The constituent to whom I referred, Mr Brian Powell, from Quorn, who has had a lifetime interest in this subject, was invited to speak on a radio program and he was inundated and it has got beyond him. I have raised this matter with the Minister of Lands, and I again raise it now, because I believe that this native plants section in the Woods and Forests Department could play a particularly important role.

The Hon. J.H.C. Klunder: It is expected that plant sales for 1988 will be 650 000. There is also a 1989 rural tree scheme, and it is expected that plant sales from that will be in excess of 200 000. I now ask Mr Cowan to provide a more detailed answer.

Mr Cowan: The short answer to the question is that the native plants section has an extension service. As well as dealing with specific sales and organising extension trips through the rural areas of South Australia it is also available for consulting. More and more we are adopting a 'user pays' principle. It depends on the extent of the advice and extension needs as to whether or not the service is free. Certainly, that extension service extends to providing the right species for a certain area—and Quorn would be no problem. The service also extends to direct seeding. The native plants section has been working on this, and it has this technique fairly well established. We should have no problem in following up this matter.

Mr GUNN: I take it that if people are interested they can contact the appropriate people in the department and that, on occasions, officers would be available to visit selected areas to pass on advice.

Mr Cowan: It would depend on what is required, how long it would take, and so on. If it involved a big project and cost the department a significant amount of money, we would expect some return for the work; but if it involved just advice on species and how to plant the trees, that advice would be available.

The Hon. H. ALLISON: In relation to Shepherdson and Mewett Pty Ltd, last year I asked the then Minister of

Forests a question about equipment and the entire equipping of a sawmill. At that stage the equipment was on the dockside at Port Adelaide. On 8 July the Minister said that clearance had been obtained. He stated that he expected that the Christmas closure was the best time to install the equipment and have the sawmill operating. In view of the operating loss sustained by Shepherdson and Mewett, can the Minister say what impact the installation of that equipment has had on the Williamstown mill?

The Hon. J.H.C. Klunder: Shepherdson and Mewett is a wholly owned subsidiary of Satco. It operates a small mill at Williamstown, drawing log supplies of about 20 000 cubic metres a year, mainly from the central region forests. It produces a range of sawmill products, which are sold as air-dried and kiln-dried milled products. The company also has a packaging division that services clients, including the wine and transport industries. The company is capable of producing satisfactory profits. The re-equipment of the mill became necessary after the wear and tear of the burnt log salvage in the years following the 1983 fires—to which the Director has referred. The change in log size mix after the fire also required different equipment.

Because the mill at Williamstown is sited on the edge of the town, the Barossa council set stringent environmental requirements on the re-establishment, and alternative sites were examined. However, the infrastructural costs of a fresh start were overwhelming. So, in 1987 the company arranged for the purchase of sawmilling equipment from Sweden, with the intention of re-equipping the log cutting section of the mill. That plant was not installed following delivery, as a review of capital expenditure priorities became necessary for the South Australian Timber Corporation in the 1987-88 financial year—and this has already been referred to. All of a sudden, finances became very tight, for various reasons—the lack of profitability of IPL (NZ) amongst them. The Satco board has reviewed this proposal, and I expect to get its recommendation on the matter reasonably soon. Let me offset that advice that the plant has been sitting there for some considerable time not being used—

The Hon. H. ALLISON: It is not yet installed?

The Hon. J.H.C. Klunder: No. I offset that advice by indicating that the plant purchased from Sweden includes a headsaw and two re-saws, together with log conveying and material handling equipment, as well as various other bits and pieces, such as a debarker and a chipper. The total cost of the equipment was \$352 000—in Sweden. However, one would have to add to that the dismantling, packaging, import duty and freight amounts. The total outlay was \$598 000. I am told that preliminary expenses associated with the planning and approval process have cost about \$96 000.

The point that I want to make is that, had that second-hand material not be bought at that time when the relevant opportunity presented itself, the new equipment to do an equivalent job would have cost over \$2 million. That equipment would have had to be shipped over here and, with the approval planning processes, a further cost of about \$1 600 or \$1 700 would have had to be added to that \$2 million. So, even though the equipment has not actually been used, the wisdom of the buy in fact indicates that we could allow it to sit around for a number of years before it would become uneconomic, compared to the cost of new equipment. I agree that that does not detract from the fact that it could have been in use a lot earlier. However, the kind of financial strength that was needed in order to install it just was not there for Satco at that stage.

