

HOUSE OF ASSEMBLY

Wednesday 26 September 1984

ESTIMATES COMMITTEE B

Chairman:

Mr. G.T. Whitten

Members:

Mr E.S. Ashenden
 Mr D.M. Ferguson
 The Hon. E.R. Goldsworthy
 Mr R.J. Gregory
 Mr G.M. Gunn
 Mr J.H.C. Klunder

The Committee met at 11 a.m.

The CHAIRMAN: I have a few remarks to make before we commence. I recognise that the lead speaker for the Opposition is the Deputy Leader, and for the Government the member for Florey. All questions will be directed to the Minister and not to officers. The Minister may at any time refer a question to his officers and request that they answer. All questions must relate to the vote as a matter of general policy. I will not allow second reading type speeches or grievance debate type comments to be made here today.

I suggest that during the break we work out a programme regarding an allocation of time. There are three votes today, the main one being 'Mines and Energy—\$15 449 000'. In order to get some indication of the allocation of time for each vote, the Minister, the Deputy Leader, and I will discuss that matter at 1 o'clock. A quorum will consist of four members and, if there is no quorum, the Committee will suspend operations until one is formed.

Members who are not members of the Committee may be heard but will not be heard until Committee members have completed their questions. I will not encourage people who are not members of the Committee to ask questions. It is my intention to allow the Deputy Leader to make some opening remarks followed by remarks by the Minister. Those opening remarks can take 10 minutes, certainly not more than 15 minutes, because I do not think that that is necessary. The first question will come from the Deputy Leader, who will be allowed three questions. I will then alternate from side to side in allowing members to ask questions. If a member on one side has spoken and a member on the other side does not indicate that he wishes to ask a question then the first questioner will be allowed to continue. Discharge or substitution of members can be done at any time provided written notice is given to the Chair.

If there is a question that cannot be answered at the time of its asking and the Minister undertakes to provide a written answer later, that answer must be in the hands of the Clerk of the Committee prior to 19 October so that it may be included in the *Hansard* record. Mr Gunn will be replacing Mr Wotton as a member of the Committee.

Mines and Energy, \$15 449 000

Witness:

The Hon. R.G. Payne, Minister of Mines and Energy

Departmental Advisers:

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

Mr T. Watts, Deputy Director-General.
 Mr M. Whinnen, Director, Administration and Finance.
 Dr M. Messenger, Director, Energy.
 Dr C. Branch, Director, Resources.
 Mr R. Laws, Director, Oil and Gas.
 Mr P. Hill, Director, Mining.
 Mr R. Bos, Senior Accountant.
 Mr W. Boucaut, Chief Government Geologist.
 Mr D. Lock, Principal Engineer.

The CHAIRMAN: I declare the proposed expenditure open for examination.

The Hon. E.R. GOLDSWORTHY: It is a pleasure to see the officers here today. I had the pleasure of working with them as Minister for three years, so anything I say that may be critical of what is happening will not be any reflection on them—let me make that clear. There is plenty to be critical of in relation to the Government's record in the 12 months since we were last sitting here. I make clear that I understand that the officers of the Department of Mines and Energy are constrained by Government policy which, in this State in a number of areas, is quite disastrous. Some of the concerns we have in relation to Government policy will be evident during the course of the day. The present policies of the Labor Party in South Australia, allied with their Federal colleagues, has cost this State hundreds of millions of dollars in development in the one area in which the State has the chance to broaden its economic base. We are largely dependent on our rural economy for the health of the State, supplemented to an increasing extent during the post Second World War period by an expansion in the secondary industry and, in more latter days we had the opportunity of giving a real fillip to the economy of South Australia in its controversial area of resource development.

I remind the Committee that back in the 1950s, when the economy of the State was ailing, the discovery of copper in the mid-north did a great deal to give a second dimension to what was entirely a rural economy, and that did a lot to save the State from bankruptcy. Likewise, in this century the efforts of BHP has led to the growth, development, and exploitation (and I do not use that word in any derogatory sense) of the iron ore deposits in the Middleback Ranges, which led to the development of Whyalla and did quite a bit for the economy. Here we are in 1984 with opportunities which we have failed to grasp, simply because we have Government policies which, allied with a degree of procrastination, have not grasped opportunities when they have been available.

I put this on the record at the start, because I express my extreme disappointment at the fact that South Australia has missed the boat in relation to what could have been hundreds of billions of dollars of development. The advent of the Labor Party not only put us back three years, but also farther than that. Whilst in London I had discussions with Dr Brian Kehoe at Marlow in relation to uranium enrichment.

He had the telex from the Prime Minister in his hand, as did anyone in the uranium area overseas whom I saw a month or two ago, and texta colour was underscoring the bits that were incomprehensible or were qualifications of the policy. Dr Kehoe told me that we had now missed the chance of having a uranium enrichment facility in South Australia for the time being. He said that we had missed a window—that is the way he expressed it—that we should have grasped, with upwards of a billion dollars of investment in the State at a time when there were record levels of unemployment and we desperately needed to add some strength to the economy. Our best chance of gaining that, if we do gain it, will probably be at the end of the decade. That is an absolute tragedy for South Australia.

The member for Eyre, who is here today, and I visited the Electricity Generating Board in London and asked it

about its contracts for uranium fuel. It knew South Australia. One of the companies interested in uranium had been here. Its contracts with Namibia had fallen through and it did not intend to renew them. That authority had written some contracts with two Australian companies but their mines had been closed down. I said, 'What are you going to do?' They said, 'We are going to buy uranium from Canada'—again a tragedy for this nation and the State.

I also had an interview with Dr Blix, the Chief Executive of the International Atomic Energy Agency in Vienna, approximately six weeks ago. He is a former socialist Minister from Sweden—the same side of politics as the present Government. Of course, he cannot understand Australia's position. Around the world we are seen as eccentric in relation to the attitudes of Australia to this question. That did not allow me to feel any great pride in my country, although I am usually proud of my country and my State.

It is in that background of great disappointment that I approach today's Committee. I do not wish to be obstructive; I wish to be realistic. I speak with some degree of force because I have strong feelings about the matter. I was pleased to note that the Stony Point liquids scheme came on stream and is up to schedule. It is proclaimed as demonstrating a bi-partisan approach. I welcome that. Notwithstanding that, I remind the Minister that his colleague on the Select Committee accused us of going too fast and that we should not have ratified the indenture at the time we did. However, I do not wish to belabour that point.

