

## HOUSE OF ASSEMBLY

Tuesday 21 September 1982

## ESTIMATES COMMITTEE B

**Chairman:**

Mr E. K. Russack

**Members:**

Dr B. Billard  
 Mr P. D. Blacker  
 Mr J. Mathwin  
 Mr J. K. G. Oswald  
 The Hon. R. G. Payne  
 Mr J. P. Trainer  
 Mr G. T. Whitten  
 The Hon. J. D. Wright

*The Committee met at 11 a.m.*

**The SECRETARY:** I refer to the extract from the Votes and Proceedings of the House of Assembly dated Tuesday 14 September 1982 which records the referral of expenditure to Estimates Committee B for examination and also to the motion which appointed members to Estimates Committee B. I refer also to a letter addressed from the Speaker to me as Secretary of Estimates Committee B, as follows:

Pursuant to Sessional Orders, Mr E. K. Russack has been nominated to me as Chairman of Estimates Committee B by the Premier.

**The CHAIRMAN:** In accordance with Sessional Orders, it is necessary for the Committee to agree to a time table for examining items of proposed expenditure and to advise the Speaker. I understand that a draft time table has been circulated to members, and I seek a motion for its adoption.

**The Hon. R. G. PAYNE:** I move:

That the draft time table be adopted.

Motion carried.

**The CHAIRMAN:** Members will notice that seven votes are set down on the Committee's time table for examination today. It is desirable that members indicate at this stage of the proceedings how they wish to allocate the available time to the votes. This is not essential, but, if members desire to do so, now is the opportunity.

**The Hon. R. G. PAYNE:** I should like to clarify the seven votes, because, as I see it, there are only five. Mr Chairman, could you clarify that?

**The CHAIRMAN:** If one looks at the time table, one can see Services and Supply; Department of Services and Supply; Deputy Premier, Miscellaneous; Mines and Energy; Department of Mines and Energy; Australian Mineral Development Laboratories; and Minister of Mines and Energy, Miscellaneous.

**The Hon. R. G. PAYNE:** Mr Chairman, I draw your attention to the estimates of payments, which are the lines on which we usually vote. Under the heading 'Deputy Premier', we have Services and Supply and Miscellaneous. Two amounts are specified.

**The CHAIRMAN:** The actual votes are those contained in the schedule to the Bill, which covers the seven here; they are outlined as members have them on the time table.

**The Hon. R. G. PAYNE:** This problem occurs every year, and I suppose that someone in Treasury understands why it is done in that way. I am quite happy to proceed in accordance with the printed format that we have before us.

**The CHAIRMAN:** The Chair takes it that we will proceed and take it as it comes during the day.

**The Hon. R. G. PAYNE:** Mr Chairman, were you looking for an indication of a possible time allotment?

**The CHAIRMAN:** Yes.

**The Hon. R. G. PAYNE:** That would be contingent on members on the other side. For my part I propose that we complete the votes through to and including Deputy Premier, Miscellaneous, by 1 p.m.

**The CHAIRMAN:** Does the Committee concur in that?

**Mr OSWALD:** That will be all right.

Services and Supply, \$5 924 000

**Witness:**

The Hon. E. R. Goldsworthy, Deputy Premier and Minister of Mines and Energy.

**Departmental Advisers:**

Mr B. Guerin, Chairman, Data Processing Board.

Mr C. S. Crisp, Director of Chemistry, Department of Services and Supply.

Mr R. Dundon, Director, Support Services, Department of Services and Supply.

Mr J. Burdett, Director-General, Department of Services and Supply.

Mr J. D. Cambridge, Director of State Supply, Department of Services and Supply.

Mr M. E. Jones, Director, A.D.P. Centre, Department of Services and Supply.

Mr D. J. Woolman, Director, and Government Printer, Government Printing Division, Department of Services and Supply.

**The CHAIRMAN:** Before calling for questions, I point out that the Chair will allow a member of the Committee, if he is pursuing a line of questioning, to ask up to three questions. A member will be given an opportunity to ask a fourth question if it will conclude his line of questioning. I will call for questions, first, from my left and then from my right. Although no rigid ruling can be made, it may be helpful if we follow the lines down the page. If a member who is not a member of the Committee wishes to pursue the line of questioning adopted by a member of the Committee, he will have an opportunity to do so at the appropriate time, if he indicates that he wishes to do so. I declare the proposed expenditure open for examination. Are there any questions?

**The Hon. R. G. PAYNE:** The first matter that I would like to pursue relates to page 11 of the yellow book and the programme title 'Regulation of the Gas Supply'. I refer to the subtitle 'Issues/Trends', which states:

A steady decline in the heating value of natural gas has led to the Chemistry Division supplying results of heating value tests for the purpose of determining the price of gas, rather than of ensuring that the gas at least meets a quality standard. The practical significance and consequence of this test has increased. Monthly average results are supplied, and there is reason to contemplate testing every day instead of each working day as at present.

Section 12 of the Gas Act states that the quality of the gas supply shall be with respect to its heating value and purity as prescribed in the first schedule. The first schedule states that that shall be 35.5 megajoules per cubic metre.

I understand that a megajoule is the metric equivalent of calorific value. It seems to me that there is some conflict between page 11 of the yellow book, the requirements of the Act, that is, what the Minister is required to do, what has actually been done and what is proposed to be done in the programme. The suggestion is that a specific heating value quality gas is no longer being supplied or able to be supplied but that some other method has been adopted that

may not be supported by the Statutes. Will the Minister comment about that?

**The CHAIRMAN:** Before the Minister replies, the procedure will be that the question will be directed to the Minister through the Chair. It is up to the Minister whether he asks one of his officers to comment.

**The Hon. E. R. Goldsworthy:** One of the responsibilities of the Chemistry Division is to test the calorific value of the gas, as it is required to meet certain standards, and the monetary value of the gas is set by its calorific value. There is a variation in that calorific value of the gas as wells become depleted. The honourable member would know from answers he has received to questions that he has asked about this matter that, when there are extractions from the gas, when ethane, for instance, is extracted, the calorific value is decreased. The consumer pays for the heating value of gas supplied. To answer the question about the possibility of conflict between what is being done in the Chemistry Division and what appears in the Gas Act, we would have to brush up on the Gas Act itself. I will ask the Director of Chemistry to comment on the point made by the honourable member that the Gas Act dictates that the gas shall be of a certain quality. This programme has been instituted to monitor the calorific value or quality of the gas so that necessary arrangements can be made to ensure that customers are supplied with gas of a known calorific value and so that they can be charged correctly. Do you have anything to add, Mr Crisp?

**Mr Crisp:** There has been a slight but fairly constant drop in calorific value from the wells. There was a departure from the previous setting of the price at 39.33 megajoules per cubic metre in 1980, to allow for that slight drop. We are taking two-monthly averages because there is a two-monthly billing period. The average value of the gas determined by the tests during the two months is then transferred to the MJ factor that one sees on one's gas bill for the preceding two months. There is such a slight drop in this value that it causes no significant difference in the figures. The amount is still above that laid down in the Gas Act. The other two stations that are not supplied with natural gas are in the areas of Whyalla and Mount Gambier. The principle applied is that gas supplied is above the value laid down by the Gas Act.

**The Hon. E. R. Goldsworthy:** The Director is saying that the gas quality is above the requirement laid down in the Gas Act.

**The Hon. R. G. PAYNE:** I am somewhat reassured but, at the same time, also perturbed by the answer that has been given. It was said that a two-monthly average is carried out, whereas the Act provides that a supplier shall not supply gas of less than the megajoule value to which I have referred. I have received no assurance in respect of that and have been told that an average is taken, that there is a decline in the value of the gas, but that it is in excess of the minimum value of 35.5, as specified in the Act. Will the Minister assure me that the department is working in compliance with the Act? Also, how is it ensured that consumers are not supplied from day to day with gas of less than the value prescribed in the Act?

**The Hon. E. R. Goldsworthy:** The note that the honourable member read indicates that the gas is tested every working day. It has been suggested that, to get a more precise average, it ought to be checked seven days each week. I think you will notice that the gas is about four megajoules above the required minimum set by the Gas Act.

As has been pointed out, the change in the calorific value of the gas has been very marginal. With that margin that I mentioned a moment ago, I do not think there is any danger, certainly in the near future, that the gas is going to fall

below the quality prescribed in the Gas Act. I think that the Director of Chemistry has made that fairly clear.

**The Hon. R. G. PAYNE:** I took into account the other notation that the Minister kindly pointed out on the same page: that the proposal is to increase the frequency of testing to seven days a week. I would assume that neither the department nor the Minister proposes to do that unless there is a need for it. This minimal reduction in the value seems to be in conflict with the statement in the document from which I read, where 'steady decline' would surely indicate something more than 'very minor'. If the wording had been 'a minimal decline' or something of that nature, that may have been different, but the words 'steady decline' indicated to me that there was a definite loss on a continuing basis in the value of the gas being supplied to consumers. The Minister would know that probably one of the most frequent complaints being received at the present time by members relates to two utilities that are his responsibility, only one of which we are dealing with now. I believe I would have the indulgence of the Committee to mention that electricity and gas accounts are figuring very largely in the minds of consumers in South Australia—and elsewhere for that matter—at the present time as to what they see are very great increases.

I take it that amongst the reasons why the Gas Act specified a certain heating value is to ensure that in the ultimate sense the customer got value for money on a continuing basis, apart from any technical requirements that may be involved in the burning of the fuel in the various devices in which it might be used. As I understand it, we have now been assured that, although there is a decline, steps are being taken by the department to try to ensure that the value will remain above that in the Gas Act. I accept that. I do not accept that the method that has been put before the Committee ensures that on a day-to-day basis customers are actually receiving gas of the value specified, unless there is some further information that I have not understood. We are told that an average is taken. As I understand it, to get an average you have to do it after the event. If you are talking of cricket, a player has to have several innings before you know what his average is. I assume obviously, in the case of gas, that you have to measure its quantities and its values on a number of occasions before you can determine a reasonable average based on accuracy over a period of time. Therefore, really, have there been any occasions when to the knowledge of the department and/or the Minister, the gas has fallen below that specified as the minimum in the Act?

**The Hon. E. R. Goldsworthy:** The variation has been less than one megajoule, I am informed—in the high 38's, which is well above the minimum—the minimum specified in the Gas Act. The note simply indicates that 'we contemplate'.

The sentence in the Issues Trends column says that monthly average results are supplied and there is reason to contemplate testing every day instead of each working day. It is not imperative that it be done at the moment because the variations have been indicated to be fairly minimal. If there was any significant movement, obviously the department would move to daily testing of the gas. At the moment the changes are there; they are perceptible but not of such magnitude that it would warrant extending the testing from working days to seven days a week. If there are any significant variations, no doubt it will be instituted. Variations so far have been less than one megajoule as I understand it.

**Mr Crisp:** In the days when gas was made from coal, there were big variations. It is now coming down the pipeline and there has been a slight continual drop because of the nature of the wells—more nitrogen or something like that. There is very little variation from day to day in the gas test.

**Mr OSWALD:** I refer to the A.D.P. Centre. Page 21 of the yellow book refers to specific targets and objectives for 1981-82. It states, 'The completion of detailed planning and approval obtained to construct new accommodation at Glenside'. Last year we heard about a proposal for an establishment in Wakefield Street. I would like to know the background of the move to Glenside. I understand also that an allocation of \$10 300 000 has been made to provide for purchase and installation of new computing equipment at the Government A.D.P. Centre. What type of equipment is going to be installed and what services will be provided at the new A.D.P. Centre at Glenside?

**The CHAIRMAN:** Before calling on the Minister I realise that this is a different subject altogether. However, it is quite within the vote. I can see that we will have difficulty but I will allow the question and we will sort it out as we go along. We can do one of two things: first we can follow one line of questioning on one subject although we may find that by doing that, all the questions will be from one side, or secondly, we can allow equal opportunity for questions from both sides and deal with different subjects. That is what I intend doing at the moment. I call on the Minister.

**The Hon. E. R. Goldsworthy:** I guess when the honourable member is referring to Wakefield Street in the previous proposal, he is referring to the Menz site. That would have been an expensive option. The final figure was in excess of \$10 000 000 for the building alone which was a large expense for the facility. After a good deal of planning work and after looking at a number of options, it was decided that on economic and other grounds it was more desirable to establish a centre at Glenside on property which the Government owned. It was envisaged that the cost of that facility would be \$5 600 000. That was the estimate which, from memory, went to the Public Works Committee. The latest estimate for that facility is \$4 800 000 which is a more reasonable figure.

The answer to the first part of the question is that the Government believed that it would be extravagant, to say the least, to proceed with the former plans to build an A.D.P. Centre on the Menz site in Wakefield Street. In relation to equipment, a great deal of work was done with the aid of an outside consultancy. The \$10 000 000 that was mentioned does not refer to the A.D.P. Centre specifically; that is a figure which covers the whole department. The A.D.P. Centre figure is more in the order of \$2 100 000, when the amount is broken down.

So, all in all, the Government believes that the planning for the A.D.P. Centre has been economical and that we have finished up with the best option for the public; it will provide a service which is required in this day and age, a service the level of which the departments expect. I do not think that the figure of \$10 000 000 can in any way be applied to only the A.D.P. Centre.

**The CHAIRMAN:** For clarification, the member for Morphett has a document.

**Mr OSWALD:** I refer to the financial statement of the Premier and Treasurer on page xlv under 'Deputy Premier and Minister of Mines and Energy, Services and Supply', where it states:

The allocation of \$10 300 000 provides for the purchase and installation of new computing equipment at the Government's Automatic Data Processing Centre.

**The CHAIRMAN:** For clarification, in Parliamentary Paper No. 9, we are considering the Automatic Data Processing Centre. Considerations of a capital nature come in the next vote.

**Mr OSWALD:** My questions are leading on to what investment has been made in the new A.D.P. Centre. One of my questions is this: what services are going to be supplied by the A.D.P. Centre as a centralised computing service,

compared with what services are going to be farmed out to the departments?

**The CHAIRMAN:** That question is admissible.

**The Hon. E. R. Goldsworthy:** To round off the answer, if the honourable member reads further, the same document points out that the \$10 000 000-odd covers a whole range of equipment, including the Government Printer, motor cars, and so on: it is total expenditure within 'Services and Supply'. The range of services supplied by the A.D.P. Centre are those which departments request. The Government took some decisions in relation to the current policy after a fair deal of research by Mr Guerin and his group, the Data Processing Board. The Government has not opted for a highly centralised prescriptive centre where departments will be compelled to use its facilities. Rather, the Government opted for a centre which offers a service and which would be competitive and available for departments to opt to use.

The question of whether a department acquires its own computing facilities or whether it has recourse to the A.D.P. Centre, is a matter on which the Government took advice from the Data Processing Board. In other words, departments are free to institute plans for their own computing facilities, but they have to run the gambit of the Data Processing Board, which then advises the Government whether or not that is a desirable move or whether or not it is not warranted. But, there is no compulsion as such for departments to use the A.D.P. Centre facilities. The A.D.P. Centre has been established over a number of years to provide services to departments competitively and its workload has steadily increased as a result of the level of service which it gives.

I will ask the Director to outline in more detail the range of things that the A.D.P. Centre does for departments. Mr Guerin may care to comment. The A.D.P. Centre exists to provide computing facilities to Government departments as efficiently as can be done. It provides facilities for a range of departments, both big and small. The A.D.P. Centre does pay rolls, information systems and so on.

I will ask Mr Jones to elaborate on the sorts of services which the A.D.P. Centre provides and Mr Guerin can expand on the policy directions which the Government has taken largely as a result of work done by Mr Guerin and his group. Early in the life of this Government we decided not to opt for a highly centralised prescriptive data processing system, which was certainly being envisaged when we came to Government. The Data Processing Board, being a highly prescriptive system, was being set up. We did not believe that that was in the best interests of efficiency and of providing what was required. But, there has been a fair bit of research by Mr Guerin and the Data Processing Board, and options have been put to the Government and we have adopted a policy similar to what I have outlined.

I will ask Mr Jones to talk about the range of services being offered. Mr Guerin might like to comment further on basic policies. Of course, there is a fair amount of training concerned. One of the functions of the Data Processing Board is to help departments in relation to their needs and in relation to people whom they need and the training programmes they need to institute.

**Mr Jones:** The major area of service that we will be concentrating on are the common support functions: the cost for all departments, for example, finance assistance, pay roll and personnel; those types of systems that all departments need to support their operations.

We will also be available to process individual systems for Government agencies based on their decisions to use us or to use other means. We will be able to provide the required level of service at the right price to meet that market. On the computer development/application development side of things, again we will be developing systems for departments without their own resources on a competitive

basis. We will be providing co-ordination for training computer personnel and management and users across the Government in the principles of computing. We will also provide a data preparation service, again for departments that do not have their own resources. The main thrust will be the support of common-Government wired systems.

**The Hon. E. R. Goldsworthy:** I suggest that Mr Guerin might comment more fully on the role of the Data Processing Board and he may be able to elaborate on the policy directives which were sent out to all Government departments, and the role of the board in liaising with departments.

**Mr Guerin:** The policy that the Government has adopted is as the Minister described: not a heavily centralised and prescriptive approach. It depends on a few basic themes and they are cost effectiveness, essentially, so that all agencies are required to establish that whatever they want to do in computing will be cost effective.

The benefits will clearly outweigh the cost. Previously, there was a fairly strong concentration of use of the A.D.P. Centre by Government departments. Provided that they adequately analyse their needs, Government departments are now given the freedom to decide whether to install their own facilities, if that is required. Over the past couple of years some agencies have acquired their own facilities simply because the A.D.P. Centre was not able to provide appropriate facilities. I think it is becoming quite apparent that a decision has now been made on new equipment for the A.D.P. Centre; that equipment is about to be installed.

There has been significantly renewed interest in using the centre because of its particular strengths, that is, its ability to run large central systems and to pick up services that would be significantly more expensive if provided from outside. We were encouraged earlier this year when we saw some, admittedly tentative, figures that indicated that some of the cost of having, for example, pay-rolls processed at the A.D.P. Centre was very substantially below any competitive offering from external bureaux.

Over the next few years decisions will no doubt be taken to establish other facilities away from the A.D.P. Centre. The Data Processing Board expects that in many circumstances, even when agencies obtain their own facilities, they will also use the A.D.P. Centre to some degree. That is referred to in the agenda and makes much more important the question of telecommunications and networking. Quite obviously, the A.D.P. Centre is and will remain the most important part of the Government's activity in relation to computing. It is very important that Government departments continue to use the A.D.P. Centre.

**The Hon. E. R. Goldsworthy:** In relation to the question of charging, as Mr Guerin pointed out, the A.D.P. Centre is more than competitive with what it would cost the Government to place work with other bureaux. The charges are made on a commercial basis. All costs associated with the A.D.P. Centre, including building and equipment costs, will be amortised over a period and will be reflected in the charges. With all this included (and this was the result of a lengthy study before a decision was taken to proceed), it was decided that we could build the new centre, equip it, pay for it and still be competitive. The A.D.P. Centre is by far the most efficient and cheapest way of providing services to Government departments. On that basis, we have proceeded with the A.D.P. Centre as soon as possible. When we were satisfied with all aspects, we pressed on with the building of the centre, and are now proceeding to equip it.

**Mr OSWALD:** How will the re-equipping of the A.D.P. Centre expand its capabilities? Will staff levels rise or fall following the re-equipping of the centre? After the new equipment is installed, what training will occur in relation to staff at the centre and staff in other Government departments?

**The Hon. E. R. Goldsworthy:** Obviously, the new equipment is up to date. All members realise that computing equipment is more sophisticated, more powerful and occupies less space. All in all, it is capable of performing a wider range of tasks than much older equipment. I will ask Mr Jones to provide more detail about the capabilities of the new equipment and implications in relation to staff training.

**Mr Jones:** The equipment being used by the A.D.P. Centre at the moment has been in operation for some years. It is controlled data equipment which is not best suited to commercial processing. We have just decided to purchase I.B.M. equipment, which is much more suited to this type of work. In fact, I.B.M. is the world's largest supplier of computing equipment. A large range of software applications can be purchased off the shelf from I.B.M. or from third party vendors, which enables quicker and cheaper implementation, and the benefits to be obtained can be gained a lot quicker.

The facilities are up to date and modern. I.B.M., the world's largest supplier, creates competition in the third party area in relation to the provision of newer and better facilities for that type of equipment. In relation to staffing, we anticipate that there will be an increase over the figure for June this year. Last year we let the staffing level decrease a little, because we had not decided on the equipment to be used and we did not know which people we would have to recruit in relation to expertise for the equipment purchased. Although the staffing level decreased last year, that level will increase by about 8.7 this year. That increase is reflected in the changing role of the centre, which is to become more custom-oriented, to enable us to research and meet the needs of the departments and to recruit technical experts who have experience with I.B.M. equipment. There will be a slight increase in the number of operating staff. However, over the years we expect gradually to decrease staff numbers, particularly in the operations area, because of the trend towards on-line systems where there is less need for operator intervention.

In relation to training, there is a large training requirement, as the Government does not have any I.B.M. equipment stored that has the operator system and facilities that we will be offering. Therefore, there is a short-term requirement in relation to training. I.B.M. personnel are currently training A.D.P. Centre staff and, in the near future, they will be training some departmental staff. In the long term we will be looking at alternative training methods using our own officers, through video training and external consultant training. I point out that there is a large range of training facilities in relation to I.B.M. equipment. Over the next few months we will certainly be examining the most effective and most cost-effective method of training people who wish to use our facilities.

**The Hon. R. G. PAYNE:** Page four of the yellow book states that the Supply and Tender Act is currently being reviewed. Further detail appears on page 17 under the heading 'Issues/Trends', as follows:

The review of public sector supply operations, commenced by the Committee of Inquiry . . .

If one looks at page 45 of the yellow book, which shows the Ministerial portfolio responsibilities, and page 46, which shows the Acts administered by the Minister, one does not find the Public Supply and Tender Act listed. Is that an error?

**The Hon. E. R. Goldsworthy:** At the beginning of the book one finds Acts administered by the Deputy Premier, and the Public Supply and Tender Act, 1940-1981, is included in that list. The honourable member was looking at Acts specifically committed to the Minister of Mines and Energy.

**The Hon. R. G. PAYNE:** What aspects of the Public Supply and Tender Act is the Committee reviewing?

**The Hon. E. R. Goldsworthy:** The Committee is reviewing the whole operation of that Act with a view to writing a new Public Supply and Tender Act. A consultant was engaged during 1980-81 to assist in this review. I have endorsed a report made on the general principles being incorporated in the new legislation. A project steering committee is presently preparing a submission seeking Cabinet approval to draft this new Bill. The Act and regulations embrace all functions of Government.

Supply is a complex operation. Any amendments to the Act would have to be carefully thought through before they were made. The review of this Act has been fairly arduous. I think that the honourable member appreciates the magnitude of the supply function. There was no point in rushing the review and reaching decisions that might be retrogressive rather than progressive. I think that the end result will be a rewriting of the Supply and Tender Act rather than its simply being amended.