The Hon. H. ALLISON: The answer is certainly different from what I thought it would be. However, the Committee

has the Minister's assurance that the second-hand mill will do an equivalent job to what it would have done with new \$2 million equipment, or at least a job commensurate with its cost.

The Hon. J.H.C. Klunder: I am able to reassure the Committee, from information that I have, that it is a very good buy. It is only some four or five years old, and such equipment tends to last for quite a long time. To have got it as cheaply as that was a real coup for the corporation.

The Hon. H. ALLISON: Will the installation of this new equipment restore Shepherdson and Mewett to some form of profitability?

The Hon. J.H.C. Klunder: That was the original intention in buying it, and it still remains a likely result of installing that equipment.

Mr GUNN: Last year I referred to the shortage of treated pine posts for agricultural purposes, and I seek an assurance that the problem has been overcome and that adequate supplies are available to meet the demand.

The Hon. J.H.C. Klunder: There is a continuing shortage of creosote treated posts in some specific sizes, in the main as a result of a lack of log size availability in that range. Each year, the department prepares a sales plan based on current demand for each size and type of treatment and takes into account variations expected, such as changes in the rural outlook. The posts are then ordered from the forest and as received are debarked, graded and put out to dry. As preservation material is at present generated as a by-product of normal harvesting operations, receipt into the mill of specific sizes and volumes depends on the quality of the particular plantation area currently being harvested. Access to some areas which may not be able to be logged during certain seasonal conditions, and demand from markets for the other products generated during the harvesting operation, also affect supply.

The supply of finished treated posts can be further disrupted if the rate of drying of stock in the yard is slowed by prolonged damp seasonal conditions. These factors, over which the department has no control, can lead to shortages, particularly when demand rises unexpectedly either in total volume or for particular specifications. Normally the department holds extensive stocks of treated posts, but currently demand is outstripping supply in some sizes—particularly in posts 50-100 mm diameter and strainers.

In general, the log intake and production are consistent with the overall plan and individual supply problems tend to be of specific sizes and lengths. The department is very conscious of the fact that, if people come in demanding specific items and they cannot get them, it may lose customers. Certainly, the commissioning of the new woodroom in 1989 will help sort out that problem through a better system of selection and a closer matching of demand with supply.

Mr GUNN: Does the department intend to have any hardwood plantings in the Bundaleer forest? What is the overall result of hardwood plantations there? I understand that there is a considerable hardwood domestic market to fuel pot belly stoves. Has consideration been given to increasing hardwood plantings in that area?

The Hon. J.H.C. Klunder: The member has reached a level of detail that I have not yet reached and I will ask Mr South to respond.

Mr South: The growing of hardwood for firewood to be economic needs to be in areas where the rainfall is good and where the increments are relatively high for hardwood plantations. If it is slow grown, some firewood is produced but it is not an economic proposition.

The Hon. R.G. PAYNE: Are you familiar that two New South Wales genus woods have shown tremendous results in the Riverland?

Mr South: I acknowledge that the trialling of species in hardwood plantations is a good thing, but most of our country is dry, except in areas like the Riverland. One can grow red gum well and quickly in the better areas of the State, but economically in dry country the aim has to be conservation of ground conditions. We looked at firewood production from Wirrabara and we also looked at it from Wanilla, but the distance to market from those locations in relation to the amount produced did not make it a proposition—it is just too far.

The Hon. H. ALLISON: I am having problems reconciling the corporation's figures at page 419 with the questions asked and responded to last year at page 358 of Estimates Committee B, 22 September 1987. At that time I asked about the \$1.5 million of LVL product reported to be around in 1986. From the response (over a couple of pages) I understood that about \$700 000 of LVL product had been sold and about \$800 000 of LVL products are still in stock. I also asked how much LVL the department had taken as sole agent for 'on selling'. I notice in the corporation's papers only \$26 000 is listed in 1987 and \$167 000 in 1988. Is it the same product? Is LVL one product, such as the high span used for the scrimber building? I am trying to reconcile three years of figures and the latest corporation statistics in the Auditor-General's Report bear no relationship to the preceding two years of debate.