If we do not grasp the opportunities as they occur in South Australia we may not recover them again. It is my conviction that we are about 15 years behind Western Australia in relation to resource development. If we grasp every opportunity as it arises we will get there.

I have a number of other matters I will raise during the course of the day. I am concerned about the Government's lack of ability to make decisions quickly—I am not suggesting that decisions should be made recklessly. Real leadership needs to be shown in this area, but that has not been apparent to me or the casual observer.

In my opening remarks yesterday I said that I had not come here in any spirit of wanting to be confrontationalist. I want to put the record straight. I will be seeking information from the Minister and trust that I will be able to get it. I put on record my attitude concerning what has happened in this vitally important area where the economy of the State could be broadened but for the procrastination and the puzzling—to put a kind interpretation on it—policies of the present Government.

The Hon. R.G. Payne: In opening my remarks, I also pay a tribute to the officers of the Department. I have only worked with them for almost two years, and I certainly agree with the Deputy Leader's remarks. The officers are of a high calibre and give total effort and co-operation. I think the Deputy Leader mentioned that he worked with them for three years; I hope to work with them for a longer period than that. No doubt on other occasions I will have an opportunity to repeat these comments.

In relation to the Deputy Leader's remark about certain policies of the Government and his suggestion about the way the Government has acted in relation to certain development enterprises, I can only say it is very difficult to explain how a State within Australia can take action and have a policy which is not in accord with the Federal Government of the day. It may well be unlikely that prospective developers would have taken action to develop in the way the honourable member suggested, in view of a likely change of Government of that time. In relation to Honeymoon and Beverley, both of those projects began during a time when the Government's policy was well known. That policy did not change. In terms of equity, the Gov-

ernment allowed the proponents of the two developments to retain their rights on a minimum commitment level. That was at least accepted by the proponents concerned.

Members interjecting:

The CHAIRMAN: The Deputy Leader was heard in silence. I ask that the same courtesy be extended to the Minister.

The Hon. R.G. Payne: In conclusion, I suppose one can pay a soft tribute to the Deputy Leader in that his remarks have always been consistent. In fact, his remarks this morning closely resemble the remarks he made at the opening of the Estimates Committee last year.

The Hon. E.R. GOLDSWORTHY: More water has passed under the bridge since last year. What I said last year is not precisely the same as what I said this morning. In relation to uranium enrichment, I refer to page 1 of the yellow book where mention is made of Ministerial responsibility and the hierarchy of the Department; and the South Australian Uranium Enrichment Committee also gets a guernsey. In looking through the Budget papers it is difficult to find where and how that committee is funded. In fact, there appears to be an attempt by the Government to conceal the activities of the South Australian Uranium Enrichment Committee.

I remind the Minister that he was questioned about this matter last year and he said that the South Australian Uranium Enrichment Committee was to report in December of that year. I asked him when the committee's report would be made available, because my Party in Government had always sought to keep the public informed in relation to these matters. In fact, the former Government tabled the Uranium Enrichment Committee Report in Parliament annually. Last year the Minister stated that he expected the report to be available in December of that year. That statement can be found in last year's Estimates Committee debate. I remind the Minister that this is what he said:

The Government does not have the report of the Uranium Enrichment Committee available to it yet. I do not know what the Deputy Leader was going on about—that it is overdue or whatever.

It was overdue in terms of the time table that the Government, of which I was a part, set. That was when the report was available. It was made public and tabled in Parliament. He went on to say:

All that I can say to him in relation to that matter is that Sir Ben Dickinson, who heads the Enrichment Committee, indicated to me only recently that he expects to have the report finalised in December of this year. So, I would assume that that answers the Deputy Leader's question in relation to when it would be available.

The report still has not seen the light of day. After my discussions with the principals of Urenco-Centec, with whom the former Dunstan Administration started negotiating way back in the middle 1970s or a bit earlier, from what I have related to the Committee that is not surprising. I ask the Minister, then, whether he will report to the Committee as to the personnel on the Uranium Enrichment Committee and whether he can find the line for me where it is funded—I understand that it is still operative. Who is on the Committee and did the Committee report in December, as he suggested he had been told was imminent? If so, when will the report be made public?

The Hon. R.G. Payne: First, in terms of funding, if the Deputy Leader looks at page 18 of the yellow book he will see in the small table at the bottom a sub-programme title 'Uranium'. There are figures for last year—the expended and proposed amount. That is where the funding line exists. It would be in the white book: the Estimates lines on page 136 under 'Administration'.

This gives me the opportunity to point out—and I do not know whether members sat in on another Committee

yesterday—that my understanding is that in the past 12 months there have been some ongoing discussions between Treasury and various departments in relation to the consolidation of the lines that appear in the Budget documents, whereas perhaps three or four years ago we had line after line. Members would also notice that this year there are fewer asterisks, double asterisks, swords and shields and so on, saying that so-and-so has been transferred from that line to this line; that is part of that ongoing consolidated approach.

In relation to the report, at the time I gave that answer last year that was the position. I gave as accurately as I could to the Committee the information that I then had. Since then, the report has got into a draft form. Sir Ben Dickinson, who retired from the consultancy arrangement with the Department as at 30 June this year, had at least brought to me a draft document, which he said he did not wish to leave with me at that stage because he was going overseas. It is fair to say that, well known to everybody in Australia, the policy of the Federal Government was to be reviewed at a national convention in respect of uranium matters. He was also proceeding overseas for visits to places perhaps not dissimilar to those that the Deputy Leader put forward in his opening remarks. Then he hoped to restructure the report and present it to me.

I saw Sir Ben yesterday in relation to another matter, together with some other people from British Nuclear Fuels, and my understanding is that he is not well.

I believe that his illness is of a temporary nature. The best information I can give the Committee is that Sir Ben proposes to complete his redrafting and to let me have the report by the end of the year. He believes that that is something he should do, although he was no longer being paid as a consultant from the end of June. That is the best information I can give the Committee on this matter.

The Hon. E.R. GOLDSWORTHY: Who are the Chairman and the members of the committee? I believe it is strange that certain specialist committees get a guernsey under a special line, but it is not readily apparent from the Budget papers how much will be allocated for the uranium enrichment committee. It seems to me that the Minister is trying to play this very low key because the Premier banged the door shut on uranium. When the Federal group set up by the Fraser Government came to Adelaide soon after this Government was elected, the Premier said publicly, 'We don't need uranium enrichment.' Nonetheless the committee exists, I understand, although it is hard to find an allocation in the papers. I ask the Minister who are the Chairman and members of the committee.