**The Hon. R. G. PAYNE:** Does the Minister intend to limit the range of suppliers to the Government when the Act is rewritten? I am thinking of the 'buy in South Australia' type of campaign. I had in mind, for example, that recent purchases, possibly through the Supply and Tender Board, of fire-fighting equipment have been from New Zealand rather than from local suppliers, who, I am assured, are able to supply similar and equally efficient locally built equipment. I do not expect us to have an Act stating that all purchases shall be made in South Australia because, obviously, that would not be practicable. Even if such an Act was to state that purchases were to be made in South Australia wherever possible, it would not be practicable, because the interpretation of that Act could create more problems than it would be worth.

However, in the case of the fire-fighting equipment to which I have referred, it was put to me quite strongly that a higher price was paid for that New Zealand equipment than would have had to be paid for local equipment, which was of equal quality. It would seem somewhat shortsighted for the supply and tender system not to take local suppliers into account when making purchases.

**The Hon. E. R. Goldsworthy:** If anything, the move is to be less restrictive rather than more restrictive, because the whole purpose of the Supply and Tender Board and the Department of Supply is to procure equipment for Government instrumentalities and departments at the most economic price at which it can obtain them. If the system becomes more restrictive, it tends to negate that aim. In answer to the first point, although no draft legislation is before the Government, there is certainly no intention on my part as Minister (and I do not think it would be the Government's aim) to be more restrictive in these matters, as that tends to mitigate against the opportunity to get the best value for money by having a broader choice.

It is true to say that a definite preference is given to goods produced in South Australia. I do not think it is normal to make public the percentage of purchases directed to this preference. However, preference is given to locally manufactured goods which come up to specification and which will do a job effectively. There is an even higher preference against imported goods and materials. An agreement was reached with the Victorian Government that there would be a trial period during which State preference would not apply between South Australia and Victoria, because we believed that we had as much or more to gain from that arrangement than had Victoria.

In all other respects, a percentage is applied against interstate goods and services, and a higher percentage again is applied against overseas goods and services that are sold in this State. So, there is a measure of protection there. I have from time to time received complaints from people who

have disagreed with decisions made by the Supply and Tender Board. Those people have made all sorts of claims about their goods, services or equipment and have said that decisions have been wrongly made to go interstate for the goods in question. I always have such allegations thoroughly investigated. It is my view that the Supply and Tender Board not only goes to great pains in these matters but also has done more than it has had to do in the past in testing and evaluating supplies. In fact, I cannot recall having received a complaint (and I have received a number) where I have not been satisfied that judgments made have been made on a sound basis and on the basis of the best endeavours by the Director of the board to evaluate all tenderers and their capacity to do a job efficiently and effectively. I shall be pleased to get the details of that complaint from the honourable member and have it investigated because, as I have said, I have received a number of complaints. I know that other suppliers who are tendering prices are not privy to all the information in other tenders and that the Supply and Tender Board goes to considerable pains to evaluate the performance and capability of equipment and suppliers.

I think that that has covered the points raised by the honourable member. I refer, first, to the philosophy in relation to getting the best deal for the Government, and that is not likely to be achieved by being more restrictive. Secondly, there is a preference that operates in favour of locally produced equipment and goods, but, notwithstanding the best endeavours of the Director and his department and the board, we do get complaints. As I have said, I can understand this. We investigate them thoroughly. I would be only too happy to investigate the complaint in relation to fire-fighting equipment. I do not know whether the Director has anything to add.

**Mr Crisp:** I am not aware of the complaint of which the honourable member is speaking, but, as the Deputy Premier has directed, I am quite happy to investigate that, and the board would be, too.

**The Hon. R. G. PAYNE:** I wish it was as simple as that. Often, complaints are received and the people who make the complaints are very loath to proceed very far with them or to become identified, because they wish to continue to be tenderers and, rightly or wrongly, they often have a view that to become identified as having complained on an earlier occasion is not to their advantage. I make no comment on that, but I know that it is a view that is held by some tenderers, including those who have complained to me. Nevertheless, I was interested in the Minister's answer, and I wonder, the Minister having said that greater efforts are being made by the Supply and Tender Board now than in the past, what evidence he can put to the Committee to support that statement and whether he can perhaps amplify on any additional requirements of the board that did not apply in the past.

**The Hon. E. R. Goldsworthy:** Let me deal with the honourable member's comment that people are unwilling to complain as it might jeopardise their chances of getting future contracts. I suggest that the honourable member urge people to come out into the open and let us know the basis of their complaints. As I say, people do come forward. I have an open-door policy in relation to these complaints. I see these people, and the Director of Supply has an open-door policy. Quite often, these people who complain have a round or two with the Director before they come to my office. This Government, and certainly the Director and the board, would not discriminate against any supplier who felt aggrieved and came forward and laid the basis of his complaint. As I say, when I have been asked by suppliers to become involved, the complaints have been investigated

and I have been satisfied as to what has happened in relation to the letting of those contracts.

I can give the honourable member a simple example, I think, as to some of the lengths to which the Supply and Tender Board now goes in testing products. I have had several complaints from firms who supply washing powders and detergents to Government instrumentalities. Efforts have been made to test their products, to the extent that the Supply and Tender Board is now putting machines in. An attempt was made to have them tested in several hospitals, not just at the Central Linen Service. Although tests were carried out there, they were also carried out earlier this year to try to assess the claims made by manufacturers in relation to that item. Several hospitals were asked to carry out tests. They did so, and each of these hospitals reported to the Supply and Tender Board, and an assessment was made. On the basis of that and knowledge of other analytical tests that were carried out, decisions were made. I might say that even those decisions were challenged, so that those tests will be refined even further. As I have said, this further development is not in place, and the department is considering getting some washing machines down at the Department of Chemistry and doing the tests itself.

**The Hon. R. G. PAYNE:** What, getting a load of washing?

**The Hon. E. R. Goldsworthy:** Yes, getting a load of washing from one of these institutions and doing the tests. This is an example of the length to which the department is going, because it has been an element of controversy to see that tests are carried out and that proper assessments are made. Even those tests are challenged, so that will be refined even further if we believe that funds are warranted. That decision has not been made. However, there was an upgrading of the standard of testing before those contracts were let. So it is certainly true to say that, to my knowledge, increasing pains are being taken by the Director of Supply and the board to ensure that they have the maximum of information in relation to the contracts that they are letting.

**Mr MATHWIN:** I refer to forensic science on page 27 of the yellow book and to pages 30 and 31 of the Estimates of Payments (Parliamentary Paper No. 9). One sees on the Estimates of Payments that it is proposed to spend \$694 800 this financial year. One sees on page 31 that there are another two items which add up to \$173 700. Would the Minister tell the Committee what manpower we are talking about within this section of his department, explain what type of work they are doing, and indicate the success of it? I emphasise the 'success' part of the question because to me, as a layman, the sum of money that we appear to be setting aside is rather small.

**The Hon. E. R. Goldsworthy:** The fact is that forensic biology and forensic pathology are being transferred from the Minister of Health—from the I.M.V.S. to the department. So, there will be increased activity in the department in relation to forensic services. In fact, there is an increased allocation in this department in relation to forensic services because, as I say, not only forensic chemistry but also forensic biology and forensic pathology will be carried out in the Department of Services and Supply. This decision was taken after a great deal of investigation and after reports were made available to the Government. We believe that this will upgrade the supply of forensic service in this area.

The appropriation of \$694 800 is reconciled in the following way. Previously, in the Department of Mines there was provision for forensic chemistry. The provision for forensic chemistry is \$294 800 and previously, included under Part 14 of the Minister of Health, Miscellaneous lines, there were provisions of \$167 000 for forensic biology and \$233 000 for forensic pathology.

It makes up a total of \$694 800. The estimates reflect the full-year effect of the award increases which were granted

last year. There are 8.75 people coming across from I.M.V.S. to forensic pathology; coming across from forensic biology are 6.75 people. Obviously somebody works part time. That gives a total number of people involved in forensic science work of 29.5, which is a substantial allocation. The Director-General may like to add something to the history of this establishment as he was involved in its planning. I believe he was co-ordinator of forensic services. I ask Mr Burdett to comment on the provision of forensic services in the department.

**Mr Burdett:** As the Minister has indicated, I was appointed as interim co-ordinator of the Forensic Science Centre on 28 June 1982. A joint management committee has been formed comprising the branch heads of the forensic pathology and forensic biology sections (formerly of the Institute of Medical and Veterinary Science), and the branch head of the forensic chemistry branch (formerly of the Chemistry Division). Those members and I form the joint management team to co-ordinate forensic services across the State. That interim management committee is in existence pending the appointment of a suitable full-time person as co-ordinator. We meet regularly, and part of the process involves trying to allocate resources across the range of services being sought from a forensic centre by prosecution counsel, defence counsel, and the Police Department. It is early days. We have been going only since 1 July 1982 and have yet to be in existence for three months. We are confident that the level of services we are providing, because we are co-ordinated, is an improvement on the previously existed services fragmented between the two organisations.

**Mr WHITTEN:** I refer to forensic science and the provision of analytical chemistry services. I have listened intently to the answers from Mr Burdett and the Minister. I notice, in the provision for analytical chemistry services, that there is a reduction in employment of average full-time equivalents of 15.6 persons. I also express concern that the provision of analytical chemistry services to consumer and environment protection agencies appears to have been reduced. Could the Minister give reasons?

**The Hon. E. R. Goldsworthy:** I think the reason for the apparent decrease in the analytical chemistry section is that 14 chemists are being transferred to the new forensic unit. That must be picked up elsewhere. Page 28 of the programme document shows that 14 people will now work in the forensic science unit within the department. Those 14 people were previously shown under the Chemistry Division. There is a consolidation of forensic work within the Department of Services and Supply. Not only are these people coming across from I.M.V.S., forensic pathology and biology, but also 14 people in the Chemistry Division are going away from that section into the forensic science section. That explains the decrease in numbers. There is no decrease in the number of people doing analysis which the Chemistry Division normally undertakes.

**Mr WHITTEN:** We look at the Auditor-General's Report on public accounts on page 164. Regarding the provision of analytical services, the item 'Forensic—Salaries, wages and related payments', shows an increase of approximately \$15 000. That does not relate to inflation. People being employed in forensic services have been taken out of consumer and environment services. Those figures show an increase of approximately \$30 000. Can the Minister explain those figures?

**The Hon. E. R. Goldsworthy:** No-one is going out of the consumer and environment sections. The full impact of the transfer will not show up. The table to which the honourable member refers goes up to June 1982. These people are being transferred from 1 July, so this is all historical material indicating the position between 1981 and 1982. Any significant variations within the Chemistry Division will show

up for the year 1982-83. I think the changes indicated in those two tables are simply inflationary trends incorporated from year to year. There would be no significant variation in those figures because the changes have only been made from 1 July this year and those figures do not relate to that. There has been no change in the consumer and environment establishment to my knowledge.

**Mr WHITTEN:** I refer to Parliamentary Paper No. 9, page 31, where we see a reduction of \$4 000 in the Chemistry Division with regard to operating expenses. If there is to be a transfer from the Chemistry Division to the forensic section, it only shows a \$4 000 decrease. Can the Minister explain the reason?

**The Hon. E. R. Goldsworthy:** It is not a major change. I will ask the Director, Support Services, to explain the \$4 000 variation.

**Mr WHITTEN:** It is the transfer of employees from that department to the forensic department, is it not?

**Mr Dundon:** We are now talking about operating expenses, not salaries. Indeed, a certain proportion of the operating expenses formerly shown under Chemistry Division have been transferred to the Forensic Science Centre. Notwithstanding that, there has been an offsetting increase in the allocation to Chemistry Division for certain activities which the division is undertaking this year. This includes restocking its store and the allocation for the purchase of glassware and chemicals, the price of which increases rather rapidly when compared with the consumer price index.

To put it another way, there has been a transfer out of the Chemistry Division lines into Forensic Science Centre, but the full effect of that transfer has been offset by an additional allocation to the Chemistry Division lines.

**Mr WHITTEN:** I know that I have asked three questions, Mr Chairman. May I be allowed to ask a supplementary question?

**The ACTING CHAIRMAN (Mr Mathwin):** The Chair has been fairly flexible and I hope that this situation will not continue all day. I am quite happy to give the member for Price the advantage on this particular occasion.

**Mr WHITTEN:** In relation to the reply I received concerning the Chemistry Division, can I assume then that the \$694 800 shown on page 30 takes care of all the extra salaries for forensic science, from the transfer of chemistry to forensic science?

**The Hon. E. R. Goldsworthy:** I think that that is the case.

**Dr BILLARD:** Pages 39 and 40 of the Programme Estimates, Vol. 2, refer to the investigation of the computerised Justice Information System. I have a series of questions about that which all basically ask for expansion as to the possibilities. I would like to know what sort of information it is envisaged could be stored on such a system. For example, is it simply to store copies of the law, in which case it is a passive thing that one can inquire about fairly quickly, or is it in fact to store details of cases that are to come before the court or perhaps details of offenders who have come before the court? One can see that, once one gets into that latter area, one starts delving into a quite different area where matters of privacy and so on become quite important. For that reason I ask what is the scope of the type of information that is envisaged to be stored on such a system at this stage. I realise that the final details have not been worked out.

**The Hon. E. R. Goldsworthy:** The Justice Information System is envisaged as having a very broad application, far broader than the honourable member indicated in his first comment—simply factual material on volumes of the law and so on. It is a fact of life that an enormous amount of effort and man hours is spent in obtaining information in relation to all of the matters which the honourable member canvassed. These include police offenders, people who come

into contact with the Community Welfare Department, correctional services, information required by the courts, and information required during investigations. It is envisaged that this system will become an information bank covering the whole of those areas.

As I say, an enormous amount of time is consumed in manual and visual searches at the moment, and the Justice Information System is envisaged as having a very broad role in relation to storing information and in terms of its ready retrieval. I will ask Mr Guerin if he would comment further on this because he has been involved fairly heavily in the planning work of the Justice Information System and no doubt he can comment on the role as presently envisaged.

**Mr Guerin:** The starting point for the Justice Information System investigation has been a recognition that five departments, the Police Department, the Courts Department, Correctional Services, Community Welfare and the Attorney-General's Department, in fact, have a common need for certain types of information and they pass this information from one to another already under manual arrangements.

The first part of the investigation that took place was to establish whether or not there was sufficient sharing of information and whether or not there was duplication in collecting, storage and usage of it to justify a common approach to providing some system. That investigation has shown that there is a very extensive sharing of information already. As an example, when a person is arrested and charged, held overnight or brought before a court, he may be sent to the Adelaide Gaol on remand and he goes through some sort of assessment by perhaps a community welfare person, may be sentenced, and may be released on parole: a whole series of points at which certain basic information about the person is required for normal operational purposes.

We have lost count of the number of times that these people were asked their names and addresses and all the rest of it. There is a great duplication of information. Currently, there is co-operation in the maintenance of criminal records, the record of actual convictions of offenders, where most of the work is done by the Police Department in a large room with thousands and thousands of index cards, which are extremely difficult to keep up-to-date.

When a court is considering a sentence, it asks for the antecedents of the person involved and essentially the report comes from the Police Department. A good deal of this information can be put in a secure computer data base and can be accessible to people who have appropriate authorisation, and only people who have that authorisation.

On top of that, there are some functions that are peculiar to one department or another which would be closely related to this type of information. One can mention, for example, court scheduling in the Courts Department. That is its prime function: to ensure that all the appropriate people get into the same courtroom at the same time, that jurors are summonsed and paid, and so forth.

The Justice Information System is looking at ways in which court scheduling can be better done to save money and to save the time of judges, lawyers, prosecutors and so forth. In addition, it is possible that it may be most cost effective to provide some additional departmental services, which may be just normal administrative services, through the same means. Currently we are in the last stages of doing a feasibility study with the assistance of a consultant. We cannot say what form the system will take. One could sketch in the extremes. At one extreme there could be something like the system that the New Zealand Government set up in the Wanganui Computer Centre, which is governed by its own piece of legislation and has its own management apparatus, where all the information in those areas is stored in two computers under the control of one organisation.

All the departments share that system. At the other end of the scale it is quite possible that a certain amount of the information and a certain number of the systems involved could be spread through those departments and we may have a series of link computers. At this stage it is clear that people will have to share certain basic information about offenders. All those involved in this work are very concerned about the possible implications involved in maintaining this type of data base in relation to the possibility of wrongful use, invasion of privacy, and so on. A group has been working for some time to establish the changes and improvements required in relation to the handling of data. That must be done before a decision can be made about the system. I believe that that decision will be made later this year. It is quite possible that cost effectiveness will dictate a certain arrangement, but that security, confidentiality and privacy will dictate a greater separation of facilities and controls than would otherwise apply. We expect a final recommendation in about two months.

**Dr BILLARD:** Mr Guerin mentioned that at the moment there is some sharing of data and that there is a considerable degree of duplication. The implication in part of what he said, which is reinforced on page 39 of the yellow book, is that the present systems are inadequate, because manual systems can create errors. To what extent does the present system pose a problem in relation to accuracy, compared with its inconvenience? To what extent is the request for the same information duplicated?

**The Hon. E. R. Goldsworthy:** I believe that there is moderate inconvenience. I think the present system is extremely wasteful in relation to time, money and the manpower required. It is a very time-consuming system. I think that area is more significant than the question of accuracy (although accuracy is vital). I think that one of the main reasons for moving to a more sophisticated information system is related to the enormous resources that are currently required in transferring information. I have no information about the level of misinformation provided or the number of errors that occur.

**Mr Guerin:** I will give one or two examples of the type of improvement that can be made. For example, there are two separate card indexes in the Criminal Records Section of the Police Department: one for criminal records and one for outstanding warrants. The two systems are not cross-related. If a police officer requires information about a certain person he must consult both systems—that is doubling up. The speed with which an inquiry can be completed in relation to these records is very slow. If a police officer apprehends an offender and he thinks that the offender may have an outstanding warrant, it can take up to 40 minutes to obtain that information. There is no way that a police officer can detain a person for that length of time just on the suspicion that he may have an outstanding warrant. That reduces the ability of the police to enforce warrants. If this information were placed on a computer system it would enable the information to be supplied very promptly.

The basic problem with both of these card systems is that there is not sufficient manpower to cull the records. No-one is quite sure how many of the cards are out of date. It is not absolutely certain whether all the information contained on the cards is entirely consistent in relation to the names given, and so on. If a computer system is used, I would expect a cost reduction and an improvement in the availability of information provided to the police.

**Dr BILLARD:** Mr Guerin stated that there is currently some sharing of data. He also said that a study group was looking at future requirements in relation to the provision of safeguards. What are the present safeguards in relation to the sharing of data by departments? What scale of system is envisaged and what is the time scale for its introduction?

Will it be a relatively small system that can be implemented within 12 months or will it be a relatively large project which may take up to five years or more? What is the scale of the project?

**The Hon. E. R. Goldsworthy:** Administrative directives exist in relation to the transfer of information between departments, requiring that certain information is not to be made available to people who are not entitled to have it. Policies and administrative directives exist within departments in relation to the transfer of information. Mr Guerin may care to comment about the scale of the project.

**Mr Guerin:** The project is quite large in that we expect it to last for several years. In fact, the project will be phased in. If everything goes well, I believe that by the beginning of the second quarter next year it will be possible to begin implementing some parts of the system. For example, work is proceeding in relation to court scheduling and I believe that the first elements of the court scheduling system could be available before the end of the financial year.

When one talks about putting up all the criminal records and dealing with other administrative and operational systems for these departments, one is really talking about a set of projects which would have to be staged over the next several years. It is quite clear that the initial investment will have to emphasise police-based systems, because they collect and hold most of the information now used by other agencies. However, there is some activity in the courts and in the Department for Community Welfare. There are other considerations about wider information needs which might mean that an investment there is possible sooner than one might think.

**The Hon. J. D. WRIGHT:** On page 4, under the heading 'Strategies', it states:

Develop and introduce appropriate customer oriented strategies aimed at improving client awareness of services provided by each division to ensure that services meet client needs and at a reasonable cost.

I have no argument with that statement because that is what the department is there for. However, under the heading 'Issues', there is some difficulty in understanding what is meant by the line starting 'within some areas the department faces competition from the private sector'. Will the Minister be more explicit about just what those areas are, and will he say whether the department is losing some of its work to the private sector or whether it is gaining work from that sector?

**The Hon. E. R. Goldsworthy:** The area that springs to mind first, in this matter, is that of the Government Printer. The printing industry is highly competitive, as indeed is all industry at the moment. The department seeks to provide a service at a competitive cost; otherwise, there is little justification for that service existing. We have already discussed the A.D.P. Centre and the fact that it will be able to provide a service that will be competitive with the private sector and certainly with private bureaux.

The Government Printer may care to comment on this matter in a moment. It is one area that springs readily to mind. Also, some of the services in analytical chemistry, the supply of goods from warehouses and other places, are in competition with private enterprise, and perhaps Mr Crisp might comment on this. Also, the A.D.P. Centre supplies a service that is available in the private sector. If a Government instrumentality is unable to compete and provide services, there is no justification for its existence.

However, in the case of the Government Printer, there is an irregular flow of work. When Parliament sits there is plenty of work for him. However, the point I make is that there is a convenience factor and a level of service factor which the Government might require and which might be difficult for the private sector to provide. The recording of



*Hansard* is a case in point. There is a large increase in the volume of printing work when the Parliament is sitting and particularly when it sits late. One of the difficulties experienced by the Government Printer is getting a steady flow of work over the whole 12 months so that he can run an economical and competitive printing service.

The honourable member is probably aware that a committee was established during the life of the previous Government, of which he was a Minister. That printing review committee had a private enterprise Chairman from Griffin Press. There was also input from various people in private enterprise. As a result of that, an agreed strategy was adopted to establish a printing board of review, on which the private sector was represented, to oversee the operation of the Government Printer and to ensure that a fair balance was struck between the flow of work required so that the Government Printer was not left high and dry by departments that sought to send their work elsewhere, that it remained competitive, and that its flow of work was not spasmodic.

The deliberations of that committee had led to an harmonious relationship between the private printing industry and the Government Printer. This has assisted the Government Printer markedly in creating a viable operation. They are the areas where competition exists, particularly in relation to the Government Printer and the A.D.P. Centre, both of which are large operations. For that reason, I think that a commercial approach is to be adopted by the Government Printer and by the Director of the A.D.P. Centre, to ensure that they provide the services required by the Government while remaining competitive. I will ask the Government Printer and the Director of Chemistry to comment. The Director of the A.D.P. Centre has already spoken. The Director of Chemistry may have remarks to make about services provided by the Chemistry Division that could be provided by the private sector.

**Mr Woolman:** The policy of the Government Printing Division since the Government Printing Study Steering Committee commenced in 1977 has been to approach the total review as a consolidation programme, that is, that the Government Printing Division would not expand but would look at its commitment to the Parliament and try to staff itself in order to meet that commitment. As members know, Parliament sits for approximately half the year, and there needs to be other work to keep those people busy when Parliament is in recess.