The Hon. J.H.C. Klunder: I ask Mr Curtis to respond.

Mr Curtis: I am unable to give statistics for the stock holdings by the Department of Woods and Forests on 30 June last year. As to where to find LVL sales in the South Australian Timber Corporation's report, one will find only the sales through the Victorian agency. Satco sells LVL product on behalf of IPL (Nangwarry) only in Victoria. It is a small percentage of Nangwarry's total sales. In the IPL report for 1987-88 LVL sales totalled \$1 366 135, which compares with a budget of \$1.736 million. A significant volume if LVL was sold by IPL directly. I do not have the stock information.

The Hon. H. ALLISON: Can that information be made available through *Hansard*?

The Hon. J.H.C. Klunder: The question is probably best taken on notice.

The Hon. H. ALLISON: I seek information about the IPL stockholdings and the Department of Woods and Forests stockholdings. I understand that the department ceased to be the sole agent last year when we were considering the 1987 Estimates.

The Hon. J.H.C. Klunder: In order to take as little as possible on notice, I wonder whether the honourable member might be happy to take the Woods and Forests figures now and have the other figures at a later date.

Mr Mutton: The Woods and Forests Department originally, as the honourable member would know, was the sole distributor for LVL. Obviously, stockholdings were accumulated to ensure product availability for the market. From recollection, I think the figure quoted at last year's Estimates hearings about stockholdings of the department was about 1 200 cubic metres. The present stockholding of the department is down to 730 cubic metres. Some of the problems associated with not having a quicker reduction concern the size assortment that is available in that remaining stock.

The department has sold approximately 600 cubic metres during that period. Obviously, those figures—730 and 600—do not add up to 1 200, the reason being that further stock

was purchased from IPL in the appropriate sizes needed to fill orders that the department had.

The Hon. H. ALLISON: A question asked last year concerned laminated beams that were being manufactured by Woods and Forests. I think that Mr White responded to my question as to the reason why the size of the beams had been changed and why inferior timber had been used for the central section of the beams. The response was satisfactory but a commitment at that time indicated that Woods and Forests was:

... endeavouring to produce a better or equal quality beam at a lower price, and we have managed to do that by changing the base material. The size change is a function of the new technology which is being introduced into sawmills today, whereby the sawing tolerances which can now be achieved in producing sawn timber mean that we have a target size for timber much smaller than it used to be. Finished timber is taken from the sawmill...

The inference was that this was to make a much more acceptable product for the market. The criticism I levelled then was criticism that came from within the industry; that the size change had been made with too little notice being given. Has that been redressed and have sales picked up?

Mr White: The industry acceptance of the new sizes we introduced has now been accomplished, and I am sure that industry customers are satisfied with the product they are receiving from us. Certainly, the economies we sought by introducing the change to our raw material, by taking the new sizes from our sawmill, has been successful. We have achieved economies in production and, as a result of that, I believe that we are now marketing a much more competitive product than would have been the case had we not made the change.

The Hon. H. ALLISON: Another problem addressed last year was the question of whether the availability of small saw log was going to be sufficient for scrimber, for the substantially increased demand from Apcel for its manufacture of paper products, and other industrial demands which are already the subject of contracts to various mills in the South-East. Last year we were informed that provision was being made to obtain sufficient small log of quality from both South Australia and Victoria. I seek a comment on the present situation and the longer-term availability of suitably sized material?

Mr Mutton: Obviously, the demands that are now starting to be placed on the industry in the South-East through a significant level of industrial development are going to tax the resource base in the region. I believe that the Government is aware of those concerns, that if plans presently being discussed in the region come to fruition there will be a significant demand on the raw material, particularly at the small diameter end of the market. The department is spending a lot of time and energy in resource assessment in relation to seeing what sort of requirements and shortfalls, if any, are likely to come out of a scenario that says that all the development takes place.