The Hon. R.G. Payne: I omitted to provide that information. The committee has been renamed as the Uranium Advisory Committee. The Chairman is Mr Ron Wilmshurst, who will be retained on a consultative basis similar to that on which Sir Ben was retained; Mr Johns, the Director-General of the Department, is a member, his alternate being Dr Branch; Edgar Kneuffler is a departmental representative; there is a representative from the Department of State Development; Geoff Inglis from the Department of Environment and Planning and Dr Brian Hickman (Amdel) who are members; and the Secretary of the committee will continue to be Mr Bob Major, also from the Department.

The Hon. E.R. GOLDSWORTHY: What are the specific marching orders for the committee? I know that uranium enrichment is a touchy subject for the Government and, although the Premier told the UEGA group one story, the media put a different complexion on it, and the public at large is of the view that there is no chance of uranium enrichment being established in South Australia under this Government. In my judgment, that is a tragedy, because uranium enrichment could be a major industry. We see

headlines that a \$20 million industry will be established in metropolitan Adelaide, but the Government bangs the door shut on a \$1 billion industry. If the title of this committee does not refer to 'enrichment', is part of the committee's function to consider enrichment? What are its marching orders and functions?

The Hon. R.G. Payne: The functions of the committee are not dissimilar to its previous functions. It has four terms of reference. I do not have a copy of the terms of reference, but I am quite sure that I will be able to cover them all. The first term of reference provides for the committee to investigate and provide advice to the Minister on request on any aspect of the nuclear fuel cycle—I will condense it to that. Its second term of reference is to provide an ongoing monitoring role and liaison with Government departments and the private sector in relation to nuclear activities. A third term of reference provides for the activity for which the Deputy Leader is searching, that is, the conversion and enrichment of uranium. The fourth term of reference is to report to the Minister at intervals of no more than three months.

The Hon. E.R. GOLDSWORTHY: Does the Minister intend to make public the report of the Uranium Enrichment Committee? No report has been tabled in Parliament since this Government was elected, and I can understand it just as all observers can understand it. For this Government it is a very delicate subject. I asked the Minister 12 months ago when the report would be available, and he said that it would be in December last year. Now, 12 months down the track the Minister says it will be available in December this year. Does the Minister intend to publish and table the report, as has been past practice?

The Hon. R.G. Payne: As to the fact that the report has not yet been completed, the former Chairman, Sir Ben Dickinson, showed more acumen than the Deputy Leader has shown because he tried, as explained to me by him, to take into account the changing circumstances that relate to the nuclear fuel cycle as a whole, which is something about which all members here are aware. Whether one is talking about the policy of the Australian Government or whatever, there have been considerable changes, possible markets, likely trends, and all that sort of thing. That was in the Chairman's hands, and it was not up to me to try to direct the body set up to suddenly take some action. In respect of the member's second question, as the Deputy Leader knows, whether the report is made public or not is not just a matter for me but will be determined by Cabinet at that time.

Mr GREGORY: Under the heading 'Administration' I notice a significant increase in payments—about \$20 000 over Budget for 1983. Did many people receive terminal leave payments, and from what area of the workforce did they come?

The Hon. R.G. Payne: I understand that the major portion of that spending relates to terminal leave payments to a number of persons who elected voluntary retirement from the Drilling and Engineering Services Division at Thebarton. As Mr Whinnen has more detail on this matter, I will ask him to provide specific information about the exact number.

Mr Whinnen: In the early part of the last financial year the Department offered an early retirement scheme to daily paid employees over the age of 55 years who wished to exercise their option to early retirement. They would be paid a gratuity equal to two weeks salary for every one year of employment up to 26 years. The offer was made to about 100 wage employees, and 16 accepted early retirement. We thus encountered a number of payments for terminal leave that were not estimated when the Budget was put together. A total of \$94 000 was paid out as terminal leave payments to such persons. In addition, another eight persons retired in the normal course of the year at a total cost of \$203 000.

The original estimate of \$90 000 was put together around the Budget preparation time in respect of those persons who had already signified to the Department an indication to retire or those who had reached the compulsory retiring age. Therefore, the estimate in the 1983-84 year was \$90 000, but we actually incurred an amount of \$203 000, which was almost entirely due to the 16 persons retiring early.

Mr GREGORY: I notice that that line also refers to \$60 000 for terminal leave. From what source are these overspent funds met?

The Hon. R.G. Payne: I take it that the honourable member is looking at the estimated amount. Is there some concern about the amount put forward for the coming year?

Mr GREGORY: From what source is it coming?

The Hon. R.G. Payne: Those sorts of funds are obtained from the round sum allowance, which more properly should be spoken to by the Treasurer. However, I think that members are aware that that is an amount put forward at Budget time in an attempt to cover increases such as this and wage increases.

Mr GREGORY: I notice an increase in the actual expenditure of \$140 000 in the administration line but an increase of only \$16 000 in the 1984-85 Budget. How does the Department allocate costs to each line, and does the Department have flexibility to transfer staff and funds between salary and wages lines?

The Hon. R.G. Payne: The general answer is that transfer of salary and wages staff to different lines can take place. Such action is subject to approval by the Minister. This applies in any department. Mr Whinnen will give the detail in respect of the more detailed arrangements that apply to the lines.

Mr Whinnen: The same rules apply for salary lines and wage lines as apply for terminal leave. At the beginning of the year when Estimates are put together proposed employment costs are calculated at 1 July prices. During the year, when salary increases are awarded through the normal award fixing bodies, those increases are funded through applications to Treasury, again from the round sum allowance. Hence the actual payment figure. The difference between the previously voted figure and the actual payments figure represents the increases in salaries and wages over the year. The rather small increase between actual payments and the proposed figure for this year is because the proposed figure for this year is calculated at 1 July prices with future increases or awards again embraced in this year's round sum allowance.

The Hon. R.G. Payne: I add to that that this is basically the way Treasury requires these matters to be handled. There must be a starting line to take into account awards and salary levels that apply at a given time, and Treasury prefers to do it this way.

Mr ASHENDEN: I ask a number of questions about the nuclear fuel cycle. Initially, I will continue with questions relating to uranium enrichment. I was fortunate enough to recently spend some time overseas looking at the nuclear fuel cycle in the United States, Europe, and the United Kingdom. In all the countries that I visited—United States of America, United Kingdom, France, Germany, Switzerland, Denmark, and the Netherlands—every person to whom I spoke about the nuclear fuel cycle could not comprehend the South Australian and Australian Governments' attitude to both mining and enrichment of uranium.