We have worked to that aim in the period since 1977. We have examined the types of product that we produce and, if those products can be produced more economically by the private sector, a conscious decision has been made that that work should be let to the private sector. This has led to a number of products being let to the private sector over the past five or six years. Presently, staffing levels within the division are such that we can cater for the work peaks created by the Parliamentary sittings. Our peaks start in about June and go through to about the end of this month. Any work which comes in during that period and which cannot be handled by the Government Printing Division but can be let to the private sector is let to that sector through our print procurement section. We call tenders from the private sector for that work, which is let out. Therefore, we are keeping our delivery dates and commitments to our other clients while maintaining deliveries to Parliament. When Parliament recesses, we stop the flow of work to the private sector.

If a particular job can be printed far more cheaply or more economically by the private sector, that work is looked at and is then fed outside. There are specific areas, particularly in computer stationery and continuous stationery, where that decision has been made not to purchase capital equipment that can produce that type of work. Again, that

involves the print procurement section of the Government Printing Division, and currently a decision has been made to reverse that to State Supply. It purchases that out through the private sector again. That type of thing, in my opinion, is saving the Government money, and it is getting the best advantage from having an in-house printing facility at its own request, meeting delivery to all Government departments.

**The Hon. E. R. Goldsworthy:** I am told that there are very few areas where the Chemistry Division is in competition with the private sector.

**Mr Crisp:** There are two elderly analysts (I hope that they would not mind my describing them as that—they are well up into their 70s) who have retired and who do a certain amount of work. Very little other analytical work would be done in the State on, say, food analysis and that type of thing. There is that facility interstate, but not much in South Australia.

**The Hon. E. R. Goldsworthy:** The Director of Chemistry is saying that food analysis is done by the Department of Chemistry. A whole range of foods is analysed. It is not done by the private sector in South Australia. Therefore, we are not in competition. There are a couple of elderly analysts in the private sector, not working for the Government, who would perhaps be in competition with the analytical work that is done in the Chemistry Division. There is no competition, to speak of, in the Department of Chemistry: the services are not supplied elsewhere.

**The Hon. J. D. WRIGHT:** Recounting the answers given regarding the A.D.P. Centre and the Government Printing Office, in the first instance, the Minister did say that the Department of Chemistry was involved as well. I do not want to waste this as one of my questions. I am more or less stating the fact at the moment that that appears to be the situation. If the Minister wants to advise against that, he may. It appears from what he has told me that there are only two areas.

Can the Minister say whether the Government has any plans to change the method of disposing of Government cars? I have been told by one of my constituents that the Government is in the process of examining the possibility of setting up a car pool of its own rather than using the method that has been used until now through a private person who is responsible for auctioning the cars. My constituent has complained to me quite strongly about this, saying that it is an intrusion. I am not suggesting that I agree with him; I am just asking for information. My constituent says that this is an intrusion by Government over private enterprise, wherein he has had the opportunity of disposing of these cars for some years now on a contractual basis with the Government, for which I do not believe he is overpaid, if the rates of which I have been informed are correct.

My constituent has pointed out to me that one of the reasons why the Government is able to get fairly high prices for its cars at these auctions is that, along with Government cars, all sorts of private cars are sold as well. This induces people not only from South Australia but from all over Australia to attend these auctions. He made the point (and I am not an authority in this area, so I am picking up what he is saying) that the Government will receive less for its cars if it goes ahead with its own private auctions, because it will not have for sale a number of cars other than those provided by the Government. He advanced the argument that that will not attract interstate buyers, certainly, as it has attracted them until now. I am really asking whether the Government is in the process of changing its method of disposing of its own cars, what that method will be, and what is the timing of it.

**The Hon. E. R. Goldsworthy:** The Government is certainly looking at the mechanism for the disposal of cars. I think that about two years ago the Public Accounts Committee was of the view that very considerable improvements could be made in terms of the efficient return to the Government by the sale of its vehicles. One area of complaint was that the vehicles were being stored at various locations around metropolitan Adelaide before they were sold. The vehicles were being held in rented premises and others, and there was fairly strong evidence that they were being interfered with.

It was put to me that batteries and perhaps tyres were being changed over. In other words, the level of supervision of these vehicles scattered around metropolitan Adelaide was not satisfactory. Therefore, the Government took some steps to establish a facility where these vehicles at least could be stored under some sort of supervision, and that has been implemented. We are in the process of getting a place where these vehicles can be stored satisfactorily, so that the Government and the people who are responsible for the quitting of those vehicles, that is, the Supply and Tender Board, the Department of Supply, can be satisfied that those vehicles are being looked after satisfactorily until they are sold.

However, there have been some queries, including those of the Public Accounts Committee, in relation to the method of selling. At the moment they are being sold by City Motor Auctions, which is paid to clean the cars, and which has a contract for selling them. It has been put to me as Minister, and to the Government again by the Public Accounts Committee and others, that this is not the best way of doing the job. Therefore, we have investigated the most efficient way of enhancing the return to the Government from the sale of its vehicles.

It has been decided to call tenders again. No final decision has been made in relation to establishing a facility where a Government auctioneer would sell the vehicles, although the practice of Government auctioneers selling Government property is certainly not new to the Australian scene. A decision will be made finally on the basis of what will be the best for the public purse in relation to the return on the sale of those vehicles. If it is found that it can be done more efficiently with less waste, a change will be made in due course.

If the Government could be convinced that it could be done, and that vehicles could be sold off by private enterprise more effectively than by any other way, that system would then prevail. However, the Government is certainly not convinced of that at the moment. I find hardly credible the point that it would not attract interstate buyers. Government vehicles are usually fairly attractive to second-hand car buyers because they know the rules under which they are quit and that they have a certain mileage or life. Therefore, they command a fair bit of attention. Sales would be held at a time when a number of vehicles was to be disposed of. I would not anticipate any diminution of interest from interstate buyers. I assure the Committee that no decision has been made simply to disadvantage a private enterprise operator. It is proposed to recall this contract by open tender for a further 12 months while we do some further evaluation. We would be quite derelict in our duty to realise the maximum on these Government vehicles and if we did not do it in the most efficient way possible to ensure a maximum return to the public of South Australia. We are looking at that matter.

**The CHAIRMAN:** The Committee agreed this morning that an endeavour would be made, although it was not a rigid agreement, to complete the first three votes by 1 p.m. I bring that matter to the Committee's attention. I refer to pages 28 to 32, and 120, volume 9, of the Estimates of

Payments. The three votes referred to can be terminated if there are no further questions. There being no further questions on the current vote, I declare the examination completed.

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Works and Services—Department of Services and Supply,  
\$10 280 000—Examination declared completed.

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Deputy Premier, Miscellaneous, \$764 000—Examination  
declared completed.

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

**The CHAIRMAN:** I advise that the required notices of discharge and substitution of members have been given, as follows: Mr Randall, the member for Henley Beach, in place of Dr Billard, the member for Newland; Mr Schmidt, the member for Mawson, in place of Mr Ashenden, the member for Todd. Also, it is desirable for a member, when he gets the call from the Chair, to indicate whether he intends to move to another line or another theme of questioning. If he does so, other members can immediately indicate to the Chair that they have further questions in the area presently being considered. I expect normal courtesy from members in permitting the current discussion to be completed first and then I will give the call to the member seeking to move into the new area.

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Mines and Energy, \$11 484 000

**Chairman:**

Mr E. K. Russack

**Members:**

Mr E. S. Ashenden  
Mr J. Mathwin  
Mr J. K. G. Oswald  
The Hon. R. G. Payne  
Mr R. J. Randall  
Mr I. Schmidt  
Mr G. T. Whitten  
The Hon. J. D. Wright

**Witness:**

The Hon. E. R. Goldsworthy, Minister of Mines and Energy.

**Departmental Advisers:**

Mr M. F. Whinnen, Director, Administration and Finance, Department of Mines and Energy.

Mr B. P. Webb, Director-General, Department of Mines and Energy.

Mr R. K. Johns, Deputy Director-General, Department of Mines and Energy.

Mr T. C. Waite, Senior Accountant, Department of Mines and Energy.

Dr C. D. Branch, Director, Resources, Department of Mines and Energy.

Mr T. R. Watts, Director, Oil and Gas Division, Department of Mines and Energy.

Mr P. R. H. Hill, Director, Mining, Department of Mines and Energy.

Mr W. R. P. Boucaut, Chief Geologist, Department of Mines and Energy.

Mr D. K. Lock, Acting Principal Engineer, Engineering Services, Department of Mines and Energy.

Mr J. D. Noble, Acting Director, Energy, Department of Mines and Energy.

**The CHAIRMAN:** I declare the proposed expenditure open for examination. The matter for consideration is Parliamentary Paper No. 9, Estimates of Payments, pages 34 to 38. Are there any questions?

**The Hon. R. G. PAYNE:** On page 49 of the programme documents under the heading 'Agency overview, objectives, issues and strategies', there is a subheading 'issues'. Amongst the matters covered under that subheading are major projects in train or foreshadowed which includes the evaluation of coal deposits at Leigh Creek, Wakefield, Kingston, Lake Phillipson, Lock and Sedan. What is the present situation in respect to coal deposits sometimes referred to as Wakefield, as appears to be in the programme documents and on other occasions, Bowmans, which exploration for, evaluation of, and testing of burnable qualities and so on, have been proceeding for some time?

It is my understanding that various tests were carried out on samples of coal sent from Bowmans to West Germany and the United States, in relation to the qualities of the coal, both to its energy value and also to disadvantages it may have during combustion in boilers and so on. I believe that the Minister may have had a report for some time now, which has not been made available generally either to members of Parliament or to the public, and that this report shows the results of tests carried out which have a vital bearing on the possible choice of that particular coal at Bowmans/Wakefield as to whether it may be used for the provision of a supply of fuel for a future electrical generation power plant in South Australia. Can the Minister throw any additional light on what is currently known by the public with respect to that coal?

**The Hon. E. R. Goldsworthy:** I have not had any written report. Certainly, the work is not complete yet in ETSA's assessment of Wakefield and other low-grade lignites in South Australia. So, it is not true to say that I have had a report, certainly, not a written report which gives an evaluation of Wakefield coal and the prospects of burning it. It is true that combustion tests have been carried out in Germany and America, but there are a number of problems associated with that coal. I guess that the honourable member is aware of some of those problems.

The Wakefield coal has a very large sodium impurity. Old deposits have saline aquifers which means that there is a major dewatering problem with salt water. So, it is certainly not all plain sailing. This morning I had discussions with the Chairman and the General Manager of ETSA and, amongst other things, we talked about these coals, the options for South Australia and the narrowing of those options. It is anticipated that ETSA will not simply rely on its own estimation of the most suitable deposit of lignite to generate electricity because it believes that an independent judgment would be valuable because ETSA owns the Wakefield deposit and holds the lease. ETSA also has the same responsibility for Lochiel, where it made a discovery recently. ETSA believes that in these circumstances it would be valuable if they had an outside consultant to do an assessment and are not relying simply on their own judgment. That will be obtained.

ETSA could be in a position to make a judgment for power generation in the early 1990s, possibly 1992, as to which of these lignites will be the preferred fuel. All I can say is that the assessment is continuing. I have fairly frequent verbal reports. Certainly, there has been no final report. I ask Mr Johns, the Deputy Director-General, to comment further on the assessment of these lignites. Mr Johns has been involved in discussions with the trust from time to

time. ETSA is still not in a position to make a final judgment on this matter. There was some talk that the Wintinna coal/Meekatharra minerals coal was the better quality; it certainly is. I discussed that with the trust again this morning and there is still a great deal more information required in relation to mining costs and so on before that can be seriously considered as a real contender as a source of fuel for power generation. I ask the Deputy Director-General whether he would like to comment on the coal options, particularly in relation to Wakefield, as I think that that was the thrust of the question.

**Mr Johns:** Wakefield offers potential for the largest source of coal as a resource for future power generation. However, there are disabilities attached to it. It is among the deepest of brown coals that are known locally; the others include Kingston and Sedan.

In the past few weeks the trust has announced the discovery of the so-called Lochiel deposit, which is really an extension of the Wakefield deposit and it is somewhat shallower. I suppose that will open up another option. The final decision to mine one coal or another depends not only on the running costs but includes such things as disposal of water and dewatering, siting and the disabilities attached to the various types of coal, because there are minor variations in deleterious matter, including sodium chloride and sulphur. I suppose that in the end the Electricity Trust will make its decision based on cost. Wakefield and now Lochiel will form part of that assessment. We have provided technical assistance on the Wakefield deposit through the secondment of a geologist to the Electricity Trust. We have undertaken geophysical work. In fact, the discovery at Lochiel was based on geophysical surveys conducted by our department.

**The Hon. R. G. PAYNE:** I was somewhat surprised to hear the Minister refer to another study. According to ETSA's annual report a study has been carried out, although it is not exactly on the topic referred to by the Minister. That study was conducted by Bechtel International Corporation, whose job was to study alternative planning strategies to meet the power requirements in South Australia until the end of this century. The study covered nuclear power, punch storage, interstate gridding, and renewable energy resources. The study concluded that the next stage of development should be based on local or imported coal. In that connection I also understand that there is a need for the provision of some further base load capability equipment for South Australian power generation, certainly towards the end of the 1980s (and we are already into the 1980s). Therefore, we do not have a lot of time to decide what should be done in that regard.

I am aware that some drilling has occurred at Walloway Basin, which is north of Orroroo. Presumably, that drilling is based on coal shows in that area. I understand that we need to provide for the base load capability that I referred to earlier, because the total of 500 megawatts which will be available at Port Augusta upon the completion of the two new stations will not be in the form that could be required. I also note that the ETSA report states that peak load gas turbine plants may have to be provided fairly quickly because of the delay that has occurred at Port Augusta. I point out that I am not attempting to blame the department for that delay.

The Minister's comments contain a lot of hope but not a great deal of factual information about what we are actually doing in relation to this vital problem that must be faced by the State. I suppose there is a lot of merit in continuing drilling wherever a geophysicist says that there is a likely possibility of locating a deposit, by whatever means he arrives at that conclusion. We could probably cover the State with holes without generating any additional power when it is required. When will decisive steps be taken to

provide for the State's future electricity needs, not in the distant future but in the near future?

**The Hon. E. R. Goldsworthy:** I think I know which report the member was referring to. It was not a report specifically on Wakefield coal; it was commissioned by the Electricity Trust and conducted by Bechtel into the wide-ranging options available to ETSA in relation to future power supplies. The Wakefield deposits were not the sole point of interest in that report; it was an overview of the power options open to the trust. The report contains some conclusions in relation to the options available. I do not think the report has been made public, as was suggested by the member. I have seen the report which, as I have said, was commissioned by the trust.

The report refers to the feasibility of a third unit at, for instance, Port Augusta. In 1984-85 or 1986 two 250-megawatt units are to be commissioned and there is a possibility of a third 250-megawatt unit. Those units will use Leigh Creek coal, which will require deeper mining and will be more expensive. It is also true that the trust canvassed the option of importing black coal from New South Wales. ETSA has not made a final decision about just what will be required to satisfy our generating capacity at the end of this decade and into the early 1990s. I was told this morning that in all probability that decision will be made early next year.

It is also true that for peak loading some further gas turbine capacity will be required, but it will not be required for base load. Although we do not believe that we will reach the dire straits that apply in New South Wales, peak loading is required and New South Wales is having to turn to gas turbines to satisfy some of its peak loading requirements. In the short term, ETSA believes that that will be required in South Australia. I believe that the power outlook for South Australia will be greatly diminished if we are not successful in renegotiating the gas contracts as they presently stand. It will be necessary for gas to be burnt for power generation well beyond 1987, if Torrens Island is to see out its economic life. That is a matter for concern for the Government, for me as Minister and for ETSA. Much of the Government's effort and my effort is being applied to those negotiations, which have been heightened and given a great deal more impetus as a result of the recent arbitration decision in relation to the price of gas.

The basic question we have been addressing for many months has been the question of supply. Gas for power generation is essential beyond 1987. It is essential that that gas is procured. What I said to the honourable member a moment ago is perfectly true. I understand that Bechtel will be used again specifically to advise on the matter raised by the honourable member, that is, the question of lignites and which of these lignites will be developed for power generation in the early 1990s. As I said, it could be said that the trust has a vested interest in the deposits it controls at Lochiel and Wakefield. Therefore, it believes that an independent view is required in relation to the economics of those deposits and the Kingston deposit, which is leased by Western Mining and the Sedan deposit, which is leased by C.S.R.

It is believed desirable for there to be a further assessment of which of those deposits is most suitable for their power requirements. I confess that I misunderstood the report that the honourable member referred to, the Bechtel report, which considered the total range of options available to ETSA of fuel from any source for its future requirements. There was no particular concentration on these lignite deposits. The trust has come to the view that one of these lignites will be used for power generation. As has been suggested, there could well be a need for some additional power generation during the intervening period. This will depend on the time that that can be brought on stream. The early 1990s are being discussed as the time for the development of a power

base using one of these lignites as fuel. I am told that a decision about this is likely to be made early in the new year.

**The Hon. R. G. PAYNE:** The Minister's answer was rather like the curate's egg, reasonable in many parts. There were two matters that disturbed me about his reply. The first was his reference to his being 'told' what will happen or is likely to happen. I am speaking to the Minister as the person in this State charged with the responsibility for this State's future energy requirements. That may have just been a form of wording that he uses. However, I hope that he uses his best influences in this matter, if that is what is needed, because ETSA is a statutory body with some standing in its own right, to ensure that decisions that must be taken are taken at the right time. Judging from information I have, those decisions need to be taken shortly.

The Minister mentioned that a decision is likely during the next calendar year. I suppose that is fair enough. However, the lead time for ordering, providing, setting up and so on of a power station takes not much less than six or seven years. If a decision is taken about this matter in 1983 that puts the completion date at the end of the 1980s. I believe that information available to the trust, and no doubt to the department, indicates that we need to be in a position to provide an additional power supply in the late 1980s. Notwithstanding that, the Minister did not nibble on the bait I threw out in relation to Walloway Basin, north of Orroroo, when he answered my question. Does the Minister have any more information about this matter?

**The Hon. E. R. Goldsworthy:** As the honourable member well knows, the Electricity Trust is not under direct Ministerial control. Therefore, I cannot tell it that it has to do anything, I suggest. However, I do not think that there have been any occasions on which my suggestions to the Electricity Trust have been ignored. The trust has a degree of autonomy in its decision making. However, what the Government suggests to ETSA is listened to and I can think of no occasion on which such indications have not been heeded. That is the position in law relating to ETSA.

I will expand on the options available in this matter. A third unit for Port Augusta has been considered. However, the costs indicated for such a unit mean that the cost of power because of increased mining depths and so on could well lead to a decision that there is a preferable option, even the option of importing black coal from another State. Another option being pursued actively at the moment is an interconnection across the southern border of this State with Victoria. A heavy duty line has almost been completed to Portland to service the aluminium smelter. However, that smelter has been deferred for some time, so the Victorian Electricity Commission, which has invested heavily in the capital cost of developing this line, may be interested in coming cross the border with it. There is an excess capacity built into that system and ETSA is pursuing, with my encouragement, discussions with the Victorian authorities with a view to power coming across the border from that source. I am not saying that it will, but it could well finish up bridging the gap which, as the honourable member has suggested, could occur in power supplies at the end of this decade if a decision is made that certain projects are not economic.

If this power becomes available one can make a judgment on the economics of the proposal, which is the first consideration. Equal consideration must be given to security of supply. This is a promising option, and one that has emerged in recent times because of the decision to defer the development of the aluminium smelter at Portland. The Victorians are interested to pursue this matter and I have 'encouraged' ETSA to pursue it. We are mindful of the needs of securing a continuing growth, which must occur in any power system,

and in catering for that growth. The lead time, as has been suggested, is considerable, although gas turbines can be established quite quickly. They will not generate a large amount of power, but can fill a gap during peak load periods.

**The Hon. R. G. PAYNE:** But that is capital sitting around doing nothing.

**The Hon. E. R. Goldsworthy:** I think that the economics of doing that are reasonable or ETSA would not have contemplated them. Those economics are quite feasible and gas turbines can be established quickly. There are, however, a number of options. If we can arrange for Victoria to transfer power across the border using an asset which will otherwise be lying idle in Victoria, that could well turn out to be a good option. To close off options while there are several available would be foolhardy, although I agree with the honourable member that the time is coming when a decision must be made about this matter, and the matter got on with. As I said earlier, a decision will be made early next year, I think were the words used, which I take to mean during the first two or three months of next year. The number one problem is to secure gas for the Torrens Island Power Station. These matters are all part of the essential planning for the security of our power supplies, but there is no alternative to the fact that, in my opinion, until 1987 a significant amount of our power will be generated by the Torrens Island Power Station burning natural gas.

That is a significant component—certainly not as heavy a component as it is at the moment, when we generate about 80 per cent of our power by burning gas, but a significant component will have to be generated by burning gas at Torrens Island. As I say, that seems to me to be equally, if not more, pressing a requirement: that those contracts be settled so that planning for further additions to the grid can be made in the knowledge that our base generating load after 1987 is secure and that we are really planning for additions to the grid due to expansion.

It would be a major blow if the gas was, in fact, turned off in 1987, as current contracts require, unless further significant reserves are found. I assure the honourable member that the Government and I certainly appreciate the necessity for making decisions as soon as they can be made, but to be committed to a course when other options may, upon further examination and negotiation, prove to be preferable would be rather foolish.

**The Hon. R. G. PAYNE:** The decision concerning Leigh Creek turned out to be right.

**The Hon. E. R. Goldsworthy:** The honourable member says, in effect, that the decision to develop Leigh Creek was a step in the dark, so to speak, an act of faith, which proved to be wise. Indeed, it did, but, of course, South Australia's requirements then were far more modest than they are now. That decision was taken because of difficulties being experienced in relation to power generation, almost all of which was being generated by imported coal, when we were at the mercy of disputation on the coal fields in New South Wales.

**The Hon. R. G. PAYNE:** That was the interstate grid.

**Mr MATHWIN:** I rise on a point of order. I think, with due respect, that the member for Mitchell has had rather a good run. He has made a couple of extra interjections which called for detailed answers. Other people, like myself, wish to ask questions.

**The CHAIRMAN:** I uphold the point of order. In this morning's session I interrupted a member on my right who was doing the same thing. I ask the honourable member for Mitchell to observe that. Please address further questions through the Chair.

**The Hon. E. R. Goldsworthy:** I will complete this point. It is very hard to insulate ourselves against industrial disputation of the sort that occurs from time to time in Australia. One of the problems with our former power base, as

I said, was that we depended, during the Second World War and earlier, from memory, on imported coal. Part of planning is to seek to diversify one's source of fuel, if that is at all possible. At the moment we depend heavily upon natural gas, which will change over time. One of the reasons that the trust has to contemplate and plan for this extra gas turbine capacity is related to the delay in construction of the northern power station resulting from the demarcation dispute which occurred between the Builders Labourers Federation and the Federated Ironworkers Association, which, I understand, delayed boiler construction for about 10 months. In those circumstances, it is very difficult for an organisation to plan. I guess that, if one plans to open this extra capacity in 1983, one thinks it will probably happen in 1984, and if one has a really bad time with industrial relations it may be in 1985.