Earlier, the woodroom was mentioned; that is being installed, and one of the key reasons for it being installed is to get a better utilisation from our forests at the smaller end of the timber sizes to be able to sort that material into the most appropriate end use, whether that is small diameter material for scrimber, material for wood preservation (as was mentioned by the member for Eyre earlier) or small diameter saw log or pulp. All those things are working towards it. It is also fair to say that there will have to be a continuing level of cooperation between all the forest owners in the South-East to ensure that the raw material base is available to industry as a whole. The idea that is presently in the process of being developed to encourage private farmers and landowners to establish forests in the region is

all part of the same scheme. In summary, I think it will be very important, if all those developments go ahead, that significant energy is put into the level of information base.

Mr GUNN: My attention was drawn to an article that appeared in the *Advertiser* of 18 May. The article stated:

Sirex wasps which have caused more than \$1 million damage to pine plantations in the South-East have been found in Adelaide Hills forests previously free of the pest. The Minister of Forests, Mr Abbott, said yesterday only a few wasps had been located in the southern Mount Lofty Ranges, but his department was monitoring the situation and would release biological control agents where applicable. This involves parasitic wasps and nematodes, or microscopic worms, which are injected into infected trees.

Was it necessary to use biological control in relation to the wasps that were found in the Adelaide Hills? What has been the success of the biological trial in the South-East?

The Hon. J.H.C. Klunder: I understand that in the Adelaide Hills a small program has started in those areas that are clearly affected by Sirex wasp and that biological control agents are used to contain the damage.

Mr GUNN: In view of the difficulties and the ongoing saga with the Timber Corporation, does the Minister consider it likely that the South Australian Government, either itself or through SAFA, will have to inject further funds into it to keep it operational, or will the Government give further guarantees to underwrite its operation?

The Hon. J.H.C. Klunder: As I understand it, the level of SAFA's change of debt to equity and the level of debt that remains was cast at a level where Satco was expected to be able to service the debt, and that is what one would hope the situation would be. I think that the next advance to scrimber is also intended to be an equity advance rather than a loan.

Mr GUNN: Is it still departmental policy to continue to buy land around South Australia for its future planting program? If so, is it expected to purchase large amounts of land outside the South-East?

The Hon. J.H.C. Klunder: The short answer is 'Yes'; as land becomes available that is highly suitable for the growing of timber I would expect the department to be in the market. I doubt that I would be very happy if only marginally suitable land was taken up, as has been the case in some years past. During the past 12 months, a number of parcels of land have been assessed but the high priorities on the limited finances available to the department have meant that no land was purchased in the last financial year. However, I recently gave approval for the department to seriously consider several parcels and, if a suitable price can be found to purchase those blocks, it is to the ongoing good of the department to take advantage of the relatively rare opportunities when decent parcels of land come on to the market.

Mr GUNN: Can the Minister indicate whether, during the next 12 months or next few years, the department will concentrate its efforts on the production and growing of timber, softwoods in particular, or whether it will move further into the manufacture, milling and marketing of timber? From reading the Auditor-General's Report and other statements, it appears to me that the department has a good record of timber production but it has got into trouble in diversifying.

The Hon. J.H.C. Klunder: The honourable member is quite correct that the department has an excellent record in growing timber, although it could be argued that the loss of 20 per cent of its stock because of situations beyond its control put a dent in its reputation. As the Director indicated, the Commercial Division has made a loss in only two years and, overall, I would consider that to be a pretty good record, given the reasons for that loss. I am not willing to accept the honourable member's suggestion that the

department has better expertise in growing than it does in processing and selling.

It is a little early to ask me about the department's future because I have spent the past two months trying to get on top of what is already in place, rather than looking at long-term plans. A lot of my time has been devoted to seeing whether there are ways to upgrade the profitability of several of Satco's marketing ventures. The facile answer is that the question of whether there will be a change of direction will arise when I have time to look at the medium term but, as I have said, I cannot agree with the honourable member that the Woods and Forest Department has greater expertise in one area than another. I do not accept that division.

The Hon. H. ALLISON: In view of the relatively low percentage of Greymouth material exported to South Australia, were any alternatives sought to purchasing the Greymouth mill? Were attempts made to obtain an assured supply of good quality plywood from New Zealand through negotiations with the New Zealand Government for forest lease? If not, why not? If so, what obstacles were so insurmountable as to prevent the realisation of such an attempt?

The Hon. J.H.C. Klunder: Any buying from New Zealand comes up against a common denominator of the exchange rate. However, I will pass the question to Mr South for a more detailed explanation.