Will the Minister indicate to South Australians why his Government has completely shut the door on a minimum investment of \$1 000 million in this State, which would have been the minimum amount spent if a uranium enrichment plant was built here, particularly after the tremendous amount of ground work undertaken by the previous Government, and in light of the facts put to me at Tricastin in France where there is an enrichment plant, although not of

the type that would have been built in Australia? Of course, a consortium operates the enrichment plant in France. They acknowledged that the system they are using is now outdated. They put to me that there will be a great need—

Mr GREGORY: Is that why they send it off to the Soviet Union?

Mr ASHENDEN: If the honourable member wants to show his ignorance he can do it during his own question time. As far as the people in France are concerned they said to me, and to the members for Bragg and Morphett who were with me, that there is considerable ongoing employment involved and that there would be employment during the building of the plant. They put to us that in their opinion there would be a minimum of hundreds, and probably thousands, of jobs involved directly and indirectly in this State if a uranium enrichment plant were to be developed.

They also put to me that a lot of expertise would develop within the State, and that if we developed such a plant it would be a very real benefit because there will be an increased demand for enriched uranium in future. It is not necessary to point out that France is a socialist country. On speaking to members of both the Socialist Party and the Communist Party in France they stressed to me that they could not understand the attitude of the socialist Government here in South Australia because they are aware that in Europe, Japan, and many other countries in the world the only hope so far for future generation of power in the short term—that is, until at least the turn of the century—lies in uranium. If that is the case, then enrichment will be required.

They say that there will be increased markets for enriched uranium. This was said in all the countries to which I went. The thing that really concerned me was that they indicated to me in no uncertain terms that unless Australia moves quickly we will, as the Leader has said, miss the boat because other countries that do not have the hang-ups of the Labor Party in Australia are moving rapidly into the area that we could be developing now. It was put to me that, unless we do this in the next few years, Australia will miss out for ever, not only in uranium enrichment but also in the mining of its resources, because uranium is being discovered in other areas of the world. However, I will touch on that matter later. Will the Minister explain why a \$1 000 million investment and thousands of jobs have been rejected by his Government?

The Hon. R.G. Payne: I assume that the honourable member is referring to a line on page 18.

Mr ASHENDEN: I am referring to page 5 of the agency overview under the heading 'Corporate and Management Objectives' where there are a number of points and where it states that the objective is to ensure that the State's mineral, energy, and underground water resources are assessed and developed in accordance with Government policy. It is Government policy I am referring to here. Also, the next line refers to encouraging private sector exploration for mineral and energy resources in this State. That is the line I will turn to when I come to my questions about the mining of uranium.

The Hon. R.G. Payne: The honourable member has just demonstrated by reading a number of points contained under the objectives in the programme documents that we are making sure that we are involved in future energy requirement developments, and so on.

It is interesting to listen to the kind of information put forward to support the honourable member's argument. He talked about what he heard in France and its commitment to the nuclear fuel cycle. In France we have a country with virtually no oil and very limited coal resources, so it is perhaps understandable that they are keen proponents of another way of providing their energy requirements. He also said that everywhere he went the people to whom he

spoke involved in the nuclear area were very keen and believed that the markets are going to be there and so on. I have probably done as much reading on this topic over the past five or six years as has any member. I do not claim to have done any more, but I have done at least as much and endeavoured to keep myself well informed, and I do not think I have ever come across any proponents of the nuclear fuel cycle who say that it will not continue to grow and be a good thing to be with. Some of the difficulties they got into relate to the 1960s and 1970s when they went berserk and said that it was the salvation of mankind and so on, leading to some of the problems that have now arisen.

Members interjecting:

The CHAIRMAN: Order! The Minister will answer in his own time.

The Hon. R.G. Payne: The only time I can recall a person speaking against the industry was a Mr Franklin, who was with Urenco-Centec, which was involved with the enrichment cycle. In 1978 Mr Franklin made a speech which forecast that things were not going to be as rosy in that area as originally thought. I had the opportunity yesterday of speaking to two gentlemen from British Nuclear Fuels and raised with them, in a rather jocular way, the question that Mr Franklin was probably not with them any longer and, in fact, they agreed that he was not. It seems understandable that people engaged in any industry are keen proponents of it.

The situation in South Australia is that we have a policy in line with that of the Federal Government. I do not for the life of me understand how the member expects that we can proceed in a unilateral way with any benefit to the State. Perhaps he can enlighten me.

Mr ASHENDEN: I wish to press that point. That is an 'out' for the South Australian Government. Let us go back to when the Premier of South Australia stated, before the Federal Labor Government came to power, that he had advised the then Federal Government that the South Australian Government was no longer interested in pursuing uranium enrichment in this State. I believe my memory is correct there. Therefore, the Minister cannot blame the Federal Government. The Premier has made it clear that he does not want uranium enrichment in South Australia. Surely, if a private consortium is prepared to invest the sort of money that would be necessary to have a uranium enrichment plant in South Australia, it must believe that it would have a market for the product. Nobody is going to spend \$1 000 million-plus if they are not going to get their money back and a bit more. I cannot accept the Minister's statement when he tries to duck out from under by saying that the proponents say, 'Of course there is a future'. If a company or consortium is prepared to invest that sort of money, it must believe strongly that it will be a profitable venture for it. Certainly it involved the State Government also, but the bulk of the funds at risk would have been from the consortium.

I come back to the Minister and ask my original question, because the South Australian Government or the Premier of South Australia, before the Federal Government policy was enunciated, stated quite clearly that they would reject any approaches for \$1 000 million to be invested in this State and thousands of jobs to be created.

The Hon. R.G. Payne: I suppose that the remarks of the honourable member would have some validity, although not much, if a project had got to the stage that he has been putting forward. To my knowledge and understanding no such project ever got out of bottom gear, if that is a suitable term. Worldwide there was less movement towards providing further enrichment facilities, and it was unresolved as to whether any such facility would be built in Queensland, South Australia or anywhere else in Australia. There were

simply a number of initial papers getting around with propositions which had never got to the stage where anyone was forced to make the choice on a genuine basis.

Mr ASHENDEN: The Premier said that he had made the choice, namely, that he did not want them.