One of the major reasons why the trust contemplates extra turbine generation is related to the direct consequences on the time table for the northern power station because of the demarcation dispute, where the builders labourers simply picketed one section of the power station for about 10 months. So, we kid ourselves if we think we can insulate the community against that sort of behaviour entirely. We do our best, but if groups want to hold up work they seem to have very effective ways of doing it. I repeat that it would be foolish to be committed to an option when the consequences could be very significant in terms of power costs in this State. I think that we will be forced into diversification of sources of fuel unless, of course, there are enormous gas discoveries made where gas is plentiful, markets are sought, and history may repeat itself. That may open up gas fields which could be used for generating power. I do not think that that is a likely scene, but one never knows.

With all the information that we have at the moment, it seems more likely that a decision will be made to open up one of these lignites in South Australia, which would generate power in the early 1990s. A decision may have to be taken to boost our output from the late 1980s to the early 1990s. In the short haul, that will be done because of a short fall in the growth in base load; that will be done by building gas turbines.

**Mr Johns:** The department intersected coal in the Wal-loway area during the course of drilling operations. Because the hole was drilled with a rotary plant we were not able to determine anything about the quality of this coal. From logging, through instrumentation, it has been determined that the coal seam is about 10 metres thick, and it is at a depth of about 60 metres. However, we know nothing about its quality, but it appears to be a brown coal comparable to the lignites known elsewhere in the State. This was drawn to the attention of the Electricity Trust and, indeed, of others interested in coal exploration in this State at the time. An exploration licence has now been granted to the Electricity Trust, which is now preparing to do some exploration. The attraction, of course, to the Electricity Trust is that this is quite well situated with regard to the Port Augusta station. It is not far removed. It is a great attraction as a possible power source, but we really do not know anything about the coal quality, whether it is close to the surface, near to the margins or whether it thickens or thins throughout the basin. These things will unfold in the next 12 months.

**Mr MATHWIN:** I would like to ask questions relating to the Cooper Basin. Gas is close to any politician's heart, of course, is it not? At page 37 it is stated that the actual payment last year for the consultancy stage was \$200 108.

This year it is to be \$230 000. I ask the Minister whether this is to be an on-going consultancy, and I make reference also to page 49 of the yellow book under 'Issues' in which it is stated that major projects in train or foreshadowed

include 'production of petroleum liquids, Cooper Basin' and also 'Expanded natural gas development, Cooper Basin'. I ask the Deputy Premier: what type of reports are we getting from the consultant? Are they optimistic? I realise that it is not all related to gas; indeed, it is petroleum liquids also. What is the anticipated future gas supply from the Cooper Basin?

**The Hon. E. R. Goldsworthy:** The department had the responsibility of advising me on production schedules and production planning for the Cooper Basin to see that the plans by the producers to develop the fields are such that we get a maximum return from those fields, that their production schedules can be confidently approved by me to see that there is a conservation and maximum utilisation of that resource in the gas reservoirs and, indeed, in all the reservoirs in the Cooper Basin. To supplement the information that the producers provide to the Government by way of their required reporting, we seek advice from world authorities. Currently, we have engaged a U.K.-based firm to give us advice on production planning and development in the Cooper Basin to supplement the information that we have obtained from the producers so that we can be confident in relation to the approval of their production schedules. That is an on-going consultancy. It will not go on forever, of course, but the work was not completed last year. This consultant was engaged last year. We have had quite a deal of information reported by that consultant so far. That work will carry on this financial year and we will get more information in relation to the Cooper Basin.

Perhaps I will ask Mr Terry Watts to elaborate on what I am saying, because he is the Director of the Oil and Gas Division, a division that we established in the Department of Mines and Energy this last year with a view to upgrading the effort in the department in relation to advice and work on oil and gas, and Mr Watts was appointed as Director of that division some months ago. He has been involved pretty well exclusively in oil and gas work for the Government. That is a finite consultancy. It is not a consultancy in which the consultant is retained for years. We do not know when it will wind up. It will be wound up when we think that we have enough information for our purposes in production planning and the conservation of the resource. As I say, that will be carrying on this financial year. Mr Watts might like to talk about this consultancy because he is involved on a day-to-day basis with these people.

**Mr Watts:** The consultancy studies commenced on 1 December—two contracts, 1 December and 1 February last year. Therefore, we are in effect not more than half way through the first year. The progress that we have made to date, I think, has been substantial. In the first instance, it is a prerequisite of this type of study that we establish interpretation procedures. These are mostly computer-based, and a lot of the effort in the first few months has been directed towards this. To date, 15 of these computer programmes used to interpret the petro-physical data from the Cooper Basin are in place. The study focuses on technical analysis of individual fields, aimed at giving the department information that will optimise the development of the Cooper Basin gas reserves and maximising the recovery of those reserves. In this respect, nine fields are due to be developed and come on stream before 1983, so there is a very short time-frame here.

Apart from the designing of the computer software packages, the individual field analysis is well advanced. On Friday I had a telex from Canada saying that the first of these field studies had been completed and would be on its way. Unfortunately, it did not arrive, but is due shortly. In the interim, we had been receiving progress reports that enabled us to impact with the producers at our regular meetings in order to ensure as much as possible that good

oil field practices were being pursued and that the development was orderly and efficient. The ultimate aim of these studies is that they should come up with practical recommendations aimed at, as I have said before, maximising the Cooper Basin development along the lines outlined by the Minister.

**Mr MATHWIN:** On the same page 49 of the yellow book, under the heading 'Implications for Resources', in the third paragraph it deals with revenue and it states:

Ensure that any rearrangement maintains a proper balance between the need for continued exploration and adequate returns, to the developer and to the State, from discoveries and to assure maximum recoveries without resort to high grading.

I would ask for some explanation from the Minister of that paragraph.

**The Hon. E. R. Goldsworthy:** Mr Johns will fill in a bit more detail in a minute, but 'high grading' refers to mining out of high-grade deposits at the start of a mining operation. This can, in effect, gut the mine. If that is permitted to occur, the miner can get the quick returns and maximum return in the shortest possible time, which will mean that the resource may not be mined to the extent that it should be if maximum recovery is to be obtained from that resource.

The same thing applies in relation to hydrocarbons. A quick return is attractive to entrepreneurs. One of the functions of Government is to ensure that the resource is developed sensibly so that there is a maximum return to all, including the State, by way of development and royalties. That is not to say that no high grading can be permitted. Sometimes, to make a mining operation economic in the first instance, it is necessary for the mining company to seek out the highest grade ore and start the mining operation there. That is not to say that we are excluding the possibility of a mining operation starting where the highest concentration of ore occurs. However, it must be part of a plan for the economic development of the whole resource. The Government seeks to see that that occurs. That is what is meant by high grading. Obviously, at Roxby Downs the companies would contemplate starting that mining operation where the ore grades are economic. That would be not considered high grading in the sense that it would be taken out and that would be the end of it. That could not be construed as cutting the mine. We would be intent on seeing that that does not happen. That explains that phrase for the honourable member.

The sense of that paragraph is in relation to getting a maximum return to the State from the development of the resource. Involved in that is ensuring that there is an economic return to the developer and the State over the maximum possible time by developing that resource to its maximum extent. That is part of the production planning process which I, as Minister, have to approve in relation to a gas field. Maximum return may be obtained by dragging out the most readily available gas, leaving some in the field and moving on to other readily available gas rather than taking the resource down to its limit. That is what I am talking about when referring to conservation in terms of seeing that that resource is not wasted. That is the sense of that short paragraph.

**Mr Johns:** I believe that the Minister has covered the matter adequately. One of the hazards of mining is that these operations often lend themselves to high grading, quick recovery and quick return without an optimisation or maximisation of the recovery of the commodity. It applies equally to metals as to oil. In the case of oil, one could easily get water flooding and incomplete extraction of the resource because it is slow yielding. In the Cooper Basin we would regard that as a significant part of our monitoring of operations. A large part of what the consultant is being hired for is to give advice on development in a fashion that

will give us a maximum recovery of products in these fields. In fact, we do not have 'in-house' expertise.

**The Hon. E. R. Goldsworthy:** The other aspect is the need for further exploration and the delineation of the resource. There needs to be a balance. The State seeks to do what it can to ensure that a correct balance is struck between exploration requirements and development expenditure to see that the extent of the resource is proved up. I refer again to the Roxby Downs indenture. Stringent requirements exist in terms of further exploration work as spelt out in that indenture. The extent of the resource is known, as well as requirements for companies that get on with the job of mining what is known. That is part of the balance referred to.

As far as the department is concerned, it is also the custodian for the Government and the State in that the State is really the landlord in relation to mining operations. The minerals belong to the Crown (which means the people of the State) and it is one of the responsibilities of the department to see that the assets are exploited in such a way that the maximum return to the State is obtained. We are intent on seeing that there is a maximum return.

The Committee may be interested to know that departmental expenditure this year totals \$12 000 000 and the contribution to revenue is \$11 400 000. We would certainly believe that that contribution will become very much more than that in the next few years as a result of developments currently occurring. I refer to the liquids scheme from Moomba which will mean a significant boost to revenue as, of course, will the operation of Roxby Downs later this decade. There is a need for not only delineating resources but also for finding new resources. It is necessary to keep a balance not only in relation to known developments and seeing that they are developed to give maximum return to this State but also in relation to increasing our knowledge of the mineral wealth that we have in South Australia in order to bring on further developments.

**Mr WHITTEN:** The member for Mitchell was questioning the Minister on coal deposits. Page 49 of the yellow book gives an evaluation of coal deposits, and mention was made of coal at Orroroo. Mr Johns said that the tests were carried out with a rotary drill which was not able to determine the quality of the deposit. I believe he said that the strata was 10 metres of coal to a 30-metre depth. I am concerned that he is unable to state the quality of the coal. Can we have further information?

**The Hon. E. R. Goldsworthy:** The department was really drilling for water. We were using this type of drill because it was part of a programme undertaken by the department in relation to water resources. On this occasion we happened to strike coal although we were not out looking for it. That is the reason for using the rotary-style drill. I will ask Mr Johns to talk about the mechanics of drilling for water and coal and the removal of coal for testing. I know that both Western Mining at Kingston and C.S.R. at Sedan were required to recover quite a bit of coal for testing. Devising a drilling arrangement to do so was no easy job. Western Mining finally got somebody at Coober Pedy to help them with the technical problem of lifting a decent piece of coal from a large drill hole.

The only other way is to dig an open-cut hole with a bulldozer and to get a decent sample of coal. One would certainly need that if firing tests were being done. Perhaps Mr Johns can explain the difference in the drilling equipment that is used when testing for water and proving a coal field.

**Mr Johns:** This was drilled with a rotary drill which, in effect, returns the ground rock being penetrated to the surface in the form of cuttings. So, one does not have anything solid to observe: it is just coming up in chips and in mud. The fact is that there are carbonateous sediments within the

Walloway Basin. These are known from previous water bore drilling and, I suppose, would have come up in various shades of grey. It was not until the geophysical logs were run that a signature was given indicating the presence of coal.

In fact, while woody cuttings have been returning in the material that is brought up in the water, they are so diluted and mixed up with other materials that are being circulated that one is not really able to establish whether it is of good, bad or indifferent quality. The method of coal drilling in normal exploration is to drill with a rotary plant until the coal is intersected. Then the more expensive, difficult and time-consuming part of the business of actually getting a solid sample of coal is resorted to, in which case they put on a core barrel and a different sort of bit, and recover a cylinder of core which gives them something specific to look at, analyse and determine properties. So, that explains why we know that there is coal there but have no idea of the quality.

**Mr WHITTEN:** I do not intend to follow that up, except to comment that I hope that the Mines Department will run further testing to evaluate the coal that is around Orroroo. In the yellow book on page 51, the first item concerns safety in and near the work place. I noticed that it is proposed to employ one more person and that the average full-time equivalent has gone from 10 to 11. I would like more information on the salaries that are to be paid to each of these inspectors. I take it that these are inspectors, because they are referred to again on page 54. If one looks at page 52, one can see that it is proposed to spend \$389 000 on safety in and near the work place. If that is the level of employees, it works out at around \$35 500 per person. It also appears that in 1981-82, the amount spent then worked out at around \$29 000. Can the Minister confirm that and give me further information on the amounts?

**The Hon. E. R. Goldsworthy:** I will ask the Finance Director to comment in a moment and give details of the breakdown. Not only salaries but also other contingencies are in that line. An average salary for these people would be about \$33 000 to \$35 000 a year. The new position in the inspectorate is for an underground mining engineer for Roxby Downs; that is one new job. In relation to salary ranges, and so on, Mr Whinnen can inform the Committee.

**Mr Whinnen:** The \$389 000 is a mixture of salaries and contingencies, or operating expenses, of the whole inspectorate area, which includes the inspections of mines, of petroleum or oil and gas operations (the pipelines), and the people on the opal fields (our area officers). So, one is going from a top salary of \$35 000 down to \$20 000. The 11 persons referred to involve very much an average full-time equivalent count. The cost of operations on the opal fields is considerable, as is the cost of travelling to and from the various mines, especially Roxby Downs. So, the \$389 000 is a mixture of salaries and operating expenses of the average 11 persons involved in the inspectorate area.

**Mr WHITTEN:** On page 35 of Parliamentary Paper No. 9, I notice that the line 'inspection staff' as proposed for 1982-83 is voted at \$487 700. If one then looks at page 54 of the yellow book, one can see that there is to be a change in emphasis of mining inspectors time from the resource use programme and that it also mentions on that page the appointment of an additional mining inspector. Does this mean that inspectors will be concentrating more on safety in and near the work place and, if so, what were inspectors doing previously?

**The Hon. E. R. Goldsworthy:** The Director, Mining (Mr Hill), is best qualified to give the sort of detail that the member requires. It would not be true to say that there has been any change in relation to safety. One of the department's responsibilities is to see that mining practice is safe.

However, it is true to say that more things are happening, certainly at Moomba and Roxby Downs, than have happened in the past. As I pointed out a moment ago, this has required the appointment of an additional underground mining engineer for the Roxby Downs development. It is also true to say that, because of increased activity at Moomba, it has been necessary to upgrade the department's oversight of what is occurring there, simply because of the scale of the operation, rather than there being a change of emphasis within the department. The nature of the operation means that it requires closer surveillance by the department to see that safety requirements are being met.

**Mr Hill:** I do not have much more to add to what the Minister has already said. The oil and gas consignment for inspection and additional travelling that is involved in the North-West of the State are with oil and gas and with Roxby Downs.

**The Hon. E. R. Goldsworthy:** Unfortunately, as honourable members would know, accidents occur in industrial areas, and mining is not precluded from this by any means. Mining, particularly underground mining of all types, is recognised as being a hazardous occupation, and safety requirements are therefore vitally important.

I recall that there have been a couple of unfortunate accidents at Moomba over the past 12 months. However, that is not the reason for upgrading the inspection: the level of inspection has been upgraded because of the higher level of activity. The more activity, the greater is the chance of serious accidents occurring.

**Mr WHITTEN:** That does not follow, because you are going to spend \$25 000 less on inspection staff.

**The Hon. E. R. Goldsworthy:** That figure contains not only salaries but a whole range of other contingencies. Last year that line contained consultancy fees of about \$500 000. This year I think it is \$487 000, as opposed to \$524 000 last year, which figure contained a consultancy fee.

**Mr Whinnen:** The inspectorate, which includes the inspection staff who report to the Director of Mining, Mr Hill, comprises about 30 people, and it will increase by a further two officers during the course of this year. In reporting the programmes, we are required to apportion those officers over a number of programmes, and the department has 10 programmes in all. The change in emphasis mentioned in the yellow book reflects, for example, that the time for the 10 mines inspectors has been apportioned 60-40 this year: 60 for safety and 40 for environment. In the past they were apportioned on a 50-50 basis. Over this year the Mining Division will increase its staffing level by two officers, one of whom has already been engaged. It is really an apportionment of the staff's time over the programmes.

When dealing with a relatively small number of people, which is probably shown in the yellow book, more attention will be given but less cost will be incurred. That has really been brought about through a change in the ratio of apportioning the 31 or, as it will be, the 32 officers salaries over the 10 programmes. We certainly will not pay less attention to safety or reduce the salaries of inspectors. It is simply a discrepancy reflected in the change of apportionment.

**Mr OSWALD:** My questions relate to the costs and benefits for the State in the operation of the opal fields. I refer to page 64 of the yellow book '1981-82 specific targets/objectives', which states:

Supervised subsidised exploration drilling for opal at Coober Pedy; and publish a handbook on opal in South Australia to promote this industry.

I notice that that target objective does not continue into 1982-83. In relation to the 1982-83 objectives, there is another entry in relation to costs involved in the mapping of the Coober Pedy precious stones field. The 1981-82 specific targets on page 54 of the yellow book refer to the need to

improve the safety and efficiency of the operations on the opal fields. What is the department's annual cost in relation to operating the opal fields? Will the Minister explain the 1981-82 subsidised drilling programme, which does not occur in 1982-83? Will the State benefit from the discovery of the new Southern Cross opal field at Coober Pedy last year?

**The Hon. E. R. Goldsworthy:** I point out that the opal field is not a bonanza in relation to any contribution to the State's revenue, because no royalty is paid on opal. However, the opal fields do generate a fair bit of interest from tourists and others. A visit to Coober Pedy would be regarded as a novel experience in South Australia. However, the State does not earn direct revenue from royalties. I think that the Government earned about \$34 000 from the opal fields last year from permits, licences, and general registrations in terms of the Mining Act. That is a direct return to the Government through the Mines Department.

As I have said, many other benefits are to be gained from a town such as Coober Pedy and the other mining fields through tourist interest, and so on. The people who are engaged in opal mining are earning a living. They might not be able to earn a living doing anything else and, therefore, could be costing taxpayers through the provision of some type of welfare payment. I think that it costs the Government about \$405 000 to run the opal fields. We undertook an exploration programme, because the supply of opal was diminishing. Therefore, about 12 months ago the Government subsidised a drilling programme, which has been successful, because a new opal field is being opened up after drilling by the department encouraged miners to drill further. A new field has been opened up as a result of that drilling.

I think that the total payments involved in the subsidised drilling programme have amounted to about \$83 000. There was a question whether the town should be allowed to scale down its production further or whether funds could be justified to prolong the life of the opal fields through a subsidised drilling programme. We decided to undertake a subsidised drilling programme. The subsidy paid was \$34 000 and the cost of supervision by departmental officers was about \$5 500. If one looks at this operation in terms of cold hard cash and whether any direct return will be made to the State, the benefits may not be apparent. However, when one looks at towns such as Coober Pedy, Mintabie and Andamooka, one realises that the opal mining industry supports quite a large population. It is a fallacious argument simply to equate what is generated with the royalties and benefits that flow from any operation, be it mining or otherwise.

**Mr Johns:** The department can assist the opal mining industry by listening to the opal miners, because they require a lot of assistance in relation to the promotion and marketing of their output. The department has gone to pains to do this for some years now. I will refer to what the department has done over the past 12 months.

The department has published a handbook on opal which covers the occurrence of this gemstone and its preparation. It also contains maps indicating the extent of known workings, the known occurrences and a whole mass of material that we regard as being of interest not only to people interested in gemstone collecting but also to those interested in the State, mineral occurrence and a whole range of matters. In December we presented a paper to a commodity minerals conference in London. We saw there an opportunity to gain exposure showing the importance to the world of this State's opal. We saw that as being useful, bearing in mind that about 80 per cent of the world's opal is produced in South Australia.

We are trying to promote tourism and have published a poster heralding opal as the South Australian gemstone. We have taken the initiative of preparing a film that displays



something of the uniqueness not only of the stone but also of the living habits, conduct and lifestyle on the opal fields, which we regard as something of an attraction to tourists. The last initiative in which we engaged involved other departments and the industry in a programme called the gemstone (something) industry; I am not sure of its correct title. That committee has prepared a report, which I do not think has yet reached the Minister. However, he will receive it within the next week or so. It sets out some of the initiatives that this committee believes will assist the industry and the State in the promotion of what we regard as a fairly important industry, even though it is a bit of a drag on resources, and is not an easy industry to come to grips with because of the nature of the occupation and the difficulties of the area. I suppose that it also relates to the nature of the material produced.

**The Hon. R. G. PAYNE:** A recent press announcement by the Minister relating to the opal fields at Coober Pedy set out to show that Mines Department efforts in that area were responsible for the latest opal finds in the new area of Southern Cross. I have been told that of a total of 222 subsidised holes drilled in the programme in that area only five holes were of any significance, one hole showed traces of opal and three holes showed patch. The nearest location to the present Southern Cross find, to which the press article refers, of a hole drilled on a subsidised basis was 1½ to two miles away. I suppose it is a moot point as to whether the programme caused that opal to be found.

I am not decrying that programme, because I think all members support the necessity for the department to assist in locating further gemstone areas, and minerals or hydrocarbons, for that matter. However, information supplied to me by the Mines Department in the form of a table showing the number of holes drilled by sources in the field is that the present find is half a mile to two miles from any subsidised hole drilled by the department. Does the Minister agree with the article that appeared in the *Advertiser*? Was it released by him, or was it some other person's estimation of what occurred in this matter?

**The Hon. E. R. Goldsworthy:** I think the honourable member is referring to a press release that I gave relating to the new opal field. I am confident that, if the department had not undertaken that programme of subsidised drilling, this new field would not have been found. I am informed, (and I have no reason to disbelieve the informant) that a local miner, as a result of one of the holes drilled by the department showing traces he found of interest, subsequently drilled a hole which led to this discovery. If the department had not funded the subsidised drilling programme the miner would not have drilled that adjacent hole. I have no information regarding the distance between those two drill holes being a mile and a half. Mr Johns may be able to give the honourable member further information about that. I was told that, as a result of what was found in the hole drilled by the department, interest was expressed in drilling further in that region.

**Mr Johns:** I am not able to establish precisely the distance involved. I believe (and this is the basis on which the press release was made) that the discovery shaft was adjacent to (and I take this to mean an adjoining claim) the subsidised hole. However, I have no knowledge of that separation distance. We are not trying to establish claim of discovery of this field. The fact is that there must be much opal extending way beyond the known limits of present workings. It is no surprise that this discovery should be made. Our problem is in getting people to do exploration on their own behalf beyond the known occurrences of opal.

It is interesting to study the history of opal discoveries and development over the years. One can do this readily by studying aerial photographs, which we have had at our

disposal since the war. One can see on, say, a five-yearly or 10-yearly basis the way in which opal diggings have extended. They now extend over a distance (and I am guessing) of about 30 miles along the escarpment and are five or six miles wide. It is interesting to see how discoveries have been made and how the workings have spread until they have ultimately coalesced.

A new discovery is made somewhere, workings extend out in that direction, and so on. We do not particularly lay strong claims to any discovery. We would attribute the discovery to initiatives that we undertook. We have done much work in trying to establish controls on opal occurrence, on ways of encouraging people to explore virgin areas. We are told by the committee that it welcomes these inputs. Indeed, it seeks extension of that initiative. We take some gratification and comfort from the people on the committee who are spokesmen for industry up there. We relate to them. Beyond that, I really have no personal knowledge of the separation of this discovery from the subsidised shaft. I repeat: my belief is that it was on the adjoining claim.