Mr South: In New Zealand, the peeling industry—vener, plywood and other products—is very much in the hands of two very big corporations which trade in Australia, anyway. The resource which IPL (New Zealand) uses is a very good resource for the purpose and it is exportable. The exchange rate for forest products from New Zealand to Australia has been unfavourable. At this time the amount of material that we bring to Australia in several forms from our New Zealand plant is escalating rapidly and it is obviously still the best way to acquire the supplementary material that we need for our plywood operations here in providing clear faces.

The Hon. J.H.C. Klunder: The timing of all of this was fairly important. Immediately after the Ash Wednesday fires, no-one had any real knowledge of how long log could be stored without deterioration. At that stage, IPL (New Zealand) veneer was an urgent requirement. The department has been exceedingly fortunate because, at the same time as IPL (New Zealand) veneer became too expensive to import because of the change in the New Zealand dollar, it was realised over time that the recovery from lake or water storage generally would continue for a much longer period than expected. The department got a large amount of reasonably high quality veneer from storage, which fitted in perfectly with the fact that we could not get it from New Zealand. The lake storage supply is now almost exhausted. Luckily, at the very time that happened, the New Zealand dollar dropped again and the department is now able to economically import material from New Zealand. It is a series of fortunate situations: it has been a very serendipitous experience.

The Hon. H. ALLISON: Is the Minister predicting an increase in the amount of material coming from New Zealand in the next 12 months?

The Hon. J.H.C. Klunder: Yes, I assume that now that the lake or water storage is virtually exhausted, the department will need to get high quality veneers in order to balance its own material.

The Hon. H. ALLISON: It is important that these questions be asked, because the Woods and Forests Department has been on the receiving end for a while and, if there are rational explanations, the sooner they are made public the better. The South-East literally depends on the timber indus-

try and on the Woods and Forests Department for its life blood, and we want the whole thing to succeed as much as anyone else. The Minister gave a strong assurance, while in Mount Gambier recently, that he expected the scrimber manufacturing plant to be the flag ship of Satco and to turn around its present financial situation. How much scrimber could the plant that is being installed produce at maximum capability, and how does that relate to the break-even point beyond which the Minister will be able to realise his dream of turning around Satco's financial situation?

The Hon. J.H.C. Klunder: Clearly, Satco should not have to rely on scrimber alone for a turnaround situation. I believe that the scrimber process will have a large bearing on the profitability of Satco. I can give the honourable member the statistics on projected factory production depending on the number of shifts and other factors. In terms of production, during 1988-89 the scrimber factory will come on stream only in the last few months and the expected production is only about 3 500 cubic metres. After that, it is expected to rise to 30 000 cubic metres in the following year and 45 000 cubic metres in subsequent years. So, it will be a significant producer of scrimber material—in fact, the only producer.

Mr GUNN: The Program Estimates state that, as at 30 June 1988, the staff of the department was 1 387 full-time equivalents, which is a slight increase on 1 343 last year. In view of the statement made at page 474 of the Program Estimates of the losses experienced by the department over two years, can the Minister or the department say whether there will be a change of emphasis from the employment of daily employees to the use of more contractors to try to overcome this loss situation?

The Hon. J.H.C. Klunder: I will ask Mr Mutton to answer the question.

Mr Mutton: The figures quoted are full-time equivalents at the end of each financial year. Our employment numbers are affected significantly at the end of each financial year because of the number of people that we employ temporarily on our plantation establishment program to re-afforest areas burnt on Ash Wednesday. The figures at 30 June reflect timings of ons and offs in relation to that program. It is probably more appropriate to consider the average staffing levels over the full year to get an indication of our staffing levels.

The average staffing levels proposed for the full year in 1988-89 are slightly less than the actual figures for 1987-88. It is appropriate to note that the supply and demand in our sawmilling operations and whether we need to put on labour or reduce shift levels in sawmills have short-term impacts on our staffing levels. Whereas most Government departments have a stable level of employment over the full financial year, numbers in the Woods and Forests Department change significantly over the year because of seasonal arrangements.