The Hon. R.G. Payne: I am not saying that it was not said. I am not specifically aware of the announcement and I guess that, if the Premier makes any remarks and is perfectly willing to stand by them, that ought to be taken up with the Premier.

Mr FERGUSON: I return to the administration costs listed on page 136 in relation to those people who take terminal leave. In regard to people retiring before the normal retirement age, what is the situation with their superannuation? If there are any additional superannuation costs, are they charged against the Minister's Department?

The Hon. R.G. Payne: There are no figures relating to superannuation in these lines. It is not charged against the Department and that is why it does not appear. There are no additional costs other than those which appear here in relation to those people who terminated their service and received the entitlements already outlined.

Mr FERGUSON: I now turn to the salaries listed on page 136. I refer to the 'Energy Information and Education' salary line and the 'Energy Policy and Development Staff' salary line. Will the Minister advise what specific areas of the Department are covered by these two lines?

The Hon. R.G. Payne: The upper line under the immediate heading 'Energy Information and Education' refers to the Energy Information Centre, which was an initiative of the previous Government. On an earlier occasion I gave it due credit and it has been fully supported by the present Government. At the election which led to the previous Government being elected, both Parties had a policy of setting up an energy information centre. Both Parties had a good idea and it came to pass in the time of the previous Government and we have continued to support that idea. The second line 'Energy Policy and Development Staff' relates to that part of the total Department headed by Dr Messenger of the Energy Division and represents the salaries of the persons concerned. If the honourable member would like more detail, approximately 12 people are involved, to my knowledge, but we can obtain more information for the benefit of the honourable member. I invite Dr Messenger to provide some of that detail.

Dr Messenger: Essentially that line covers the salaries of the people who, cover policy development, which is the area of energy conservation and utilisation, and the energy supply side, which covers the various forms of energy in terms of our future energy supplies. The Division is broken up into two areas: energy supply and demand, with the Energy Information Centre and other staff areas covering the S.A. Energy and the State Energy Research Advisory Committee being common to both sides. That is basically the core supply and demand areas and the main areas of the staff of the Division. Such things as the Government Energy Management Programme are in addition to that.

Mr FERGUSON: If one looks at the actual expenditure and at the original funds provided for salaries one can see that the expenditure was higher than the funds provided. Will the Minister explain the reasons for this? Where do the additional funds come from to meet what appears to be overspending? At what level of employment and at what rate is the 1984-85 proposed Budget set? One can see that the proposal for the coming year has increased yet again.

The Hon. R.G. Payne: In relation to the first couple of queries, the amount shown as actually expended is in the category referred to in an earlier question. Since the estimating takes place at 1 July and Treasury then makes a

round sum allowance provision for those changes in award rate salaries and so on that may occur, one can get an apparent overspend although it is not really to be regarded in that way. I also think that the honourable member raised the question of the additional amount proposed for the current year.

Mr FERGUSON: My question concerns the number of people. Will there be an increase in this area?

The Hon. R.G. Payne: My understanding is that there will be no increase of staff in this area. I think that we are talking about 12 persons, and there is no projected increase. That is a way of outlining the amount that is a 1 July figure, if you like, as to the cost of salaries for that number of persons.

The Hon. E.R. GOLDSWORTHY: Will the Minister take a trip overseas to find out what is happening in the real world? The Minister tells us in Parliament quite frequently that he has done a lot of reading. He quotes the markets for uranium, Uexco or some body that he frequently talks about to sustain a point of view and, when prognostications are more favourable, we do not hear of them.

I speak from my own experience. I went overseas privately in the 1970s to find out what was going on in the nuclear fuel cycle area because I had some concerns, as did most of the public in Australia. I visited Hinkley Point at Bristol and found out that it had been quite cheerfully ticking away for 30-odd years and that the public in the surrounding districts were perfectly happy with its safety record. It was also commissioning a new reactor.

Then, as Minister, I went overseas with the now Director-General, who was then the Deputy Director-General. I think that the Director-General attested to the fact that that was a most useful visit and that we made a lot of contacts. One could not find that out by reading about it. Again, this year I took the opportunity to go overseas and follow up some of these leads. These markets, according to the Minister, are never right. They can be used to sustain any argument or stance, whether one is for or against any project. Like the Minister, I have done a lot of reading—do not think that I do not read. I believe that if one wants to find out what is going on one should go to the people concerned and talk to them. I have made it my business to visit mines around Australia at odd times because that is the way one finds out what is going on. If one wants to find out what is going on in the world one asks the people concerned. The Minister will not learn unless he goes overseas, even after all his voluminous reading. Last year, he stated:

Presumably, when the Government receives the report it will look at it and something will be done or said. The activity is continuing. I know from information put before me from time to time by Sir Ben and from efforts that I have made myself with the assistance of the Department in relation to markets generally for both uranium and enriched uranium that the scene is not at all clear cut at the present time.

The problem is that nothing is ever damn well 'clear cut' with the Minister. All his voluminous reading seems to do is confuse him further. I spoke to Dr Brian Kehoe, the Commercial Manager for Urenco-Centec, who had decided to establish in Australia. It had come down to South Australia or Queensland. All this gobbledegook that the Minister has expressed about the position being unclear and that they were miles away from a decision is not the case. The fact is that Urenco-Centec was then prepared to establish a facility in Australia. The UEGA group advised the former Government in relation to its commercial viability. One does not have to be a genius to realise that UEGA was steering it towards South Australia and that we would have got this facility.

I repeat that Dr Kehoe said to me that there was a window and that they would have made a decision if the Government had been favourable. Unfortunately, we have lost our chance.

I would not have known about our chances if I had not seen Dr Kehoe several times here and in Britain, and also again this year. The Minister can stay home and read until his eyes are sore: he will not find out what is going on unless he talks to the people concerned. If he is in the hands of his reading then, of course, he will read into it what he wants to read into it. Unless he is prepared to go and find out what is going on, his reading will only confuse him. The statement he made last year is inaccurate. Is the Minister contemplating an overseas trip?

The Hon. R.G. Payne: Presumably, if one can read into anything what one wants to, it would be fairly sensible to say that one can see in anything in what one wants to. Perhaps that did not occur to the honourable member.