**The Hon. R. G. PAYNE:** I will clarify a couple of points. I support such programmes. Assistance should be provided for discovery of new opal areas, minerals, hydrocarbons, and so on. My query is how accurate was the press article which purported to show that because the Mines Department had done some drilling a new area had been located. I put to the Minister in my previous question information I received that the Southern Cross find is at least 1½ to two miles from any subsidised hole drilled in the programme. Let us not lose sight of the fact that I am glad it has been found. If it is 10 miles away, I am not unhappy about it. I was concerned about the article. It might help the Minister if I point out that, in the Mines Department's list of the holes, hole 94 south-east of Dead Horse Gully showed traces of opal. At hole 117, west of Hanns Peake, it showed patch 130, east of Browns Folly showed 133, and another was 157 east of Browns Folly. Those are the only holes I have been advised that could relate, and I am informed that none of those holes is any nearer than the distance I have already indicated. It may be that some additional information will now be forthcoming.

**The Hon. E. R. Goldsworthy:** Additional information is to hand. I have no reason to doubt the material in the press release which Mr Johns sent up. It was not something dreamt up in my office. It came from the department. The clear conclusion was that as a result of Government subsidies to the drilling programme this miner was encouraged to go ahead. He looked at what was found at the bottom of this hole and drilled another hole as a result of that. Mr Boucaut is the chief geologist in the department. He has a more intimate knowledge of the geography of the opal field than we have. I will ask him whether he has any more information on that subject.

**Mr Boucaut:** Initially, a subsidised shaft was put down in the area now known as the Southern Cross field. Some patch was intersected at the bottom of that shaft. Later (I am not sure when, but probably some weeks), a claim was taken out by the miner around the subsidised shaft. This is the normal area of 50 metres by 50 metres. He then put down further holes inside that area and intersected opal. This find led to the Southern Cross field. So, he was drilling within a few metres of the existing subsidised shaft put down during our programme.

**The Hon. R. G. PAYNE:** Is the number of that subsidised hole available?

**The Hon. E. R. Goldsworthy:** It is shaft 85, I am told.

**Mr SCHMIDT:** I would like to commend those involved in the departmental display at the recent Royal Adelaide Show. Its production was comparable with some of the better A.B.C. programmes seen on television. The beauty

of it was that it gave the general public of South Australia an opportunity to view and hear just what is happening in mining in South Australia. What was the cost of that programme? Was it produced by the department or by outside agencies?

**The Hon. E. R. Goldsworthy:** Mr Johns can give details about the show stand, which was an excellent display. I think that some outside production was involved and that a large number of people visited it.

**Mr Johns:** The department was responsible for photographic assistance. In fact, our people conducted those who prepared those photographs to various mining operations. We also prepared a script which was refined by the programme makers. The costs were picked up by the Premier's Department. I cannot give the final costs, but the initial estimate was \$35 000. The company responsible for the technical details, photography, sophisticated camera operation and production on site was Shirley Spectra Pty Ltd, which was responsible for the Constitutional Museum display. I guess that the final cost has not come to hand, but the initial estimate was \$35 000.

**Mr SCHMIDT:** Have you any idea how effective the display was?

**The Hon. E. R. Goldsworthy:** Reports were that it was very effective. About 3 000 people visited the display each day. The department was very pleased with the interest it evoked.

**Mr SCHMIDT:** I also commend the staff who manned the display. They were very friendly and courteous when handing out literature. Part of the display showed various mining operations throughout South Australia. Can the Minister give an up-to-date report on progress of the Stony Point to Moomba pipeline, which is also mentioned at page 54 of the yellow document? I recently visited the Hawker area and noticed from talking to people at the camp that the pipeline was proceeding to schedule. Can the Minister verify that and can he give an indication as to when the pipeline may be completed? How does the department view the progress of the project?

**The Hon. E. R. Goldsworthy:** If the honourable member had asked me this question next Monday I would have been able to give him an update, because I am going on the first of these resource flights that have been announced recently. Airlines of South Australia has scheduled several flights, including Moomba, and the first of those is next Saturday. I was up there a couple of months ago and there are certainly signs of very rapid progress, as the honourable member suggests. The chief executives of Santos and I believe that there has been probably no resources project of this magnitude brought on stream as quickly as will this particular scheme. From conceptual stage to planning to environmental clearances to actual construction, it must have made some sort of Australian record. The project is ahead of schedule. Certainly the pipe-laying part of the contracts are ahead of schedule. It is expected that that line to Moomba will be completed later this year, and that it will be carrying liquids early next year.

Likewise, there is a great deal of activity on site. Not only is the pipeline ahead of schedule but also there is evidence of much activity at Stony Point, where the jetty was well under construction when I was there. Certainly, it would be well out into the gulf. I cannot say at this moment how much of the jetty has been constructed, but work was going on on the wharf; that was off-shore. Enormous tanks were under construction. Lines to connect various parts of the Stony Point development were under construction. As I say, it is anticipated that oil will be shipped from Stony Point early next year. By 'early', I mean in January. Initially, they will not be the largest tankers that will be accommodated

at Stony Point, but they will be 25 000-tonners. All in all, I think progress on the project has been quite spectacular.

I will get more up to date information on the time table for the honourable member in the next few days and send it to him. I think that it is true to say that we have made history in South Australia with the speed with which this project has been developed because, as I have pointed out previously, it is a project that is costing in excess of a billion dollars. From the original decision to proceed, to planning, all the clearances that were needed, negotiations for the indenture, to construction, I think is probably some sort of Australian record.

**The ACTING CHAIRMAN (Mr Mathwin):** The honourable the Deputy Leader of the Opposition.

**Mr SCHMIDT:** I would like to ask—

**The ACTING CHAIRMAN:** Order! I have called the Deputy Leader.

**The Hon. J. D. WRIGHT:** I did not rule the member for Mawson out of order. The Chairman did. It is up to him.

**The ACTING CHAIRMAN:** I point out to the honourable member for Mawson that he had three questions and that he has used them. If he wishes to use another one or if he wishes the Chair to be very flexible, he could follow the example set by the member for Price earlier. I have already called the Deputy Leader.

**The Hon. J. D. WRIGHT:** Thank you, Mr Acting Chairman. During the reply to my colleague, the member for Mitchell, when you were talking about the revenue from various projects occurring in South Australia, you made the point that within this decade there would be revenue coming in from Roxby Downs. That seems to suggest to me that before 1990, on your word, anyway, there will be revenue. I would like to find out from you, Mr Minister, when you anticipate the commencement of the production will be. What guarantees have you about the production date commencing? Where are the markets likely to be at that stage for uranium?

**The Hon. E. R. Goldsworthy:** The indenture spells out the maximum time available to the participants, the joint venturers, to commit to a project, and that date is 1987. I think that the honourable member is well aware of that. The fact is, of course, that they can commit before that date, but that is the date by which they have to commit. It is also true to say that any production that occurs, even if it be during a mining operation associated with feasibility studies, attracts royalties. Any production that is for sale will attract royalties. I am confident that, at the conclusion of the feasibility studies that the joint venturers are bound to follow as a result of the passage of the indenture, there will be a mining operation by the end of this decade and under those circumstances they will be paying royalties to this State.

Of course, there are other taxes that they pay. There is income flowing to the State now as a result of the pay-roll that is associated with this project. It is true to say that the project is generating revenues at this very moment. As the work proceeds those revenues will increase. Therefore, it is no flight of fancy to suggest that those revenues will continue in this decade. If the honourable member is referring solely to royalties I simply point out that any production, whether it be copper, gold or uranium or anything that is produced from that mine at any stage, will attract royalty.

In relation to markets, this has been thrown backwards and forwards and to and fro in all directions publicly by critics of the Roxby Downs venture, and it will continue to be thrown up by people who want to oppose the project. The fact is that if people require, as I am sure that they will, the use of precious metals (copper and fuel for power generation)—and all evidence is that there is going to be

increasing need for and commitment to the use of uranium as a source of fuel for electricity generation—then I do not think that there is any evidence at all to indicate that there will be a lessening of the use of uranium in this decade.

Every indication that came to me when overseas with the Deputy Director-General, and from all information available to us, no alternative fuel is economically and physically available as a substitute for power generation other than nuclear reactors which have been in use for about 30 years. More nations in Europe and in the northern hemisphere are committing to power generation using nuclear fuel, including France under M. Mitterand. There is an increasing commitment to use nuclear power there.

There is no economic alternative which would indicate that mankind is not going to rely to an increasing extent on a nuclear component for power generation. When one considers these facts of life and one does not believe that mankind is suddenly not going to need metals or electric power with an increasing nuclear component, one comes to the conclusion that some mining operations at least, are going to be viable. It is then a question of competition in the market place for those markets. Obviously it is a prime concern of the joint venturers—the people who are spending hundreds of millions of dollars in proving up this gigantic resource. It is in their interest to secure these markets. No companies, let alone Governments, will spend millions of dollars on feasibility studies unless they believe there is a good chance that they will be able to secure markets. That is true of any development. If one wants to take a pessimistic view and believe that the world recession is going to develop into a depression which will persist for the next 10 years or longer, that will simply delay the development of some new mines. If one accepts the proposition, which I certainly do not, that mankind will not require metals or nuclear energy, one could accept that the venture is shaky.

As I pointed out in the numerous discussions I have had previously on this subject, it is unrealistic to suggest that I am in a position to say that on 1 March 1984 a commitment will be made to this project and that by 1 November 1986 I will be at the mine opening. That is being quite unrealistic. However, there are requirements in the indenture to commit between 1984 and 1987 and thereafter there will be production within three or four years. There will be some production, after the date of commitment in the years 1988-89. Production will build up from 1 500 000 tonnes in the initial operation to 6 500 000 tonnes of ore. In terms of the indenture, they are the commitments. The Deputy Leader of the Opposition could not hope for anything more specific than those firm dates which are spelt out in the legislation.

**The Hon. J. D. WRIGHT:** In response to my simple question in looking for some timing and futuristic opportunities of the Roxby Downs venture, the Minister took some 20 minutes or so to answer. I want to make a couple of observations and ask him a final question in relation to this matter. The Minister said that critics of the Roxby Downs venture or, in fact, of uranium mining anywhere, were apt to consider the possibility of markets being quite scarce when the opportunity came to sell the product. I remind the Minister that one does not have to be a critic of uranium mining as such to wonder about possible markets, because people who support the Roxby Downs venture have also written many articles and have spoken about it.

I remind the Minister that he talked about the possible royalties from copper and other minerals located at Roxby Downs. Can he say whether or not mining at Roxby Downs would continue if there was no uranium? For example, suppose that something occurred that resulted in there being no market for the uranium or that the price was too low for it to be extracted, would the mine go on with just the copper and other minerals that are there? If there is such a

great world demand for uranium (and this is what the Minister said in reply to my question), how does the Minister equate that with the current price of \$20 per ton, which is the lowest price for many many years?

**The Hon. E. R. Goldsworthy:** Dealing with the last point first, I did not suggest that there was a great demand for uranium at the moment, nor did I refer to the current price of uranium.

I was referring to the time scale in which this mine will come into production. I was looking at the likely availability of future markets. One of the joint venturers has told me that the fact that there is a downturn in demand for these minerals at the moment is to the advantage of this mining operation, because they will have a chance to catch up. They are saying that some mining operations throughout the world are facing the same situation as the aluminium smelter at Portland in Victoria, that is, the economic conditions are such that there is no justification for proceeding with that operation at the moment. That is true in relation to some mining operations that are further advanced than Roxby Downs.

In fact, the joint venturers see this as a distinct advantage, because they can complete their feasibility, economic and metallurgical studies. In fact, it is a breathing space which will allow them to catch up with the rest of the world. Because of the immensity of this deposit, the joint venturers will be in a far stronger competitive position compared with some of the other known deposits. That fact was put to me quite seriously and quite genuinely by one company, that is, that the present demand is a distinct advantage, because other mines throughout the world are on hold, which has allowed the joint venturers to catch up.

As I have said, in my earlier response I did not comment about current prices. At the moment metal prices are depressed. I did say that, if one took a pessimistic view of the world economy we could be facing a depression for the next 10 or 12 years and that, if mankind's requirement for metals and nuclear energy disappeared, there would be no future for this mine or any other mine. However, I do not believe that that is a realistic assessment of the world scene in relation to its energy requirements or the nuclear component which will make up an increasing part of that scene. The member's earlier question was whether this mine would be viable if it did not contain uranium. Once again, that would depend entirely on the economics and the present price of metals. Based on present prices I do not believe it would be an economic copper mine. However, it could well be economic as a copper and gold mine if copper prices particularly improved. However, the fact is that this deposit contains uranium.

To make this mine viable the copper would have to be separated from the ore body. To suggest that uranium should not be further processed and sold would make the possibility of the mine coming on stream at an early date more remote. In fact, the joint venturers are saying, and I have no reason to disbelieve them, that the present concentration of minerals is such that, if they do not proceed and process the uranium as well, the mine would not be economic. It is also true to say that, in a mine which has several streams to its production, one commodity can carry the others when those other commodities may not be in strong demand. In other words, if copper prices improved and the price of uranium did not improve to the same extent, the mine could still be viable. The fact that the mine contains a number of metals makes it that much more attractive to the developers. In other words, all the eggs are not in the one basket.

To answer the honourable member's question, it would depend entirely on the economics of the metals extracted. If copper prices considerably improved, and they have, it could be viable to simply mine copper, gold and silver. As

I have said, that makes the mining proposition less attractive, even though the uranium may not be highly profitable, because it will at least make some contribution to revenue. To suggest that one metal should not be mined makes the proposition much less attractive. The Director, Mining, coordinated the negotiating team that I set up when we were negotiating the indenture. Mr Hill has been intimately involved in this venture since his appointment as Director, Mining, and he knows the mining scene at first hand. Without wanting to prolong the discussion it might be appropriate for him to comment about production and scheduling and to confirm what I have said and add to it.

**Mr Hill:** One of the strengths of the Roxby Downs project is the spread of copper, gold and uranium. There are other very valuable minerals present that could be recovered when the price is right. On present-day prices, roughly 50 per cent of the revenue will come from copper, 25 per cent from gold and 25 per cent from uranium. The market fluctuations for those three metals are very different: when copper is up, gold is normally down; when copper is down, gold is normally at a high; and uranium really does not follow the pricing of the other two metals. This gives the operation some strength. When the price for one of the metals is down the company can work those ore bodies which are achieving higher prices.

By world standards it is a very high-grade ore body. I believe that the ore reserve was announced recently but I cannot remember the exact figures; I believe it is about 2 000 000 000 tonnes of 1.25 per cent copper. That is an enormous tonnage of ore. There is a very large tonnage of high-grade ore in excess of 3 per cent. In the project's initial years, just by mining the higher grade ore bodies, the average income from the copper mine will probably be higher than that from most other world copper mines, because at the moment there are not that many mines mining better than 3 per cent copper with gold and uranium thrown in. Once the project begins production, if hard times come along, the joint venturers will probably weather the storm better than most of their competition from overseas. If we can only see this major project into production, the chance of it helping the State's economy for a long period of time is very real.

**The Hon. J. D. WRIGHT:** We are anticipating what might happen in the future. I do not care whether the Minister or Mr Hill answers this question: if this mine was in production at this time of economic downturn in prices, would it be viable?

**The Hon. E. R. Goldsworthy:** That is a hypothetical situation. The scene set by the Deputy Leader postulates that the mine is in operation. I think, the Director has said that, once a mine is up and running one does not close it down just because it is running into a loss situation for a period. There are a number of mining companies in Australia at the moment whose profits have taken an enormous cut. In fact, some of these operations are running marginally or are unprofitable at the moment. However, people do not immediately close those mines down. The Director has said that once this mine is up and running it will have a capacity to weather economic storms and fluctuations in prices better than its competitors on the world scene. That, I think, answers the Deputy Leader's question. Once a mine gets through the initial stage of investing this enormous capital and the mine is up and running (so a decision has been made that it is viable) world evidence suggests that that mine will keep on going.

**The Hon. J. D. WRIGHT:** Read yesterday's paper.

**The Hon. E. R. Goldsworthy:** I am answering a question relating to a mine which is in production and whether or not that mine can keep going. It may be that during hard times a mine produces at a lower level or stock piles the material mined; those are decisions made by management.

**The Hon. J. D. WRIGHT:** I did not ask whether the mine would continue or not but whether it would be viable in the circumstances applying at the moment.

**The Hon. E. R. Goldsworthy:** That depends on how long the mine has been running, how much of the capital expenditure has been paid back, what is the cost of scaling down, and what is the cost of closure (because there are enormous costs involved there). It is in everybody's interests, including those of the mining company, to keep a mine open as long as possible and until no light can be seen at the end of the tunnel. The answer to the Deputy Leader's question would depend on how long the mine had been operating, whether for one year or 10 years. The circumstances he puts are completely hypothetical and circumstances can change enormously.

The initial major expense is incurred in getting a mine up and running. Of course, considered alongside that is the question of how long it takes to pay that money back. It depends, also, on how far along the track the company is in terms of paying back. A mining operation is often not profitable during the initial years while it is paying back interest and principal relating to the cost of setting up the mine. Many ventures are not profitable in the initial years while they are paying back these enormous borrowings. One cannot give a firm 'Yes' or 'No' answer to this question because it depends on how long the mine has been running, what is its level of production and what markets it has secured.

I repeat what the Director has said, that this mine would have a better than average chance of survival on the world scene because of the diversity of its production and the grade of its ore. There is also strength in the fact that it has an enormous ore body. Everybody has been talking about this being a low-grade ore body, but it is so enormous that there are significant sections of it that one cannot say, on a world scene comparison, are low grade. However, it is impossible to be precise about this. Have you anything to add, Mr Hill?

**Mr Hill:** A mine of this size costs an enormous amount of money to get going. The capital cost has been variously reported as being between \$1 000 million and \$1 500 million to get it going. The joint venturers would probably be looking to getting the \$1 500 million back in six to 10 years. They might be lucky and do a Bougainville and get their money back in two or three years, but if prices drop it may well take 15 years to get their money back. Once they have reached payback the main costs are operating ones, and also the annual capital cost of replacing underground loaders and buying other fairly small capital items. The safety of this mine really comes after payback, which might be from six to ten years after it starts production.

**The Hon. E. R. Goldsworthy:** I suggest to the Deputy Leader that once companies are committed to these enormous expenditures the penalties incurred by closing the mine down are enormous. It is a decision that has to be weighed, even during the payback period. Perhaps the Director will comment on my remarks.

**Mr Hill:** At present probably the biggest copper mines in Australia are the Mount Isa mines. You will remember the history of Mount Isa, which took a great number of years to pay its first dividend. This year, for the first time, they are missing paying a dividend. I was at that mine recently and saw that there is no slowing down of production. The work force is working well and the whole mine is running efficiently, so it pays to go on running the mine at a loss rather than closing it down and losing the work force, thus being in a bad position when the market picks up. There is a parallel between Mount Isa and Roxby Downs. They are both fairly high-grade ore bodies. Mount Isa is presently mining copper ore of slightly under 3 per cent copper content.

They have another string to their bow there with other ore bodies of silver, lead and zinc which are not quite as extensive in size as the copper ore body but which still provide an enormous reserve of low-grade material that will be mined at some time in the future.

The penalties for closing down are really two-fold. First, it might be slightly difficult to start up both in getting the money and people to re-open, and, secondly, in relation to the loss of markets. Mount Isa, by continuing in production, will have stock piles and will have an efficient mine running when the market picks up. Whatever its losses are at the moment, it would hope to recover those when the boom starts.

**Mr OSWALD:** My question relates to the tailings dams at Port Pirie. In the *Advertiser* in August 1982 an article on a \$6 000 000 project for Port Pirie read:

The South Australian Government plans to spend more than \$6 000 000 to cover and rehabilitate Port Pirie's uranium mill-tailings dams and upgrade its harbor.

I will not take up that matter. The article continues:

The project would eliminate any dust problem from the dams and reduce radon gas emissions 'by a substantial factor'.

Will the Minister report on the rehabilitation of those tailings dams at Port Pirie and perhaps also mention the Radium Hill rehabilitation, indicating how successful the project is and what stage rehabilitation of those dams has reached?

**The Hon. E. R. Goldsworthy:** Again, Mr Hill has been intimately involved in both these projects. In fact, he has, from his experience elsewhere in Australia, brought some expertise to the department in relation to handling the disposal problem. He was involved in the rehabilitation of Radium Hill and removal of some low-level waste material that had accumulated over many years at Thebarton and transport and burial at Radium Hill. Also, he has been involved, along with Health Commission officers, in producing a final and most acceptable strategy for overcoming the environmental hazard, as much as anything at Port Pirie.

I think I have reassured the public from time to time by reports from the Health Commission that there has been no health hazard but that there has been an environmental eyesore from the tailings dams which needed to be eliminated, as did the dust problem. As a result of that, we bought some land from the House of Lindner, which owns part of that property. We are getting on with the rehabilitation programme at Port Pirie.

The cost to the Government will be somewhat less than we budgeted for in the first instance, because the programme involves covering the whole of this area with a metre of material, which would then be further covered with some soil, planted with shrubs, and so on, placing a high visual barrier along the road, which I think is called bunding. That involves planting the area with ornamental trees, and so on, to make it visually acceptable, and covering the tailings dams with material, soil, and planting it, which would cut down the dust hazard and the emanation of radon to an even lower level. Broken Hill Associated Smelters has offered to supply, free of charge, slag material to cover the dams. At first, we did not envisage using that. We thought that we would have to buy material. That will cut down the cost.

The Government will have to buy some soil to cover that, as well as material to do the bunding and create a mound on the road perimeter for planting trees there. That programme is under way. I will ask the Director to comment further on the precise position that we have reached with that. The Radium Hill project has been completed as far as we need go at the moment. The material has been removed from Thebarton and buried, and the dam walls have been rehabilitated. That has, I think within the past 12 months,

been put in an environmentally acceptable state for this day and age. Both projects have been developed. The Radium Hill project has been executed, and the project at Port Pirie is under way. I ask Mr Hill to give more precise detail on the stage reached.

**Mr Hill:** We have had a great deal of help in every possible way from the people of Port Pirie, since this project started. Broken Hill Associated Smelters, in particular, has assisted not only with slag but also with placing the slag, which has helped the cost of the project enormously. The contractors who provided soil cover have also assisted. We have had discussions with a number of them, and some contracts for that work will be let shortly. The fence between B.H.A.S. and the tailings dam now has a gate in it. A road has been built by B.H.A.S. from its slag transport road to that gate. Presently, B.H.A.S. is building the road around to the bund area. The Minister referred to it as an environmental bund. It really has three purposes, the first of which is its appearance, which forms a visual barrier. Secondly, it is to stop the dust, which is its main purpose, during the covering operations. Thirdly, it is to break down the wind velocity and any particles in the air long before they come out of the dam area.

Turning to Radium Hill, its covering was completed in April 1981. During the winter of 1981 there were some very heavy thunderstorms in the area, and we were a little worried that they would wash away part of the cover. A couple of minor runaways developed that have since been repaired, but some of the native plants are beginning to grow on the side and the top of the tailings dam where the water was ponding.

Burial of radio-active waste from Thebarton and other parts of the State is still progressing. A number of convoys were up there in late 1981, when waste from various mining operations, laboratories, and from Thebarton, was carted to the site and buried under two metres of clay. Since then, only two weeks ago, we sent up another convoy of drums and buried those, taking a front end loader up and using a heap of clay that we had stockpiled on top of the dam; we buried the rest. There is plenty of room for any possible waste generated in the State towards the end of the century. It is a very large burial site, which will serve the State for some time in the future.