Mr GUNN: Earlier, I asked the Minister what was the policy of his department concerning the grazing of some areas under his control. Can he now say whether the department will consider this option, because there are sections in my district which, although owned by the Woods and Forests Department, have no forest activity and were previously grazed? Have departmental officers examined this proposition because, if large quantities of flammable material are allowed to build up again, they will burn again.

The Hon. J.H.C. Klunder: I assume that the honourable member is talking about agistment. The department will consider that situation. Grazing has certain advantages for the department in terms of fire hazard reduction, but the department must consider a number of factors when it

receives requests for agistment, factors including the availability of fencing and land. Agistment is usually arranged on a lease basis, although occasionally on a short-term weekly basis. Revenue from this sort of activity in 1987-88 totalled \$170 000, so it takes place fairly regularly.

The Hon. H. ALLISON: What is the anticipated write-down for Sirex damage in 1988-89?

The Hon. J.H.C. Klunder: I will ask Mr Mutton to reply.

Mr Mutton: The figure for the write-down of Sirex is one that we estimate as closely as we can from the resource base information that is available. Periodically we compile a detailed resource inventory of our forest areas so that we can have as accurately as possible the volume of material and the size range at our fingertips for long-term planning.

However, it is not especially appropriate to go to all that trouble while the Sirex levels are at their present levels or even a little lower, and we are looking for the situation to stabilise before conducting a major inventory survey. Nevertheless, our information from our cruising and sample pot work gives us a chance to identify the level of dead and dying trees and therefore to assess the losses that we might incur in a specific year. That is the methodology that we used to arrive at a figure of \$5 million for the 1987-88 financial year. That is the first time that we provided for Sirex losses, so that sum related to a period of perhaps a couple of years, but we will continue to identify as accurately as we can Sirex losses to bring them to account each year.

The Hon. H. ALLISON: I assume that, if you do not mill the trees that are diagnosed as Sirex damaged or vulnerable, there is a possibility of double counting in the following year. For instance, would the \$5 million worth produced this year be \$5 million worth of new trees or would that simply include the previous count? I imagine that difficulties would be experienced if you did not mill every tree that was Sirex damaged within the year of estimate?

Mr Mutton: We would rely significantly on the expertise of people in our organisation who do our inventory work in looking at what is there. It becomes obvious how long a tree has been dead if it is still standing and has not been milled, so there are ways and means of identifying whether trees have died in the previous year and therefore would have been taken into consideration in that inventory.

The Hon. H. ALLISON: Page 484 of the Program Estimates states:

As the provision for forest salvage established after the fires in 1983 is now estimated to be \$4.5 million above requirements, the excess has been written back in 1987-88. Partially offsetting this is a \$.8 million write-down of stock value due to some log now considered to be irrecoverable from Lake Bonney.

When the bushfire first occurred a Federal Government loan was made of \$11 million, which was interest-free for the first three years. That loan was subsequently converted into a SAFA or Government debt. It was paid back to the Federal Government and the State Government took it over. It then became an interest-bearing loan. Will the \$4.5 million, or whatever is left after the \$.8 million Lake Bonney write-off, be used to offset that Federal loan in order to set the books straight?

The Hon. J.H.C. Klunder: I will ask Mr Mutton to answer that question.

Mr Mutton: The only external assistance provided for the department following Ash Wednesday was an \$11 million loan from the Commonwealth. It was interest-free for three years, but it was nonetheless a loan and fully repayable. It has now become part of our loan indebtedness and we are paying interest on that to the Commonwealth through SAFA. The \$11 million loan was very much a drop in the ocean

in relation to assistance under that program. In the year that the fire occurred the department made provision for the cost of the salvage operation.

That operation, which is now nearing completion will fairly accurately identify the costs involved in the remainder of the program. Knowing what those costs are likely to be from now until the end of the program, we have determined that we have over-provided to the tune of \$4.5 million. We have written that back and adjusted our accounts to allow for that over-provision. The Commonwealth loan of \$11 million is basically a separate issue which allowed us to have funds to get those sorts of programs up and running.

The Hon. H. ALLISON: I am surprised at the department's loss on commercial operations this year, in view of the substantially increased turnover. Although the Auditor-General's comments in his report that the first few months were highly competitive, he offsets that by saying that subsequently, in the latter half of the year, the prices were extremely good. Was the reason for the department's loss due partly to the fact that it feels it has to lead in the discounting area rather than following discounts?