The Hon. E.R. Goldsworthy interjecting:

The Hon. R.G. Payne: I think that the honourable member will find that I am referring to the fact that the medium for absorption into the brain is exactly the same: one uses one's eyes whether for looking or reading. I confess to a certain wry amusement. Whether under the current or old Committee system, a matter that over the years often gets considerable ventilation is how much money is being put aside and spent on a Minister's overseas trip. It was never normally raised by way of approval of a Minister's spending money in that way. Yet, I am here being urged and pushed towards going overseas.

I also have contact with people concerned with the nuclear fuel area because they actually come to Australia on occasions. As the former Minister well knows, those people usually take the opportunity to call in and see Ministers in various States. So, I have contact with people and listen to them, as well as doing my reading. It is fair to say that the position is still not entirely clear in relation to future marketing.

I can recall a visit from a gentleman (whom I will not name, but I am sure that he is known to the former Minister) who is with Phelps Dodge, which is a very large overseas organisation involved in the mineral world. That organisation has its own uranium subsidiary and mining division. Two years ago this gentleman told me that uranium would reach \$200 a pound by next year. I do not think that anyone could now suggest that that will be the case, but at that time he gave me an outline of how he saw the market developing. When I saw him recently he said that things were not going too well and that his organisation had closed one or two of its more costly operations under its umbrella organisation in the United States. He said that he hoped prospects would improve, and one can see that there are prospects for improvement. I am not suggesting that that is not so.

The situation is not as clear cut as suggested by the former Minister. The Deputy Leader said that in some ways we have missed the bus. In fact, he said, 'We are steering the bus towards South Australia.' That suggests that it is by no means a *fait accompli*, if it can still be steered in our direction. That is what I was putting to the Committee.

The Hon. E.R. Goldsworthy interjecting:

The Hon. R.G. Payne: The Deputy Leader mentions Queensland. I have not been able to check this information (but I will): I have been told that the Premier of Queensland has disbanded his uranium enrichment group because he believes there is no longer a need for it. I pass that information on to see whether the Deputy Leader still believes that by now there should be a project under way in Australia relating to the construction of a billion dollar development and all the other things he said in relation to uranium enrichment.

The Hon. E.R. GOLDSWORTHY: Quite clearly, the Minister is not prepared to find the facts for himself. I pointed out earlier that I attended an appointment arranged

by the member for Eyre, who may care to say something about this later. I went with him to the Central Electricity Generating Board, which is charged with supplying fuel for the whole of the grid throughout Britain. I repeat that since the Minister stated that the markets were far from clear Australia, as a result of the policy adopted by him and his Party, has lost many millions of dollars.

The ACTING CHAIRMAN (Mr Klunder): Order! Is the Deputy Leader going to tie his remarks to a question?

The Hon. E.R. GOLDSWORTHY: Yes, Mr Acting Chairman. Does the Minister think that a uranium enrichment plant for South Australia has gone forever? I have explained that all this hoo-hah about markets is just not borne out by the facts. I urge the Minister to find out what is happening in the real world—not what is happening within the confines of his own Party. If he found out what was going on in the real world, he would not mouth the inaccuracies that he is putting to this Committee: he would try to lead his Party down a more enlightened path.

As I have said, I attended an appointment with the member for Eyre, and his memory of it is precisely the same as mine. We were told that Australia has lost markets, which could have been available right now, because our mines were closed down. It is gobbledegook for the Minister to say that markets are not available. Does the Minister believe that an enrichment plant for South Australia is gone forever? Indeed, the Minister does not seem to think that we ever had a chance of having one. If the Minister believes that it is gone for good, he should follow the course that he suggests Premier Bjelke-Petersen has adopted (no doubt in light of the Federal Government's policy) and wind up the South Australian Uranium Enrichment Committee.

The Hon. R.G. Payne: I believe, and I am sure most people would agree, that a sensible course to follow in these matters is to maintain liaison with the industry as a whole to try to ensure that the Government is provided with information. There can be changes in the enrichment area: for example, Asahi has developed a pilot scheme for a chemical process of enrichment, which has considerable advantages over the gaseous diffusion and centrifuge methods, and so on. Obviously, technology is not standing still in this area. That is one of the functions of maintaining the Uranium Enrichment Committee. The Deputy Leader seemed to agree with me that we never really had any prospect of an enrichment plant in South Australia, and he asked me whether it is gone forever. It is a very foolish person who tries to look into crystal balls. I think it was Confucious who suggested that people who spend their time looking into crystal balls do not find a diet of broken glass very helpful. I do not think the honourable member's question is very sensible. I cannot make a judgment as to how long 'forever' is.

The Hon. E.R. GOLDSWORTHY: You never are; that's the problem.

The CHAIRMAN: Order! The Deputy Leader will come to order.

The Hon. E.R. Goldsworthy interjecting:

The CHAIRMAN: Order!

The Hon. E.R. GOLDSWORTHY: Mr Chairman, I am always orderly.

The CHAIRMAN: Order! I warn the Deputy Leader.

The Hon. E.R. GOLDSWORTHY: The Minister has not answered my question. Obviously I will not get anywhere, so I will turn to another topic. The Minister referred to a principal of Phelps Dodge in relation to the price of uranium. What was the attitude of that principal in relation to his organisation's interest in the Beverley Mine?

The Hon. R.G. Payne: The attitude expressed was one of some disappointment and also a degree of patience and

understanding which is perhaps not always exhibited by the Deputy Leader.

Mr GREGORY: I refer to the Engineering Services Division line. I note a significant reduction in this area this year. Is the early retirement offer responsible for that reduction?

The Hon. R.G. Payne: Yes; 16 persons elected to take voluntary retirement. We have replaced four of those persons, and that explains the amount in that line.

Mr GREGORY: What is the level of staffing at Thebarton over the past three years?

The Hon. R.G. Payne: I refer the question to Mr Whinnen, because there have been changes and fluctuations in that time.

Mr Whinnen: The level of our wage or weekly-paid employees has over the past three years reduced as the Department has changed its method of operation. Overall, the staffing of the whole Department has reduced. I cannot specifically give you the number of employees at Thebarton, but the Thebarton division comprises predominantly waged employees. I will give you the number of the waged employees overall, and answer in writing when I get back to the office.

The level of employment of our weekly-paid employees in June 1981 was 164 persons; in June 1982 it was 145; in June 1983 it was 136; in June 1984 it was 116. So, over the period 1981-84 it has reduced from 164 to 116, which is 48 persons, predominantly out of the drilling and the workshops functions. I will provide the Committee with the exact figures in writing.