The Health Commission has been with us in all these three projects and has contributed greatly to the design of the Port Pirie one, the initial designing of which was done by mining engineers, after which there was input from Health Commission health physicists. We went through a number of draft plans and we are still going through further refinements to it to use more slag and less of the expensive clay that must be carted in. In all this, the Health Commission has been a great help.

**Mr OSWALD:** Also in relation to 1982-83 specific targets, on page 70, there is an entry, 'Uranium conversion and enrichment studies and its progress'. In the *Advertiser* on 22 June, under a heading, 'Pirie may get U-plant', it states:

A final decision on the plant will depend on a feasibility study which will begin almost immediately.

That article is 15 months old. It also says:

The \$500 000 study will decide whether it is economically viable to build and run such a plant at Port Pirie.

I understand that a uranium conversion joint venture has been established, comprising Roxby Management Services Pty Ltd, British Nuclear Fuels Ltd, B.H.A.S. and the South Australian Government, to go into this feasibility up there, at a cost of \$500 000. That 18 months estimate is almost up. When is the report due? I realise that the Commonwealth is involved in the decision, but would the Minister say that South Australia is in a favoured position to get a uranium enrichment plant and, if so, what are Port Pirie's chances?

**The Hon. E. R. Goldsworthy:** This feasibility study that is coming to a conclusion now relates to uranium conversion as opposed to enrichment. I think that honourable members are aware that there are two stages in upgrading uranium oxide, which is the production of yellow cake derived from milling the ore body. Uranium oxide is converted by a chemical process to uranium hexachloride. That is referred to as uranium conversion. That is the first stage in converting uranium oxide into what will eventually be nuclear reactor fuel.

The second stage is enrichment, which simply means upgrading that uranium hexachloride to a higher concentration. The feasibility study currently being undertaken is in relation to conversion, that is, converting uranium oxide yellow cake into uranium hexachloride, and that is a chemical process. That is the study to which the honourable member rightly refers and which is being conducted by the companies that he named in association with the South Australian Government. That study is expected to be completed this year.

I was not aware of the 15 months time scale when it was set up, but I think that it would be about the end of this year. It is expected that the uranium conversion feasibility study will be completed then. As the honourable member suggests, that was based on Port Pirie as the site of the uranium conversion facility.

The question of uranium enrichment, the next stage, has occupied succeeding South Australian Governments since about 1973. Certainly, some members of the Committee and possibly the honourable member would be aware of the activities of the previous Administration in setting up the uranium enrichment study group back in about 1974, I think, that gave South Australia a good leg-in in relation to enrichment, which is the next stage from conversion. That committee has continued and is still working with a view to securing a uranium enrichment industry for South Australia. The Commonwealth Government set up a group called the Uranium Enrichment Group of Australia at least two years ago. That group of companies is interested in the question of developing and refining our resources. Included in that group is B.H.P., Western Mining, Peko, and C.S.R., and the Commonwealth Government really gave it the charter to examine, and to report on, the economics of uranium enrichment in Australia. That has complicated life a little for us, in that the South Australian Government and the South Australian Uranium Enrichment Committee have been progressing on feasibility studies for a facility in South Australia, particularly. We are not interested, of course, in doing work to result in an enrichment plant in another State.

The former Premier claimed that we were well to the fore in securing this plant for South Australia. I think that that was probably a statement of fact. The uranium enrichment group was active. No other group of which I am aware was actively pursuing this industry in Australia with the same detail as was the South Australian uranium study group. Of course, they had to liaise and deal with this U.E.G.A. group, which was doing its work at the Commonwealth level. I think that it is true to say that South Australia is still very much to the fore in relation to securing this industry. We have been awaiting the submission to the Commonwealth Government of the report of the U.E.G.A. group.

Successive dates have been given to me and to the Government in relation to when that group is to report to the Commonwealth Government. That has spanned more than 12 months, probably more like 18 months, during which time they have been going to report. Dates have been given, and then the dates have been pushed out further. My latest information is that they are due to report to the Commonwealth Government next month. That is as close as we have

ever got. It has been always about three months away at best, but we now have it down to a month. We will await with some eagerness the findings of that committee, which will report to the Commonwealth Government in the first instance. I do not know how long the Commonwealth Government will take to peruse the report before we can look at it. The present Government, of which I am a member, certainly is intent on giving a maximum chance of securing that industry for South Australia because, by secondary processing of ores, one does enhance the whole range of economic benefits to a State and a community.

Australia has been a great exporter of much of our raw material, but the more we can refine it in Australia the more benefits will flow to the community in terms of employment and revenues generated. It enhances the value of the product, and so it goes on. So, I cannot be more precise than to say that I believe that we are still well to the fore. Some other States are evincing some interest. Indeed, one State in particular is evincing a great deal of interest in securing this plant but, as I say, South Australia started well before it did. We believe that the studies that we have carried out have been more extensive than those in any other State.

In the fullness of time, we will have probably the biggest uranium mine in the world as well as the biggest copper mine in the world, with the longest life of any mine yet discovered in the world—upwards of 300 years. So, it would seem that, besides the other benefits that this State offers in terms of stability of work force and so on, the logical place for further processing to occur under these circumstances is in South Australia.

**Mr OSWALD:** Is Port Pirie the favoured site in South Australia in the event of its coming here?

**The Hon. E. R. Goldsworthy:** Port Pirie is the site on which the conversion studies are centred. In regard to enrichment, a number of sites are being considered. It would not be true to say that Port Pirie is the favoured site. It is one of a number of sites that have been contemplated. It would not be true to say that Port Pirie has the edge on any other site in regard to uranium enrichment. However, that is certainly the case in regard to conversion. The feasibility studies for conversion but not for enrichment are centred on Port Pirie.

**The Hon. R. G. PAYNE:** I refer to a topic pursued by my colleague the Deputy Leader of the Opposition earlier in regard to various aspects of Roxby Downs (I almost said El Dorado). I raise another aspect. In an August issue of the *Miner*, reference was made to an announcement by Western Mining that, among other things, in relation to tightening the belt a bit, there was to be a reduction of 200 persons in the work force. Is the Minister aware of any such scheme and whether any of the workers concerned were likely to be involved at Roxby Downs, as it is at present?

**The Hon. E. R. Goldsworthy:** We can talk about El Dorados and things that may be seen by the honourable member as pipe dreams. The warm fact is that about 200 people are employed at Roxby Downs at the moment and with indirect employment about 1 000 people will be gainfully employed in South Australia as a result of that exploratory work. A firm commitment is contained in the indenture that the companies must spend at least \$50 000 000 in each of the next two years (that is \$100 000 000 in South Australia within the next two years) which is no diminution in effort in terms of what has gone on in the past. So, if they can spend that amount of money without employing a significant number of people in the operation, I will be surprised.

There have been a number of changes to the drilling programme, drillers having come and gone. However, no change is contemplated, nor is any change allowed, in relation to the basic programme for the development at Roxby

Downs. I am well aware of the announcement made by B.P. management in relation to economies that it has been forced to make. They cannot apply to the Roxby operation, because of the indenture which we have finally managed to get through Parliament—no thanks to the honourable member's Party. There can be no change to that.

*The Hon. R. G. PAYNE interjecting:*

**The ACTING CHAIRMAN (Mr Mathwin):** Order!

**The Hon. E. R. Goldsworthy:** I wanted to keep it all sweetness and light but, when El Dorados, pipe dreams and all the rest of it are thrown around, we need to come back to reality, and they are the facts of life. The commitment is contained in the indenture, which compels companies to spend that money during the next two years. I will be the last to turn my back on that. That commitment means that levels of employment will be guaranteed in South Australia in relation to the project for the next two years. Further commitments are contained in the indenture that go well beyond those commitments during the next two years.

In answer to the honourable member's question, I am well aware of what the company has announced. There will be a freeze on executive salaries and a diminution of effort in some operations. A minimum of 40 hours per week will be worked by those people. I, for one, make no apology for saying that I, and I believe the Government, endorse the sentiments expressed by Sir Arvi Parbo. I am not saying that the honourable member sought to denigrate what he has been saying, but certainly some people have denigrated it. I endorse what Sir Arvi Parbo suggested. The same sort of thing has been said by Sir Roderick Carnegie of C.R.A., and this has been endorsed by senior spokesmen of the mining industry, namely, that we live in a fool's paradise if we think that we can survive and prosper on the world scene if in Australia we institute shorter working hours and think that we can pay people more money for less effort.

Sir Arvi Parbo said that they would put a clamp on salary rises in Western Mining and that they would have to institute other economies or the company would go broke. If the company goes out of business, no jobs will be associated with Western Mining. I, for one, endorse what he said. The company will try to weather the difficult times, as it is in its interests to survive. It will make the company's chances of survival that much less if it does not tighten its belt in the fashion that Sir Arvi Parbo has outlined. So, I am well aware of what he said.

**The Hon. R. G. PAYNE:** We got a long-winded answer from the Minister but I do not believe that my question was answered.

**The ACTING CHAIRMAN (Mr Mathwin):** Order! The answer might appear to have been long, but it was helped along by interjections, which are out of order, in any case. If members wish to have shorter answers, I ask them to try to refrain from interjecting, which encourages people to give longer answers.

**The Hon. R. G. PAYNE:** I asked the Minister earlier whether any of the reduced numbers to be employed by Western Mining were amongst those employed at Roxby Downs at present, but the Minister did not answer that question. Perhaps he could give some information at another time. I now refer to page 70 of the programme document, where, under that heading '1982-83 Specific Targets/Objectives', etc., we see the words, 'Gas supply—pricing negotiations, progress'. Earlier this year the Minister announced that Mr Webb was to be seconded for a specific task (still within the department) in relation to matters that might well be covered by those words. Can the Minister give the Committee any information as to the area in which Mr Webb is working and any progress that might have been made in relation to the task that he was given?

**The Hon. E. R. Goldsworthy:** Let me take the opportunity of completing the answer, as suggestions have been made that I did not complete it a moment ago. There will be no reductions by Western Mining at Roxby Downs as a result of the announcement by Sir Arvi Parbo. I indicated that there were financial commitments which the joint venturers cannot escape, but the financing of Roxby Downs is by agreement between B.P. and Roxby Management Services (Western Mining). Those commitments have been made and they must be fulfilled. In fact, I understand that there has been an increase in that an extra geophysical team has recently been formed at Roxby Downs.

Let me make it clear that ongoing financing of the project is by agreement between Western Mining and B.P. It had to be agreed in terms of the indenture and that ensures that the level of activity must be maintained. So, the short answer is 'No', there will be no scaling down as a result of that particular announcement by Sir Arvi Parbo.

Regarding the negotiations, Mr Webb was seconded for a period, and that period has elapsed, to concentrate solely on the gas negotiations with A.G.L., but the Director-General has continued to be occupied and is currently still engaged in those negotiations. Of course, I am directly responsible for them and am involved at the executive level with the principals of A.G.L. and, from time to time, with the producers.

Mr Webb had discussions today with one of the parties involved. I have yet to obtain a full report of that particular meeting. I think I indicated earlier today to one of the members of the Committee that these discussions have now a new element, a heightened element, and that relates to price, not only supply. Price is a new element which has been there, and there have been discussions in relation to a common agreement which would involve both A.G.L. and the Pipelines Authority of South Australia. So, we could encompass questions, not only of supply, but also of price, over a longer period than is currently available, certainly to the Pipelines Authority of South Australia, where there is an annual review with a retrospective price increase which is causing enormous difficulties in terms of planning for the future, not only for the Electricity Trust of South Australia and the South Australian Gas Company, but for the other users of gas.

Those negotiations, I believe, have made significant progress. I cannot be more precise than that. A.G.L. are well aware of the fact that the Government is intent on securing South Australia's gas supply beyond 1987 and will leave no stone unturned to achieve that. I have said before, and I say without offence, I hope, that the present contracts leave a great deal to be desired. The Government did not start from the most advantageous of positions in inching these negotiations but, nonetheless, we faced the facts of life and I think that we have impressed on the other parties that the Government will leave no stone unturned to ensure that South Australia continues to get adequate supplies of gas after 1987. We are not in a position of great strength, nor are we in a position of complete weakness, and we have sought the best legal advice available in Australia in relation to the manoeuvring room we have within those contracts.

As I say, the discussions in relation to price have an added dimension as at the last adjudicator's decision. The Government believes that with the big discrepancy in price now awarded in South Australia, in comparison with that which applied last year and which applies to Sydney contracts, has added a new dimension which I, as Minister, and which Mr Webb and Government officers involved in this exercise, realise must be ameliorated if possible, and we must get better contracts in relation to price over a period of time.

If we could write a contract where we had an agreed price over anything up to ten years, it must be of distinct advantage to all South Australians. We are all dependent on electricity, and a large number of people are dependent on gas. So, I do not think that we need limit it to industrial users. If we can come up with a mutually acceptable arrangement for supply and price, and I suggest price over anything from five to ten years, the longer the better, we will be doing an enormous service to the public of South Australia.

As far as I am concerned it is the number one priority in relation to my efforts, and I think that it is the number one priority in relation to Mr Webb's efforts at the moment. Negotiations are taking place. I had several discussions last week and I anticipate having several discussions this week. I could not have a discussion today because I am here, but Mr Webb had a discussion before he came down here with one of the parties to the contract. The Government does not intend to let up.

**The Hon. R. G. PAYNE:** The Minister's answer was very helpful. As he pointed out, everybody in this State has an interest in this matter and I think that the Minister realises that in my position as shadow Minister, I am entitled to have an interest in it, too. I believe that I have a worthwhile answer in relation to what has been transpiring. Following up this matter, I can only make guesses in relation to these matters, as the Pipelines Authority of South Australia has declined to release to me the details of those documents which are described as sales contracts for the 1975 Cooper Basin (Ratification) Act, unless the Minister is prepared to authorise their release, but, so far, I understand, he has not given that authority. If that is the way the Minister wants to keep it, that is fine. However, I can only try to estimate what might be contained in some of the matters for which I have a responsibility.

It seems to me that there was a futures agreement associated with the 1975 Cooper Basin (Ratification) Act, which provided for further supplies to South Australia in certain circumstances. I believe that those circumstances would have been such that they were contingent upon the discovery of further supplies reserves than were known at the time of the drawing up of the indenture to which I have referred.

If that is the situation, can the Minister say whether or not there has been any clarification in respect of reserves in the past year or two? This has been a topic that has not been explored greatly. One hears, from time to time, of new finds in holes drilled and so on, and of gas found in such and such an area or oil in another place, and so on. The quantification that one would like to see go hand in hand with those announcements of discoveries is not readily available. Can the Minister inform the Committee of any factual information in relation to an improvement in reserves over the years?

**The Hon. E. R. Goldsworthy:** In relation to the honourable member's first point, before the contracts could be released to the member I think it would be necessary to obtain the approval of the parties to the agreement. There is some commercial incompetence arrangement (I think that is the phrase) in relation to these contracts. I have received requests to release them from time to time. However, I believe it is improper to do that without the concurrence of the parties involved. Personally, I have no objection to the honourable member seeing those contracts in confidence. However, I believe that I am not at liberty to do that without the concurrence of the signatories to the agreement.

In relation to the futures agreement, there is an entitlement to South Australia in terms of that agreement. I believe the weakness in the agreement, from the State's point of view, is that the producers are not required to find gas, but the State is required to buy it. From memory, I think the State is required to purchase gas if it is priced up to 110 per cent

of the price of oil. That is a let out for the State. We do not have to buy the gas if it is dearer than 110 per cent of the price of oil and, in this day and age, that would make it enormously prohibitive. The futures agreement requires the State to take any gas found, although the company is not required to find it, and that is one of the problems with that contract.

In relation to reserves, from time to time I receive reports from South Australian Oil and Gas, particularly in relation to reserves and the company's assessment of them. The company undertook some exploratory work, soul risking work (as the honourable member would know), with the prime purpose of finding gas. In summary, the advice that I have received from time to time from that source and from the department indicates that the overall reserve level has not increased since about 1973. New gas finds have been made, but concurrently with those finds the known reserves have been downgraded. When I became Minister of Mines and Energy I was told that about 700 billion cubic feet of gas had to be found to satisfy the Sydney contract before South Australia could receive any further entitlement. That advice has not changed significantly in the three years that I have been Minister. That has been the story since 1973.

Some new finds have been made, but existing reservoirs have been downgraded. Therefore, there has been no effective increase in the reserves. We have sought to obtain the best possible advice about the position in relation to the reserves. Independent consultants have been engaged, and I believe that A.G.L. has engaged yet another independent consultant to estimate the level of the reserves. In fact, today I sought further information in relation to this very important question of reserves, because it has been an integral part of any negotiations in relation to gas sharing, and so on.

A true, up-to-date delineation of reserves is a most important part of the assessment of the scene, and it is an important part of all negotiations in relation to gas supply and gas pricing. As I have said, today I sought further information in relation to reserves. It is true that since I have been Minister, indeed, since the contracts were written, there have been additions, but there have also been concurrent subtractions. I was informed that we needed 700 billion cubic feet and I do not believe that that situation has changed much since I became Minister. The price of gas does have a direct bearing on reserves in the sense that it then becomes economic to recover gas from known reserves, therefore, if the price is high the cost of recovery is a factor. If the price is high it immediately has an effect on reserves in that it becomes economic to recover some gas that ordinarily would not be economic to recover. Perhaps Mr Webb can provide more detail.

**Mr Webb:** I think the Minister has covered the question fairly well. His final point is important: reserves are the economic parameter. As the real price of gas changes, the reserve volume also changes. Gas which is some distance from areas or in a tight formation becomes economic to produce as the real gas price rises. It is true that the whole question of reserves has been under some scrutiny over the last several years. It is also true that as our knowledge of the geology of the Cooper Basin has increased, as more development drilling has proceeded, our earlier estimates have had to be downgraded in some cases and estimates in other areas have been upgraded.

On balance, the recent result has been a fairly static estimate. It became even more complicated quite recently when the producers adopted a new concept for the definition of 'reserves'. That method has led to a conservative estimate of reserves, so the amount of proven and probable gas under the new concept has decreased and the amount of possible gas yet to be found has increased. This tighter concept was



essentially developed for the producers who have to borrow large sums of money from banks to undertake the further development needed in the field. The banks required a very conservative estimate of gas reserves. The consultant work that we are doing, which Mr Watts mentioned, is aimed at getting a very close handle on the whole question of reserves. The negotiations that I have been involved in with A.G.L., as mentioned by the Minister, means that we now have a much closer understanding of technical matters between A.G.L. and ourselves.

The nature of the reserves and their quantity is one of these aspects. That whole matter is receiving close attention at the present time and it will be a factor in the move towards a gas sharing concept. I think it is fair to say that, as a result of the negotiations between the producers and A.G.L., a recognition of the need to develop a gas sharing concept of some form is now agreed by all parties. Much more understanding will be required to produce the final details of such an arrangement.

**Mr RANDALL:** I refer to page 62 of the yellow book and the Energy Information Centre. My question relates to the development of our resources. We have talked about the search for energy and mining resources. The community is beginning to take an interest in our resources, their utilisation, and the means and ways of preserving those resources.

That means the controlling of air conditioning at the correct temperature and getting the best value for the dollar in development and use of our resources. Will the Minister say what is the role of the Energy Information Centre and what is its expanded roll because on page 26 of the yellow book it is indicated that the centre is going to extend its services and its conservation programme? I know that constituents of mine have been to this centre to get information about the best way to heat or cool a home. I believe that that centre is providing a valuable service to the community. Will the Minister say what are the other areas that it is going to expand into?

**The Hon. E. R. Goldsworthy:** We are looking at extending the service of the Energy Information Centre, but it would be premature to suggest that resources are available for the proliferation of services. We are funding much of the Energy Information Centre from the National Conservation Programme where there is a co-operative agreement between the States and the Commonwealth to share the expense of implementing energy conservation programmes. We have taken the opportunity of seeking and getting agreement from the Federal Government for expenditure in relation to much of the work being done by the Energy Information Centre. I believe that this has been a very successful initiative on the part of the Government. There are many people going through the centre, including school groups, and a large cross section of the community including householders, industrial users and so on.

As the honourable member has suggested, there is a heavy conservation bent in the work, publications and displays at the Energy Information Centre. There are plans to increase its scope. However, we all appreciate that we live with fairly tight financial restraints at the moment and that many of the initiatives we would like to initiate in Government have had to be confined within the limits of financial reality. The Director of this department is overseas appearing as the guest lecturer at an important energy conference in the United States. He will be absent for a month and during that time Mr Noble is Acting Director and I ask him to elaborate on the work of the Energy Information Centre and indicate the scope of the work which, as I have said, has a heavy conservation bent and also provides a service to householders. That service is used to a considerable extent. It also provides advice to industry. There are other initiatives within the department relating to conservation

other than the Energy Information Centre, such as energy audits for industry. Mr Noble, will you elaborate on my remarks?

**Mr Noble:** I will pick up the last point made by the Minister. It is important to realise that we are using the Energy Information Centre as the focal point for a range of conservation-type activities. I will briefly describe some of those activities. The information centre concentrates on providing advice mainly to householders on how energy can be conserved in the home. It also provides advice to industry and people involved in the transport sector. During the last financial year the majority of the 500 people a week who went through the centre were asking for information in the household area. As the Minister has mentioned, we are using the Energy Information Centre as a focus through which a range of publications produced under the national energy conservation programme vote can be distributed. These publications range from those explaining to people how energy can be saved in the home to those explaining how solar energy can be used and how l.p.g. gas can be used in transport. It also covers a whole range of other matters.

The energy conservation programme vote also provides the opportunity to use a limited amount for energy conservation advertising which also features the Energy Information Centre. We advise people of the various ways in which energy can be conserved and then refer them to the Energy Information Centre for more information. In a similar way, the department is conducting an energy audit programme within industry. Again, the centre is used as the focal point through which that programme is run. This energy audit programme also utilises funds provided by the Commonwealth and, in that way, we are able to maximise the benefits obtained from the programme.

The audit programme has been quite successful in identifying major areas of energy saving for particular firms and savings of the order of 25 per cent to 30 per cent have been common. In describing the range of activities of the information centre I think I should also mention that there was an energy conservation award competition run last year and that perhaps the most successful sector of that competition involved schoolchildren. We received a large number of entries, I think some 200, from schoolchildren and many of those entries demonstrated a considerable understanding of the benefits of conserving energy and some novel ways in which that might be done. This energy conservation award programme is due to be continued this year. I think I have briefly covered some of the more important activities of the centre.

**Mr RANDALL:** I would like to follow up another area of operation, that of the assessment of the efficiency of consumer goods. People are perhaps not complaining, but are concerned about the increase in their power bills. They want to know that they get the most efficient usage of their equipment, whether an air conditioner or a heater. Is there some programme to look into the efficiency of consumer goods?