The Hon. J.H.C. Klunder: Mr South has already replied to the basic part of that question.

The Hon. H. ALLISON: What is the status of Woods and Forests with regard to discounting timber? In other words, is it a leader or a follower in the field?

Mr South: In this industry we know what goes on around Australia. There are not so many big producers that we cannot fairly readily read their activities in the market place. A couple of words from our specialist, Mr White, would help the honourable member considerably.

Mr White: As closely as we are able, we monitor the pricing of our competitors because we have been very conscious, particularly over the past two years, to ensure that we can obtain the best price for our product in the market place. We are particularly mindful of the tight margins that the industry as a whole has had to survive on during the market downturn, and have been making strenuous efforts to try and get the price up. The fact that our sales fell during the market downturn confirmed that we were not leading what was obviously a very competitive market with discounting by a number of the major producers. We wanted to try and retain our market share but would not do so at the expense of margins or by leading the price downward. Our motive was the direct opposite.

The Hon. J.H.C. Klunder: There is a feeling that the commercial division is still in a loss mode. I want to dispel that feeling, and the easiest way is to give the Committee the figures for a number of four week periods which relate to the commercial division's profit and loss situation. For period 8 (ending 13 February 1988), which was the last loss period, there was a loss of \$78 500; for period 9 there was a profit of nearly \$422 000; period 10, which included Easter, showed a profit of \$268 000; period 11 showed a profit of \$420 000; period 12, \$362 000 profit, and period 13, \$490 000 profit. Period 1 of 1988-89 (the last four week period in the current year) showed a profit of \$418 000. So, the period when the commercial division was operating at a loss is now some time in the past.

The Hon. H. ALLISON: An earlier statement related to the improved quality of timber. Are there genetic strains

and methods of improving the speed of growth on hand to the department, and does this auger well for plantations currently being sown?

The Hon. J.H.C. Klunder: I have expressed some interest in this area from my appreciation of the fact that generations in trees tend to be for fairly long periods and consequently one needs a great deal of patience to be able to prove up hybrids which are stronger and faster growing than the originals. Genetic studies as a basis for breeding radiata pine began in the South-East in 1938, but it was not until 1958 that a second generation seed orchard was established. By 1970 the department became the first radiata grower in the world to exclusively use genetically improved seedlings in broad-scale plantations.

For those people who are concerned that the Government might not be providing a lead, I think that is a perfectly good rebuttal. I must point out that I do not include the member for Mount Gambier in the group of people who always decry Government initiatives. Within 10 years the productivity gains of seed orchard stock over standard seed were so large that real interest developed amongst plantation managers in the South-East.

In 1983, two of the department's three seed orchards were burnt, and it became apparent that a large amount of work would be required to develop new orchards. At the same time, the two major private forest growers in South Australia were keen to improve the quality and growth rate of radiata pine through superior genetic stock. I do not think anyone has mentioned a 'super tree' yet, but I guess that is what we are eventually working towards. Through departmental initiation, a tree breeding cooperative, the Southern Tree Breeding Association, was formed to pool expertise, to produce genetically improved radiata pine seed for its members and to achieve a maximum gain per unit of time.

The orchards established in 1983 are now producing their first seed, and it is pleasing to note that the original five year objective of 55 hectares of seed orchards to be established by 1988 has been achieved. Since 1983, genetically improved seed for use in departmental plantations has been obtained from other States and New Zealand. However, by 1990, production from the remaining pre-Ash Wednesday seed orchard at Mount Schank, together with that from the association's orchards will provide sufficient genetically advanced seed for departmental requirements.

The reputation of the association has become widely known, and other forestry organisations have joined. It is expected that in 1988-89 we will see a doubling in size of the tree breeding group, which will have the effect of reducing the cost per kilogram of seed for members. The department has been a driving force behind the Southern Tree Breeding Association, and the worldwide recognition that it is receiving for its efforts in this field is indeed a tribute to the officers involved.

The CHAIRMAN: There being no further questions, I declare the examination of the vote completed.

ADJOURNMENT

At 9.4 p.m. the Committee adjourned until Friday 23 September at 9.30 a.m.