The Hon. R.G. Payne: Not all of the persons who have been listed in the numbers concerned are directly charged because a recharge operation is involved as well and some of the costs are charged against other departments. It appears as a deduction in a sense in overall costs on page 137 of the white Estimates book on the line under 'Resources Division' heading, 'less charged to other accounts'. A component of that amount exists there.

Mr GREGORY: Is outside work done by the division's work force and, if so, what happens to the funds earned by the Department's recharging for its services? We have all read about that lately.

Mr Whinnen: The line, 'Engineering Services Division, drilling and mechanical services staff', in the Estimates accounts for 83 persons, both salaried and waged employees. Of the 83, 51 are funded from other sources, within the Department and from moneys provided under 'Contingencies, Engineering Services Division, drilling', where we charge ourselves for projects undertaken by other divisions. They are also funded through projects undertaken for other Government departments (E & WS, Highways) and local government authorities and by some drilling for the private sector.

All moneys earned by these recharge processes are paid into a working deposit account and from the credits in that account we pay the employees' salaries. So the Estimates in their printed form of \$1.435 million is the total salaries of all persons, but the Department is funded (on page 137) for \$1.088 million less than the full requirement because of the use of recharge funds to pay these 51 employees' salaries.

The Hon. R.G. Payne: The honourable member who asked the question will understand why I sought the technical amplification of how the money transactions take place.

Mr GUNN: I appreciate the opportunity of raising one or two matters with the Minister. I say from the outset that I hope that he considers what the Deputy Leader said in relation to going overseas and looking for himself. We would be sorry to lose the Minister for any length of time, but we are concerned to make sure that he is properly briefed on these matters.

The Hon. E.R. GOLDSWORTHY: And to supplement his reading.

Mr GUNN: It would be better than his reading. I recommend to him that if he happens to be in the vicinity of the United States he has discussions in Washington with the Uranium Forum, the projections of which on the need for uranium for the next 10 years are most interesting. In relation to exploration, I bring to the Minister's attention the situation in the Pitjantjatjara lands. He would be aware that during the Select Committee discussions on the Maralinga lands the mining industry of this nation lined up to give evidence to that committee and pointed out in great detail the anomalies and the defects in the Pitjantjatjara land rights legislation: how 11 per cent of South Australia has virtually been shut off from exploration, even though some areas are of considerable interest to mining companies. Those people who made comments include the former Director-General of the Minister's Department, who is on record making some very strong comments about the effects of land rights legislation.

What action does the Government intend to take to correct these anomalies? Does the Government intend to bring in amendments to the Pitjantjatjara land rights legislation in order to place that legislation on the same basis as the mining and exploration provisions in the Maralinga legislation?

The Hon. R.G. Payne: Dealing first with the action the Government intends to take, I have had discussions with the Pitjantjatjara community in a meeting some time back and ascertained that they are not in principle opposed to explorational access to their lands. It would be fair to say that there are a number of arguments about why the breakdown of the previous attempt by BHP Hematite to enter into the area when they were not happy about it occurred, ranging from attempts to blame non-Aboriginal community advisers to the difficult communication problem. The people as a whole informed me that they had no opposition to mining or oil and gas operations taking place on their lands *per se*. They also said that they did not want to see their legislation changed. I have been queried on this topic before, and I have a view that I have not altered.

The legislation as it stands—and the honourable member and I were on the Select Committee—came into being after a very long and intense period of discussion, negotiation, offer and counter-offer, Select Committee and so on. The Pitjantjatjara land rights legislation then came into being. It seems unfair for a Government then to attempt to unilaterally change some legislation that has never been properly tested—we should not argue over the reason why; I am sure that one could get five different reasons—because there was an arbitration provision in the legislation that was supposed to take care of deadlocks or failure to proceed. In the event, it was not tested.

When I had the discussions with them, I tried to show them how the scene was seen from outside by members of Parliament, the public and so on. It would be fair to say that Mr Donald Fraser, who was Chairman at the meeting of the Pitjantjatjara people, understood what I was putting forward.

I have tried to go about it in another way to obtain an offer or an approach from another group that is willing to have discussions with the Pitjantjatjara people. It may be that the South Australian Oil and Gas Corporation could assist in this matter, and I have asked the Corporation to consider that possibility. That is the present situation, to my knowledge.

Mr GUNN: I take it from what the Minister has said that, even though he is not 100 per cent satisfied, he is not prepared to advise the Aboriginal people that they should reconsider their position. I believe that the public of South

Australia will not be prepared to sit back forever and allow a situation whereby virtually no exploration takes place in a large part of the State. I was on the Select Committee with the Minister, and I believe that the legal opinions and the understanding of how the legislation would operate have not come into being. Therefore, we are deluding people if we lead them to believe that, once passed, the legislation cannot and never will be changed. That is quite wrong.

I am concerned about this matter, and I would be pleased if the Minister would clarify the situation. From what the Minister has said, the Government is not prepared to introduce amendments to bring the Pitjantjatjara legislation into line with the Maralinga legislation. The Minister would know that originally the Maralinga legislation was very similar to the Pitjantjatjara legislation, but following the most exhaustive discussions, in which I had some involvement, a more acceptable measure, in the view of the mining industry, was eventually enacted. The two areas are adjoining, and I believe that the Pitjantjatjara legislation should be amended. The Minister should keep in mind that on many occasions the representatives told the Select Committee that they wanted economic independence. The only way to achieve economic independence is through commercial activities, and the major activity would be a well organised mining venture.

I am sure that the Minister and his officers have examined the evidence of the Select Committee, but I do not believe that anyone could have clear and precise evidence about what will happen in those areas if there are no changes. The mining industry is lined up across Australia. Will the Minister and the Government as a matter of urgency and after proper discussion consider amending the Pitjantjatjara legislation to bring it into line with the Maralinga legislation?

The Hon. R.G. Payne: I do not quarrel with a number of the remarks made by the honourable member. It is true that we on the Select Committee were informed about the desire of the Aboriginal people concerned to have a measure of independence, their own income, and so on. However, I am also aware of the industry's attitude, because I have had discussions with the industry as a whole and with individual members of the group that stated 'We will not persist' and went away. The Director-General has just advised me that an application for a PEL in the area has been outstanding for some time. It closes on 30 November this year. I understand that there has been a degree of interest from other groups that wish to negotiate with the Aboriginal people for entry to the lands. We hope that there will be a further attempt to carry out exploration in those lands.