**The Hon. E. R. Goldsworthy:** That is being looked at now co-operatively between the States, which are looking at the labelling of electrical appliances, and so on. This matter was raised at a recent mining Ministers' conference in Darwin. It was placed on the agenda by the Minister from New South Wales. I think people can understand that the problems in New South Wales are acute in relation to electricity supplies. It was agreed, and I think this came out in the joint press release issued after that conference, that the States and the Commonwealth would co-operate and that a committee of officers would report to the Ministers about the feasibility of implementing a labelling system next year. I had one proviso about that, which was discussed, that I

would want to know the cost to industry of instituting such a system. I was not prepared to give open agreement to a resolution which simply said 'We will do it.'

I will say no more about people who may have had that view, but my firm view is that part of that study would require us to be advised on the cost to industry of implementing such a scheme, as well as on the benefits. There would be obvious repercussions in the present economic climate, in loading industry with costs in relation to implementing any such scheme. Mr Johns was at that meeting in Darwin. He may add further detail. I will ask him whether he has anything to add about labelling electrical appliances.

**Mr Johns:** I think the Minister has covered this. The committee was set up and is to report to the next meeting on progress. Some guidelines have been spelt out on labelling. Progress will obviously be determined at that next meeting.

**Mr WHITTEN:** I refer the Minister to page 56 of the yellow book. My question relates to underground water. At the top of that page, under the heading 'Need being addressed', it is stated:

To establish the nature and occurrence of underground waters and provide advice on their withdrawal and recharge throughout the State to ensure maintenance of quality.

On the right-hand side of the page we see the specific targets for 1981-82. Part of this section reads:

Establish the availability of underground water from the Great Artesian Basin in connection with mine development at Roxby Downs, Beverley and Honeymoon.

I was under the impression, rightly or wrongly, that the Beverley and Honeymoon deposits were outside the Great Artesian Basin and on a different basin from Roxby. Regarding withdrawal and recharge of the basin, have any studies been undertaken that would enable the Minister to assure the Committee that the leaching process at Honeymoon and Beverley will not pollute the artesian or any other basin?

**The Hon. E. R. Goldsworthy:** None of those mines is on top of the Great Artesian Basin. The water referred to there would be piped down to the mine site. In the case of Roxby, it is a long way. I will ask one of the officers to comment on the geography there. The fact is that most mining, to my knowledge, requires processed water, because the ore is ground and it is usually carried in water during some part of the process. What is meant there is a supply of processed water for the mine operation. The environmental impact statement for Honeymoon has been completed. The e.i.s. for Beverley is well advanced. Clearances have been given for Honeymoon. It has been shown that there is no possibility of polluting the Great Artesian Basin by this process of solution mining. Likewise, if there was any possibility of pollution with either of the other mines, of course, they would not be able to proceed. There is no question of polluting the Great Artesian Basin with any of these mining operations. The environment of underground waters question must be addressed in an e.i.s. statement. As I say, Honeymoon has been cleared. The other two are in the process of preparation; both are well advanced. Mr Boucaut is the Chief Geologist. A committee has been established, representing the Mines and Energy Department and the E. and W.S. Department. I do not know who else is on the committee to address these questions. Mr Boucaut is more familiar with the technical details. He may like to comment on the Underground Waters Technical Advisory Committee.

**Mr Boucaut:** The Underground Waters Technical Advisory Committee was set up two or three years ago. It comprises members from the E. and W.S. Department and the Department of Mines and Energy. The E. and W.S. Department's role, of course, is management of the State's water resources. There is input from this side; we provide technical input in terms of determination and protection of our water resources.

The committee has had a large involvement in many of the mining operations mentioned today, where water has been involved, ranging from the dewatering of Bowmans or Wakefield coal, similarly Kingston coal, to the protection of groundwater resources at Honeymoon and, more recently, at Beverley, where the draft environmental report is presently open for public comment. We have also been involved with the company, Roxby Management Services, and the groundwater consultants in determination of availability of groundwater from the Great Artesian Basin for the Roxby Downs supply. That, broadly, is the role of the Underground Waters Technical Advisory Committee. We actively consult with mining companies at the appropriate time.

**Mr WHITTEN:** Following those remarks on underground water, I refer the Minister to page 57 on employment levels and average full-time equivalents. I notice that underground water resource evaluation and protection employment is to be increased from 32 last year to 49. On town water resources, there is an increase of 10 full-time equivalents. But, when I look at the lines on page 34, Parliamentary Paper No. 9, the only reference I can see shows that there would be approximately \$43 000 more to be spent, yet we will have about a 50 per cent increase in the manpower equivalents. I would appreciate more information from the Minister on this.

**The Hon. E. R. Goldsworthy:** That figure does not include an increase in the head count in the department. It now includes drillers from the Thebarton depot who previously were not included. They used to appear under 'Separate services' on page 73 of the Budget document. They have simply been included in this year in that head count, because they are very heavily involved in drilling for water. This is a big component of the department's activity. It consumes about a quarter of water drilling, water studies, work in relation to determination of underground water, and so on.

It consumes about a quarter of the department's budget. There are 98 people out of a total establishment of 442 involved in this work, so it does indicate a very heavy commitment by the department to underground water activities because we are a very dry State. That gives an idea of the scale of the work that the department undertakes in relation to underground water. There is an increase of 34, including drillers who are involved in this work.

I would like to correct an answer that I gave a little earlier to the honourable member. The Beverley deposit is, indeed, over the Great Artesian Basin. I said that they were all outside. The other two are, but Beverley is over it. However, because of pressures within the basin and so on, and the geography of the basin, there is no risk of pollution to the Great Artesian Basin from the Beverley operation. I misled the honourable member earlier in that answer. What I said was correct in relation to Roxby and Honeymoon, but Beverley is geographically over the basin.

**Mr WHITTEN:** I thank the Minister for that, because I was fully aware that one of them was over the basin and I was a little upset that he would have given me that information.

**The Hon. E. R. Goldsworthy:** It was not deliberate, I can assure you.

**Mr WHITTEN:** I accept it. There is no worry about it—I accept that you made a blue.

**The Hon. E. R. Goldsworthy:** A serious mistake.

**Mr WHITTEN:** I also notice on the same page (page 56) under 'Issues/Trends' that there has been an increasing demand for underground water for domestic and irrigation use and for other town supplies. Also, on the right hand side of the page it appears to me that there is going to be a fair amount less spent this year on drilling. I am told that drillers will come from the one section to another section. It also appears to me that in 1981-82 on underground water

resources there were 32 employed, and now that will go to 49. New mineral developments, constructions, will go from 13 to 20 and town water resources from 19 to 29. If they were employed there before and now there is something new, because the asterisk says that they are, can he explain to me where they come from or why they are like that?

**The Hon. E. R. Goldsworthy:** On page 73 of the document you will see that under 'Professional and Technical Support' the drillers used to be included. There were 48 in 1981-82 outcome. There is a head-count of 48 in the second last column and nil in the last column. That means that there has been no significant change in terms of head-count. Those 48 are now spread in other areas of this budget document, and 34 of those appear now in this programme, 'Underground Water', because that would be as near as could be gauged the number of drillers that could be involved in that particular drilling activity.

In relation to the reduction of funds, it is true that there will be a reduced effort overall. To complete that last point, there is no cost to any Government budget by transferring people. They are still paid, but they appear in a different line of the budget in these programme documents. In relation to salaries there is no significant change to the number of people employed, but inflation will mean that they will be paid more this financial year. There is no significant change in the number of people employed but there is a diminution of effort, as the honourable member suggests from the Budget papers.

The fact is that there has to be a continual assessment of priorities within every Government department in relation to where money will be spent. There are changes in priorities in all Government departments, and certainly in the Department of Mines and Energy there are changed emphases. There will be in real terms less effort in relation to underground water than there was last year because there is an increased priority in the Oil and Gas Division, for instance, headed up by Mr Watts. Significant resources have had to be put into the Cooper Basin consultancy study in relation to oil and gas and, as the honourable member appreciates, one cannot spend money that one does not have. The department is in competition with other departments for funds. When decisions are made in relation to competing priorities across Government, then in the present economic climate cuts have to be made in some areas. Decisions are made to expand in some areas. It is not a large cut, but some less effort, and this is one area in which resources have been redirected in to the Oil and Gas Division that I mentioned a moment ago. That is a pressing problem that we must address with more resources this financial year.

**Mr MATHWIN:** I would like to ask the Minister a question, first, in relation to page 37 of the Estimates of Payments: under 'Mining Inspection' I see that the allocation this year is \$270 000. Last year the actual payments were \$275 775. That is a reduction in itself, but when one takes into consideration inflation and the like it would appear to me to be a far greater reduction than appears at first hand. I wonder whether it is the intention of the department to reduce the number of mining inspectors, or what exactly is the reason for this drop in allocation to that line?

**The Hon. E. R. Goldsworthy:** I missed an answer earlier when I said that we had taken on an extra underground mining engineer as an inspector to work at Roxby and that there was no diminution of staff. That figure which appears for last year includes some consultancies and some back payments.

**Mr Whinnen:** The honourable member is looking at 'Contingencies', which are the operating expenses of supporting staff. The increase in expenses here is primarily due to an increase in the operation costs of the opal fields, where for the majority of 1981-82 we had an additional member of

the staff. That has been reduced now by one member. Also included in 'Contingencies' is the fairly high cost of travel to distant mining sites, such as Roxby Downs, Mount Gunson, Beverley and Honeymoon.

**The CHAIRMAN:** Are there any further questions?

**The Hon. R. G. PAYNE:** Yes.

**Mr MATHWIN:** You, Mr Chairman, asked whether there were further questions. I take it that the member for Mitchell has further questions. I remind you that I also have two further questions to go.

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

**The CHAIRMAN:** I advise that the required notices of discharge and substitution of members have been given as follows: Mr Lewis, the member for Mallee, in place of Mr Schmidt, the member for Mawson.

**Mr MATHWIN:** Have we progressed at all in our investigations into the advantages or disadvantages of the use of solar energy? The Government is concerned about conserving existing fuel. We realise that it is very important. The Minister will be well aware that in Israel they appear to be well advanced in the investigations of the use of solar energy because the majority of houses seem to have a solar system working. They are experimenting with the Dead Sea and the heating of heavy salt water. What advances have we made in relation to solar energy?

**The Hon. E. R. Goldsworthy:** The honourable member has drawn my attention to the work in Israel in relation to solar ponds. His study tour some years ago led to a visit by Mr Johns and me two years ago to look at that work. We are currently looking at the feasibility of establishing a solar pond for heating and power generation at the township of Marla, recently established. About \$5 000 was spent last year on that proposition. I believe \$15 000 was set aside to further the work in relation to that project. The final commitment to establish the solar pond at Marla has not yet been made but there is every possibility that a solar pond will be established in that part of South Australia with a view to harnessing solar energy using that technology. I repeat that it was because of the interest shown by the honourable member on his study tour four years ago that we followed that up.

The former Governor, Sir Mark Oliphant, was in contact with the Government and me in relation to this technology. It would appear that for a country like Australia, where we appear to have supplies of salt and plenty of sunshine in the outback, it could well be a proposition. We have visited the solar pond out from Alice Springs. One is operating there for the use of power generation. When we were visiting the Northern Territory in the course of other investigations we looked at that solar pond. We were quite impressed with that development. That is probably the main area in which we are planning new technology in South Australia. It is currently being funded in terms of feasibility and cost of power for the township of Marla compared to alternatives. There is every chance that that will be developed. Other than that, a range of projects have been funded in the past.

I inspected the solar heating plant at the Dairy Vale factory in Murray Bridge where they have a whole bank of solar panels used in connection with solar heating for commercial purposes. The major effort in brand new technology for South Australia is with the solar pond.

**The Hon. R. G. PAYNE:** I refer to an area which we were discussing earlier today in relation to ETSA. The Minister correctly outlined his relationship with that authority and referred to a close relationship which from time to time has some effect. My study of the annual report indicates that large sums of money are being borrowed by that corporation. I understand that they are needed. Further large

sums will be needed in respect of the further financing of northern power stations and any other power generation equipment to be provided in the future. According to the current annual report, ETSA is paying an average rate on borrowings (which are large sums) of 16 per cent per annum. ETSA also disclosed in its annual report that it has very large reserves although not large enough to do all the financing that it will have to do, but of the order of \$80 000 000 to \$90 000 000. To my surprise I note from the same report that the earnings on those reserves are 13½ per cent on average. That indicates a 2½ per cent differential between what is being earned on large sums held in reserve and the amount being paid for borrowings which have to be met some day or carried over *ad infinitum*. It concerns me that that is happening. Is the Minister aware of the current increasing differential between earnings and borrowings by ETSA? Has he any thoughts on the matter and, if so, could he advise the Committee?

**The Hon. E. R. Goldsworthy:** As the honourable member acknowledges, I do not have direct responsibility for those arrangements with ETSA, although I am to be kept informed. It is true that reflected in the revenue of ETSA and its tariffs is a higher component for its ongoing capital programmes than anywhere else in Australia. Our tariffs are the best of the mainland States. Tasmania is cheaper but our tariffs are most competitive. Even with that achievement they are able to put aside a sizeable proportion. I will ascertain the exact amount for the honourable member. My officers and I are not directly responsible for the matter. I have a fortnightly meeting with executives of ETSA to discuss matters of mutual interest. I had such a meeting this morning. The matter of all-consuming interest at the moment is the price of its fuel and gas. It sets aside a higher proportion of its revenue towards future capital programmes than any other electricity authority in any other State which means that we are in an advantageous position in relation to borrowing. The more revenue set aside for future capital programmes, the smaller the borrowings necessary which is a distinct advantage to us.

True, the cost of all borrowed money has escalated dramatically in recent years. Therefore, the earnings on borrowings for all electricity authorities has changed markedly simply because of the high interest rates offered by electricity commissions and authorities in order to raise money on the public market for their capital programmes.

Every State, indeed every country, is faced with this. Certainly, every State is. I think an ETSA loan advertised last week was for 17 per cent interest over five years; it was a guilt-edged investment and would have to be a very favourable loan. As the honourable member also knows, the competition for money is still very keen, and it is the competition for money on the international scene that has put interest rates where they are.

So, I know that what the honourable member is saying is true. I suppose that it is a matter of concern to all authorities, companies and industries who must rely on borrowed money for expansion. Of course, it means that that is added into their cost structure and tariffs. As I say, we are no orphans in South Australia and the cushion that we have against that tendency is in terms of the provision for expansion via the retention of earnings, which is higher, in my understanding, than it is in any other State. This is what the Federal Government has been advising authorities to institute, and ETSA has been more successful in South Australia than have the other authorities.

If one looks around Australia one will see that all States are involved in enormous capital programmes. This has led to dramatic increases in tariffs in the other States, higher than the increases that we have had to implement in South Australia, because those States rely more heavily on borrowed

money for their capital programmes than we do. I agree that it is a cause for concern; that money must and the interest must be paid, and there is only one way in which it is paid, that is, in the tariffs that are charged. But, that is not peculiar to South Australia, or to Australia.

I will obtain a fuller report from ETSA with the details that the honourable member is seeking. There is no point in my asking any officers to comment because, as I say, we are not responsible for ETSA. My officers, although they have a liaison with ETSA, particularly in relation to the valuation of South Australia's coal deposits and so on, do not bear a responsibility for their financial management basically, although, of course, as the honourable member suggests, it is a matter of vital concern to the State and, therefore, a matter of very great concern and interest to me.

**The Hon. R. G. PAYNE:** I am not quite sure whether the Minister registered the point that I was making, and possibly that is my fault. I was making the point that borrowing is being conducted at a rate 2.5 per cent in excess of that which is being earned on very large reserves. My understanding of that is that one tries not to exceed 1.5 per cent because, ultimately, someone has to pay back the borrowings, and that would be the people of this State, through tariffs, which will need to be charged by ETSA. Yet, very large amounts, some \$90 000 000 of reserves belonging to ETSA are earning only 13.5 per cent, in the same climate that is drawing 16 per cent, on average, as a borrowing rate. I accept that the Minister will obtain further information, and at this stage I indicate that I am perfectly satisfied with that.

I want to proceed with another area of interest that still lies within the Minister's responsibility. There has been a good deal of interest, and certainly a good deal of publicity, in South Australia regarding the discovery of oil just over the border (I think that there are certain wells, known as Jackson, and the possibility of one or two others) and how the sale and transport of that oil will take place—whether it will go to a destination in Queensland or whether it might be married in with the Moomba to Stony Point project, which is a liquids transmission line. Can the Minister say whether or not there has been a degree of involvement by him or his officers at this stage and what is transpiring in this matter?

**The Hon. E. R. Goldsworthy:** I am sorry that I overlooked the thrust of the original question, and I will obtain some information about ETSA paying more for its loans than it is receiving for the money that it has invested. I guess that that is explained in terms of the nature of those investments, some of which would, I suppose, be from investments that were entered into some time ago.

*The Hon. R. G. PAYNE interjecting:*

**The Hon. E. R. Goldsworthy:** That could well be. The former Under Treasurer, Mr Gilbert Seaman, is on the board of ETSA and was appointed by the Government of which the honourable member was a Minister, and Mr Seaman would bring some financial expertise to its deliberations. I think that he is also on the State Bank Board, so he is still actively involved in those matters. Money flowing to and fro from organisations very rapidly in the short-term money market usually offers the highest return, and has done so for some time, but that is fluctuating at the moment. The trust had no alternative but to offer 17 per cent if it was to attract the sorts of funds that it needs for its capital programme. As I say, I will obtain a report.

In relation to the Jackson oil discovery, the Government is not involved directly in negotiations with the Queensland Government. I have discussed the matter with the producers, and the Chairman of Santos in particular, and offered the services of the Government if at any time the producers were of the view that we could be of assistance, with the

Queensland Government. It was suggested that there was no point in our becoming involved at the moment in discussions with the Queensland Government, and that discussions were taking place between the producers and Santos as the operating company, and the Queensland Government.

I mentioned this again quite recently to the Chairman of Santos, when I had one of my regular discussions with him. He was of the view that they were making satisfactory progress. It is true to say that the producers share our view that the logical way for that oil flow is down the liquids pipeline, which is almost complete. It does not make economic sense with the discovery in Queensland so far, and certainly not enough has been discovered to justify the building of another liquids pipeline to Brisbane, particularly when the line to Stony Point will not be full.

The Queensland Government has adopted an attitude where it is not prepared to say 'Yes', in the first instance. The producers are keen to bring that oil on stream and to use the newly constructed pipeline which is the only economic outlet for that oil in the short term.

I think common sense dictates that a lot more oil needs to be found in the Queensland portion of the Cooper Basin to justify an oil pipeline to Brisbane or to Roma. The producers are seeking clarification in relation to the requirements of the Queensland Government to obtain permission to feed it across the border into the existing pipeline. Early reports that I have received indicate that it will probably require some expenditure commitment in terms of further exploration in the Queensland section of the basin. I think that would suit everyone's purposes. In the meantime, I also understand that the producers are not prepared to spend large sums of their funds on exploration in the Queensland portion of the Cooper Basin until this matter is resolved.

I am quite convinced that nothing will be achieved if we simply begin table thumping and telling the Queensland Government what it should do when we do not have one bit of authority in that State in relation to what it will do. It would be counter-productive for us to become involved simply for the sake of becoming involved. As I have said, we have no authority or clout in Queensland in relation to this matter. I have offered to assist the producers in any way that they wish. The latest report is that they believe the discussions are progressing satisfactorily. From earlier discussions, I believe it could well be that there could be a commitment to exploration by the Queensland Government in that part of the basin in return for the necessary approvals for that oil to join the Moomba/Stony Point pipeline. As I have said, everyone acknowledges, although they may not be prepared to admit it publicly, that that is the only economic outlet for the oil at present. It is the main discovery in that area.

**The Hon. R. G. PAYNE:** A certain happening occurred today in relation to the liquids pipeline. I suppose that because of what we are doing here the Minister and I could not attend. I am interested in the attitudes of the Government and the Minister to the provision of a refinery structure at Stony Point. As I understand it, a fractionation plant comprises some of the stages that may have to be built to put together a refinery. Therefore, an economy may be effected if further stages are simply added in series with the fractionation plant to be constructed by the producers at Stony Point. Has the Government been approached in relation to that or has it been involved in any discussions about the provision of a refinery at Stony Point, or is it proposed to ship the condensate and other products to Mobil at Port Stanvac?

**The Hon. E. R. Goldsworthy:** The only firm contract of which I am aware that has been written for the products is the very large contract to supply l.p.g. to Japan for five

years. I am aware of the discussions with Mobil for condensate for Port Stanvac. A proposal for a small refinery at Stony Point has been put forward by some entrepreneurs. I have done what I can to help them with the necessary approvals required from Canberra. As I understand it, the fractionation plant will separate l.p.g. condensate and crude oil. Markets will be found for those products, and I doubt whether there will be any problem there. I am informed by the producers that commercial discussions are progressing at the moment.

There is a proposal for a small refinery at Stony Point. There has been a problem in obtaining what is termed remote refinery status for that proposal. There are advantages in having a refinery at Stony Point, in that, if it is declared a refinery port there will be some advantages to the producers in the enhanced value of their product at the port. I can see advantages for all concerned that will add to the security of supplies in that part of South Australia. We are interested in the maximum processing of products in this State because, as I said earlier in another context, it will enhance activity in this State and will provide returns to everyone, including members of the South Australian community.

There have been discussions in relation to the establishment of a refinery, but they have not proceeded that far down the track. Some progress has been made, but more progress is yet to be made. Much of the discussions will involve commercial discussions between the proponents of the scheme and the producers in relation to their charges for the product and also the necessity to secure adequate markets for the refined products. In relation to South Australia, that means having access to the outlets which are currently in the hands of various companies. Those discussions are also taking place.

**Mr OSWALD:** I refer to page 60 of the yellow book, '1982-83 Specific Targets', as follows:

To establish oil/gas/coal reserves estimates to facilitate the State's forward energy planning programmes.

What is the level of exploration activity currently being carried out in the Pitjantjatjara lands?

**The Hon. E. R. Goldsworthy:** Last week a meeting was held at Ernabella to discuss the question of oil and gas exploration on Pitjantjatjara land. Dr Colin Branch attended that meeting. As a result, I understand that the Pitjantjatjara people have agreed to re-open negotiations with Haematite. I think there is an appreciation by both sides in relation to the parameters within which negotiations can take place. I invite Dr Branch to comment further about exploration on Pitjantjatjara land. The only exploration contemplated in that area at the moment is the Haematite hydrocarbon programme, at a cost of about \$30 000 000.

**Dr Branch:** It must be recalled in this context that the Pitjantjatjara Land Rights Act was introduced by the present Government in 1981. At that time it was hailed as leading the way for mineral exploration on Aboriginal lands. There were problems in the Northern Territory, which has similar legislation, and in other States, where there was no legislation and where projects of this type have been delayed. An important point in relation to this legislation is that although the land was intended for the Aborigines and has been ceded to them under a freehold title, the minerals within those lands are still vested in the Crown.

It is appropriate that this question has arisen tonight, because it was the member for Mitchell who introduced previous legislation under the same title. It is interesting that, had that legislation been enacted (and it was not because it was overtaken by a State election), it intended that at the exploration stage there would be no payment for allowing that exploration on Aboriginal lands. In fact, the Aborigines had a right of veto. However, if they did allow

exploration they would have received payments only after discovery and when royalties commenced being paid.

The present legislation allows negotiations to commence between a mineral petroleum explorer and the Aborigines (in this case the Anangu Pitjantjatjaraku) in relation to entry upon the land. Those negotiations will allow discussions about disturbance to the Aborigines, their way of life and their land, and compensation payments are allowed for. The current situation is that a consortium comprising of Haematite Petroleum, Australian Occidental and Ajax were given permission by the Minister to commence negotiations with the Anangu Pitjantjatjaraku to determine the conditions for access by that consortium upon the Pitjantjatjara lands. Through those discussions agreement has been reached on a range of matters related to that issue, such as the scouting of seismic lines to avoid sacred sites, the question of alcohol, the movement of personnel in and out of the lands, their social interrelation with Aboriginal communities, and so forth.

All these agreements reached between the parties have aimed to minimise the disturbance to the Pitjantjatjara and their lands. The Government has, in the interim, said that it will not permit other companies who may be interested in exploration on those lands to enter into negotiations with the Pitjantjatjara until this round of negotiations has been completed successfully. This was done because we believe that the goodwill that has been expressed by both sides during the negotiations on the legislation is real and that we should allow these negotiations to reach their conclusion and hence set a precedent to be followed in future by others.

It is appropriate to mention that no other companies are pressing the Government to enter on those lands for exploration purposes. We are now at the point where it has been announced in the press that negotiations between the Anangu Pitjantjatjaraku and Haematite, leading the consortium, have supposedly broken down over the question of financial compensation. The Minister has been instrumental in bringing the parties together, and the meeting at Ernabella last Thursday was a move by the Minister to allow the Government's point of view to be presented to the Pitjantjatjara Council. At that time we also heard the point of view of the Pitjantjatjara Council. The upshot is that the goodwill hoped for on either side has been renewed. I was advised at the end of that meeting to contact representatives of Haematite to say that the Pitjantjatjara Council was ready to receive representations from them to renew negotiations. That is where the matter now stands: it is now back between the two parties, who will be authorised by the Minister to negotiate—Haematite on one side and the Anangu Pitjantjatjaraku on the other. We will wait for the outcome of that further round of negotiations.

**The Hon. E. R. Goldsworthy:** I think, as Dr Branch pointed out, that the company had reached agreement about all matters related to entry on to the land except for the matter of financial compensation for the right to explore. In effect, a proposal sought to set out a formula that so much would be paid per line kilometre of seismic and so much per head for each Aboriginal comprising the Anangu Pitjantjatjaraku, and so on, but the company rejected that proposition.

I am informed that the company was prepared to meet all requests relating to minimising impact and to spend, I think, \$400 000 on rehabilitation of any land disturbed as a result of seismic work. It is also true to say that if the Pitjantjatjara had persisted in their demands no exploration would have occurred. I do not think I am being inflammatory in saying that; rather I am simply stating the facts. I think that the mining industry nationally made it known (and the Petroleum Exploration Association of Australia, which represents over a hundred companies, as I understand, made

it known) that the end result of this demand would be that there would be no activity at all on the lands because, as Dr Branch pointed out, this was not envisaged in previous legislation and does not occur anywhere else in Australia.

There are some significant variations between the legislation enacted in South Australia and the legislation that is in force in the Northern Territory on both these counts, and certainly on the count of payment for exploration. There is no payment for exploration work in the Northern Territory, although there are significant payments by way of royalties once discoveries are made. I did not get a particularly sympathetic hearing in one or two quarters for saying previously that the end result of persistence in demands of this nature would be that the exploration effort in South Australia would be diminished and that no exploration would take place in that part of South Australia.

We cannot compel companies to spend money to what they see to be their disadvantage when there are other areas in the country in which they are interested. In my view, it would be a great pity if this happened because, as Dr Branch pointed out, the minerals, hydro-carbons and other resources that are found belong to the whole community, and any Government has a responsibility to the whole community and not just the Aboriginal community.

I am still confident that the consortium will reach an accommodation with the Aboriginal people which will allow exploration work to take place with a minimum of disturbance. Rehabilitation work will restore that land to its former condition if disturbance does occur, and there is certainly some disturbance with seismic work because vehicles must travel over the land, resulting in disturbance of that land in some cases. I am convinced from what I know that the land can be restored to its original condition, and the company has agreed to spend \$400 000 on such restoration.

Significant progress was made last week in relation to the question of exploration of Aboriginal land. As Dr Branch points out, the disputants have agreed to start negotiations again. We await, with some interest, the outcome of this.

**The Hon. R. G. PAYNE:** From what I could hear of the argument it was simply a statement of a difference in philosophy between a former and a present Government. I have no quarrel with that answer, but I do want it in the record that, as the person named who introduced the original legislation which has become a guideline in this area, I offer no apology. On the contrary, I am proud of having been the person who introduced it.

**The Hon. E. R. Goldsworthy:** No-one is seeking to canvass previous legislation, except that I think Dr Branch pointed out that even under the terms of the previous legislation before the House, which was not pursued, there was no contemplation of payments for exploration work. I think that was Dr Branch's point in his reference to the previous legislation. I just clarify that point.

**The Hon. R. G. PAYNE:** I would like to explore that point, too. I had not intended to canvass that area, but one of the things that I have observed since those days, as a person who was totally concerned with the production of the original legislation, is the number of people who seemed to know what was intended by it and seemed to know more about what was intended by it than both myself and the former Premier of this State, who was its originator.

**The Hon. E. R. Goldsworthy:** The personnel in the Mines Department have not changed markedly since those days. I think part of the responsibility of Mines Department officers is to be cognisant of legislation which concerns them. I do not think anyone is seeking to brag that he or she knows any more about the Bill than the Minister who introduced it. I think they are simply trying to state facts as they understood them.

**Mr WHITTEN:** My final question relates to page 64 of the yellow book under 'Mineral resources' where, in the second paragraph on the right hand side of the page, mention is made of specific targets for 1981-82 of high resolution seismic experiments on the Stuart shelf to assist mineral exploration. The next paragraph states:

Calibrate gamma ray probe test pits with the international system.

Further down, under 'Achievements', it is stated:

Stuart Shelf project progressing satisfactorily, test pits calibrated.

I do not expect that the reference to seismic experiments on the Stuart Shelf is the same thing as the gamma ray probe test pits. Could that be explained?

**The Hon. E. R. Goldsworthy:** That is a technical question. Perhaps Mr Johns can answer it.

**Mr Johns:** These are two separate matters. We have been engaged in seismic experiments on the Stuart Shelf. I should explain that seismic surveys in research, particularly for oil, have been conducted for some time, but you would understand that normal oil occurrences in unconsolidated sediments or loosely consolidated sediments relate to hard rocks, consolidated, strongly cemented rocks of the Stuart Shelf which involve this seismic and experimental work.

The work that has been undertaken there has attracted quite a deal of interest, not only in this country but internationally, so much so that we have done work at Mount Isa on contract in attempting to delineate ore bodies in terrain in which previously this technique had not even been considered as something that might be applicable. So much for seismic experimentation.

The calibration of the gamma ray probe test pits is another matter. In this country there has not been, until this work was put in train, a tying back of the probes with an international system. This relates to all sorts of probes that are used in oil, gas, water development and, particularly, uranium exploration. The reference here, in fact, is to the conduct of an international symposium in Adelaide at which standards were set and levels established on an international system, so there is a transference and recognition of standards between one country and another.

**Mr Webb:** I think that there are only four or five places around the world where calibration of this sort can be carried out. As a result of the international visit here it is now recognised, as I am informed, that our facility is as good as any in the world and will be used as a general standard. So, in that sense, it is a very great assistance to exploration people, not only in this State but anywhere in the country.

**Mr LEWIS:** I refer to the matter upon which information was being sought earlier. That is the part of the Cooper Basin which underlies both South Australia and Queensland and that part which is in Queensland. I have heard from some engineers that incentives were being offered to explorers and commercial developers to, as it were, close drill the area within a few centimetres of the border and further north than that and bring it on stream for royalty remission from the Queensland Government to enable them to get a volume flow sufficient to establish a pipeline from that locality to the Eastern seaboard. I wonder whether or not that would have an effect of literally moving gas and oil reserves below the ground beneath the border from South Australia into Queensland and whether there is any constitutional point involved in such a proposal. Has the Minister heard of that?

**The Hon. E. R. Goldsworthy:** No, I am not aware of those rumours or of the information that the honourable member has been given. They would have to be rather good incentives to induce the producers to drill on the border with a view

to sapping oil and gas out of a reservoir which travels the border and piping it to the Eastern seaboard.

They would have to be incentives of which I am not aware and could not contemplate. If it came to a legal argument in relation to where hydrocarbons were to flow, if the borders of the States intersected the reservoir, in the unlikely event of a programme such as that being undertaken with a view to dragging oil or gas from under the border to Eastern States markets, we would be getting the best legal advice that we could to block off the flow of South Australian hydrocarbons to any Eastern market without conditions that were to our liking. I cannot imagine what they would be, either, at the moment. I would be very interested to learn from the honourable member any further details of this proposal. It strikes me at first glance as being far fetched. As I said earlier in answer to the member for Mitchell, it would take the discovery of significant further reserves of oil to justify the economics of the producers spending the enormous sums that would be required to bring those on stream and to finance another oil pipeline, particularly as the present one is not full.

I must say that I have not heard of that proposition, but it would be an interesting legal argument, I guess, once a reservoir was delineated and straddled the border, as to who had a claim to what. I am quite sure that we would have a claim to what was under the ground in South Australia. We would have some say as to what happened to that. I do not know whether any of the other officers have information on that. It would not be a few centimetres from the border; it would be within the vicinity of the border. However, as I said earlier in an answer to the member for Mitchell, there is not much incentive for the producers to drill for oil in that Queensland section of the Cooper Basin at the moment if they are being precluded from developing their known field in the most economical way possible. The only economic way of developing that with the known size of the Jackson field would be to pipe it across the border for a relatively short distance and join it into the existing infrastructure.

**Mr Webb:** In the situation where a field straddled a State border the engineers would determine the economic limits of the field. Then the position of the State border would be established in relation to that aerial economic limit. The volumetric content of that reservoir on either side of the border would then be calculated, and the volume content of the total field that would be attributable either to the South Australian or Queensland sides of the border would be predetermined in the production scheduling. The royalty rates and the royalty income would be apportioned from the production of the field in that ratio. There is no difficulty in determining the revenue that flows to either State in such circumstances.

**Mr LEWIS:** The assumption underlying that explanation is that common sense prevails against the interests of parochial pigheadedness.

**The Hon. E. R. Goldsworthy:** Perhaps Mr Webb will comment on the other aspect of the question, that is, the legality of companies piping oil that in effect lies under the border from South Australia to a market on the Eastern seaboard. Mr Webb has outlined the way in which royalty compensations would be made. He may care to comment on the legality or on what the position is once that field is being developed, what the rights of the State are in relation to the percentage of production that lies, say, on the South Australian side of the border.

**Mr Webb:** This is not an uncommon problem in all sorts of situations where you have oil or gas fields that are owned by different interests from place to place and there are boundaries within the single pool of oil or the single gas field with differing interests. Therefore, it is not an uncommon

mon matter that has to be dealt with in this exercise, but it is very clearly an engineering calculation based on the volumetric size of the reservoir pertaining to particular areas of interest, whether they be State or company interests, or whatever. So, it is a resolvable technical problem because the facts would be known to all parties concerned and the answers would be able to be sorted out between all the parties concerned.

**The Hon. E. R. Goldsworthy:** And the State would have hold, so to speak, of the fraction of the production that was attributable to that part of the reservoir that was in South Australia, so that no agreements could be entered into with another Government for the exploitation of that fraction of the field without the agreement of the State concerned, as I understand it. To suggest that that reservoir could be pumped dry, including that portion of the reservoir that was under service in South Australia, would be incorrect. It would have to be done with the concurrence of the relevant State.

**Mr LEWIS:** The question is that there is a provision somewhere in the Federal Constitution, presumably, that would preclude the possibility of anything other than that happening. When I heard this at a social function where producers and other interested parties and a number of engineers were involved, I was reminded of the parochial pigheadedness that ruined the river trade in the last century where at great cost to the State Governments involved they extended railways to the banks of the Murray River and to the ports that had been established on the Murray River to take the trade away from the Murray steamers back to their own capital cities, even to the extent that there was freight going upstream out of South Australia on the favourable railway freight rates back into New South Wales and Sydney. There was no constitutional point established in the Federal charter, even though an attempt was made in the 1890s to negotiate that. I just worry about the inclination.

**The Hon. E. R. Goldsworthy:** I think that the realities would be that, if there was a discovery on the border and it was to be exploited, all parties would have to be involved in agreeing contracts for the development of that field, including both Governments involved. The constitutional reality is, as I said earlier, that the minerals and hydrocarbons in South Australia belong to the Crown and no party can exploit those without the concurrence of the Crown. That is the constitutional situation.

**The CHAIRMAN:** I point out that this morning the Committee agreed that there would be three questions per member. Are there any further questions?

**Mr LEWIS:** On another subject, Mr Chairman?

**The CHAIRMAN:** Associated with this?

**Mr LEWIS:** In connection with the Kingston coal deposit. The Minister would be aware that there are a large number of irrigators in the South-East who have, in spite of reassurances from himself and myself, been constantly concerned at the prospect of losing what they consider to be a valuable irrigation resource—the underground water.

The two points I wanted to clarify are whether there will be any mining of that coal deposit before a complete assessment is made of the effects of mining and de-watering the mine on irrigated agriculture land in the South-East. How long might it be at the earliest before any such mining was undertaken? What procedures have to be undertaken and completed before mining can commence?

**The Hon. E. R. Goldsworthy:** The answer is 'No'. No mining operation can commence until the full e.i.s. procedures have been complied with. One of the important aspects of any environmental impact statement undertaken for a proposed development at Kingston would involve, as one of its major thrusts, an assessment of the effects on underground water. There would need to be a full e.i.s. completed

by the company before a mining proposal would get the green light. As to the timing, which was discussed earlier today in relation to questions from the member for Mitchell in discussing low-grade lignites in South Australia and which options will be followed, it is highly unlikely that more than one of these low-grade lignites will be exploited in the first instance. It is highly unlikely that a mining operation would lead to fuel being used in a powerhouse before the early 1990s.

**The CHAIRMAN:** There being no further questions, I declare the examination of the vote 'Mines and Energy, \$11 484 000' completed.

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Works and Services—Department of Mines and Energy, \$800 000—Examination declared completed.

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Works and Services—Australian Mineral Development Laboratories, \$330 000.

**Chairman:**

Mr E. K. Russack

**Members:**

Mr I. P. Lewis

Mr J. Mathwin

Mr J. K. G. Oswald

The Hon. R. G. Payne

Mr R. J. Randall

Mr J. P. Trainer

Mr G. T. Whitten

The Hon. J. D. Wright

**Witness:**

The Hon. E. R. Goldsworthy, Deputy Premier and Minister of Mines and Energy.

**Departmental Advisers:**

Mr M. F. Whinnen, Director, Administration and Finance, Department of Mines and Energy.

Mr B. P. Webb, Director-General, Department of Mines and Energy.

Mr R. K. Johns, Deputy Director-General, Department of Mines and Energy.

Mr T. C. Waite, Senior Accountant, Department of Mines and Energy.

Dr C. D. Branch, Director, Resources, Department of Mines and Energy.

Mr T. R. Watts, Director, Oil and Gas, Department of Mines and Energy.

Mr P. R. H. Hill, Director, Mining, Department of Mines and Energy.

Mr W. R. P. Boucaut, Chief Geologist, Department of Mines and Energy.

Mr D. K. Lock, Acting Principal Engineer, Engineering Services, Department of Mines and Energy.

Mr J. D. Noble, Acting Director, Energy, Department of Mines and Energy.

**The Hon. R. G. PAYNE:** I have not been able to locate any explanation for the amounts proposed for 1982-83. I would appreciate short advice from the Minister as to what is proposed. Is it some extension of Amdel?

**The Hon. E. R. Goldsworthy:** I believe the expenditure refers to the move from Thebarton to Technology Park. I will get a report for the honourable member which will



either confirm that detail or give him the correct detail. However, I understand that it refers to the transfer.

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

Minister of Mines and Energy, Miscellaneous, \$570 000.

**Chairman:**

Mr E. K. Russack

**Members:**

Mr I. P. Lewis  
Mr J. Mathwin  
Mr J. K. G. Oswald  
The Hon. R. G. Payne  
Mr R. J. Randall  
Mr J. P. Trainer  
Mr G. T. Whitten  
The Hon. J. D. Wright

**Witness:**

The Hon. E. R. Goldsworthy, Deputy Premier and Minister of Mines and Energy.

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Mr M. F. Whinnen, Director, Administration and Finance, Department of Mines and Energy.

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Mr W. R. P. Boucaut, Chief Geologist, Department of Mines and Energy.

Mr D. K. Lock, Acting Principal Engineer, Engineering Services, Department of Mines and Energy.

Mr J. D. Noble, Acting Director, Energy, Department of Mines and Energy.

Mr WHITTEN: In tonight's *News* mention was made on page 16 of the electric car. It states that there are high hopes for the electric super car and that the Flinders University hopes to develop an engine and batteries which will be a great help as far as the electric car is concerned. I noted that no money would be made available for the electric car this year. Why has that decision been taken?

The Hon. E. R. Goldsworthy: The programme is coming to a conclusion. The funding has been accomplished. The programme for the Flinders car is nearing completion and no further funding is warranted in regard to that. I have not had a chance to read the article in tonight's *News* but the Acting Director of Energy has read it and may care to comment.

Mr Noble: The article in tonight's *News* refers to an application by the Flinders University for further funding for the conversion of a Ford Laser to electric drive. The article does not state that substantial funding was provided by the State Energy Research Advisory Committee last year of the order of \$70 000 for that conversion and that that amount was hoped would complete the development at

Flinders. In general terms, the substantial Government assistance for electric vehicles, which has taken place over the years, has really come to the stage where electric vehicles have reached the commercial development stage and the amounts shown in the Estimates are the final subsidy for the commercial developer rather than the Flinders university. So, the question of Government subsidy of Flinders should really be considered in the context of the substantial amounts provided over the years and the fact that it is now reaching the commercial development stage.

The Hon. E. R. Goldsworthy: The programme involved the development of a number of vans to be used commercially. That has been achieved and the programme is winding down. What the Acting Director said indicates the current position.

Mr RANDALL: As I understood it, the programme has been going for nine years. At some stage could the Minister give an overall figure of the money made available to the programme from the State Government?

The Hon. E. R. Goldsworthy: It was about \$750 000. A lot of work has been done around the world on electric vehicles. The Deputy Director-General and I looked at some of the work done in Tokyo where the Japanese are very fuel conscious. They have to import all their fuel. They have done a fair bit of work not only on electric vans but also on electric buses. We saw both and had a drive in them.

The Japanese are not particularly optimistic that they will make big inroads into motor traction using electric vehicles. The batteries for the buses are enormously heavy and charging them is quite a contract. The economics, as such, and the conversions which they anticipate will occur in the next five to 10 years, indicated to us that they are not looking for a very big saving in their fuel bill by conversion to electric vehicles.

Mr Johns: The Minister has covered it pretty well. The problem relates particularly to batteries as much as anything. The breakthrough needs to come, it seems to me, in the development of something better than a lead acid battery. It is a matter of weight, mobility and rechargeability and that is the area, I believe, which we must look to for new development of the electric vehicle as a mode of transport.

Mr TRAINER: One thing that caught my attention on page 38 of the Estimates is an *ex gratia* payment to the city of Marion of \$8 000 last year, of which \$6 425 was expended. This presumably is finalised, as there is nothing down for the 1982-83 year. What was that payment for?

The Hon. E. R. Goldsworthy: It was for the rehabilitation of a quarry by the Marion council, in terms of land tax which the Government agreed to forgo. That is the way it is shown as a book entry. Under the extractive areas rehabilitation scheme, a golf course has been developed on that site.

Mr TRAINER: Is that by Brighton cement?

The Hon. E. R. Goldsworthy: Yes. I visited that site some time ago and it is quite an attractive golf course on the site of an old quarry. It was agreed that the Government would not charge land tax in relation to that development, and that is the book entry which accounts for the fact that the council has been relieved of land tax.

Mr TRAINER: I hope you gave the council that in writing.

The Hon. E. R. Goldsworthy: I think we did, a fair while ago.

Mr OSWALD: I refer to the 'Energy research' line of \$315 000. I have not been able to find a reference to it in the yellow book. Does that refer to a grant to SENRAC?

The Hon. E. R. Goldsworthy: Yes.

Mr OSWALD: Could the Minister give me an indication of the amount of money that the present State Government has granted to SENRAC over the past three years. In broad

terms (I do not want great detail), what is that money being used for?

**The Hon. E. R. Goldsworthy:** It is \$1 000 000 over three years in round figures. It has been in the order of \$330 000 a year for three years. The commitment is \$1 000 000 over three years, and that has been honoured and is being used for funding a whole range of projects. The reports have been available from time to time indicating where those funds have gone. I will ask one of my officers whether he can recall those projects. There have been a whole range of projects, some to individuals and companies, and one to the South Australian Gas Company.

**Mr Johns:** About \$1 000 000 has been expended over the past three years and it has been fairly widely distributed. I suppose solar energy has received particular support, certainly electric vehicles, and battery development has received fairly heavy support. There have been wind energy projects, and air conditioning has received a lot of support. Most of the attention right now is being directed towards coal and combustion, as it is perceived that that particular problem in this State relates to the poor coal we have available to us, and it relates to attempts to remove deleterious components. Briefly, I guess that they are the main areas which have been served during the past three years.

**Mr OSWALD:** As an example, has the money from this particular grant been used by Asahi in its feasibility studies in relation to petro-chemical plant utilisation of feed stock, or does that come from another source?

**The Hon. E. R. Goldsworthy:** That comes from Asahi's own sources.

**The Hon. R. G. PAYNE:** I am interested in two points in relation to 'Miscellaneous'. The first is the item in Par-

liamentary Paper No. 9 of \$25 000 for petro-chemical project site studies. Can the Minister say whether that is in relation to sites or one site and whether that site or those sites are only at Port Adelaide?

**The Hon. E. R. Goldsworthy:** It is for site studies, hazard studies, and so on, at Gillman, information which the Government requires in giving approvals if they are sought in due course. That money will be expended in site studies there.

**The Hon. R. G. PAYNE:** Regarding the last item, the Uranium Enrichment Study Committee fees and expenses of \$17 000, in 1982-83 there is nothing shown and we are told by way of notation that it is provided under the Department of Mines and Energy contingencies. Does the Minister know, off the top of his head, whether that received special mention?

**The Hon. E. R. Goldsworthy:** I recall that figure. It is the funding for the allowance and expenses for the chairman. It is included in the \$70 000 this year on page 37, under the line 'Uranium Enrichment and conversion'. That \$17 000 is embraced in that \$70 000 this year. I can obtain more detail on the \$70 000 if the honourable member wishes.

**The Hon. R. G. PAYNE:** No, I am satisfied with the answer.

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

#### ADJOURNMENT

At 8.50 p.m. the Committee adjourned until Wednesday 22 September at 11 a.m.