Mr GUNN: The answer concerns me, because I would think that most South Australians would be not only disappointed but also concerned that we have taken a course of action and that we will say to BHP, one of the most successful and largest companies in Australia, 'We don't want you in South Australia.' We have allowed a group of people who were quite unreasonable in their approach during the time of the previous Government, when the then Minister of Lands, the Minister of Aboriginal Affairs, and I had discussions at Ernabella with the representatives, to persist in their attitude, which was amazing. Obviously, those people had no understanding of commercial arrangements. I understand that BHP sent representatives to Melbourne who went to great lengths over a long period to resolve the situation. I sincerely hope that exploration is undertaken immediately, but I would appreciate the Minister's advising this Committee whether or not the Government is prepared to amend the Pitjantjatjara land rights legislation in line with the Maralinga legislation, because it is my assessment that the public of South Australia expects the Government to have some courage in this matter. People would expect the Government to enter into reasonable discussions with the Pitjantjatjara

Council, but those discussions cannot go on for ever and a day. It is the responsibility of Governments to make decisions. Unless the Government grasps this matter firmly, the people of South Australia, the Pitjantjatjara community, and other Aboriginal communities will miss out in the long term.

It is my strong belief that if we lead those people to believe that the legislation will never be altered, and if the interpretations of the legislation, which have been accepted contrary to the beliefs of the Select Committee, are continued, we will be deluding those people by leading them to believe that they have those rights but the rest of the community cannot have similar rights. Will the Minister give a clear and precise reply about whether or not the Government is prepared to amend the Pitjantjatjara legislation in line with the Maralinga legislation, even if the Pitjantjatjara Council will not agree?

The Hon. R.G. Payne: Obviously, I cannot speak for the Government in this matter: it would be for Cabinet to decide. However, I can speak for myself. I have tried to indicate to the honourable member that I believe that the Pitjantjatjara people in respect of their legislation are in a special position (if that is the right word) because of the long history of the matter and all the negotiations that took place before the legislation in the present form was passed. It would be unfair to unilaterally try to change the legislation. In answer to the honourable member's question, I as the Minister do not feel prepared at this stage to take the action suggested by him. Once again I draw the honourable member's attention to the fact that we are endeavouring to get entry to the lands, but there is a time limit, which expires on 30 November 1984. In simple terms, I hope that we will have a starter.

Mr KLUNDER: I note from the Estimates of Payments (page 136) that the 1983-84 allocation for 'Mining division, mining tenement and resource management staff' was grossly underspent. Why did that happen?

The Hon. R.G. Payne: Funding was providing for a transfer to occur so that that line amount estimated would have been consumed in that year. The transfer did not take place until later, and so that underspend then shows in the financial year, in the actual payments line, and it also explains why there is a larger amount than appears before the Committee for the present financial year, the transfer having now taken place.

Mr KLUNDER: Can the Minister indicate what are the functions of that section and of the remaining staff in that section?

The Hon. R.G. Payne: I have some understanding of the function of the people in that section, but either the Director-General or Mr Hill, the Director of Mining, would have a better understanding, and I invite one of them to provide the information.

Mr Johns: Of this group, seven people are engaged in the consideration of tenement applications and their processing. They are responsible for the assessment of the applications, their processing, the taking into account of considerations relating to environmental matters and of comments that we would receive from other departments and the public. In fact, all tenements on application and before grant are gazetted, and the appropriate people concerned with regard to other land interests are invited to comment. Whatever comments are made are considered in setting terms of tenure. These people are responsible for those matters, and then for maintaining the registers.

Mr KLUNDER: Can the Minister say how many mining inspection staff there are, and how many are inspectors of mines? Also, if these are the people who inspect underground mining at Roxy Downs, do they have the skills necessary to monitor those operations?

The Hon. R.G. Payne: There are 28 employees involved altogether under the heading 'Mining inspection staff', and they comprise mining inspectors, blasting supervisors, opal field staff, and one person who is the Roxby Township Co-ordinator. As to how many of them are actually inspectors, I ask Mr Hill to provide the breakdown. I know of my own knowledge of the 28 total, but Mr Hill will be able to give important detail concerning qualifications of the people involved at Roxby that would be of benefit to all members.

Mr Hill: We have eight mines inspectors in that line, including the Chief Inspector, and four area officers. As to the qualifications of mines inspectors, seven of them are professional men who are fully qualified in respect of underground mining at Roxby Downs.

The Hon. E.R. GOLDSWORTHY: I refer to page 14 of the Programme Estimates in regard to energy co-ordination and the Electricity Trust. Did the Minister have discussions with the Electricity Trust Board before the Government decided to rearrange the Trust's debt servicing of outstanding Government loans?

The Hon. R.G. Payne: I wish to clarify that matter and I trust, Mr Chairman, that you will not penalise the Deputy Leader in regard to having asked a question. Did he mean whether I or the Government had discussions?

The Hon. E.R. Goldsworthy interjecting:

The Hon. R.G. Payne: I did not have any direct discussions with ETSA relating to new arrangements for debt servicing before that came into being of my own volition, if that is what the Deputy Leader is trying to ascertain. I became aware of it at about that time, and I think I am accurate in recalling that I did not initiate discussion. Members would appreciate that this would most likely be a Treasury initiative, and it is likely that any Minister would hear shortly after but not at the time of the actual origination of such an idea or financial arrangement.

The Hon. E.R. GOLDSWORTHY: Has the Minister done any calculations on the breakdown of the components and the percentage increase in tariffs that would be required in terms of the components making up the increased costs that ETSA has to accommodate with its increased tariff? Particularly, has the Minister done any sums or does he know what contribution to the increased tariff—the figures bandied about are a 14 per cent or 16 per cent increase—is attributable to the increase in natural gas price this year? I seek a general breakdown.

The Hon. R.G. Payne: I have not done any calculations myself, but I have been involved in calculations undertaken by my officers recently and I have perused them. I am aware of information provided to one of my officers by the Trust relating to the amount that the increased price of gas would represent in any necessary increase. To the best of my knowledge it represents about 4.3 per cent. I do not believe that one should try to be as accurate as that, but I am stating what I am aware of, and that is the figure in my recollection.

The Hon. E.R. GOLDSWORTHY: That was the figure put out by the Leader of the Opposition.

The Hon. R.G. Payne: The information that has been provided from the Trust to my officers indicates that it is not a simple calculation between the gas as purchased from one year to another, and does not suggest that, because there is some overlap (that is the best way I can describe it), that figure might be shown to be somewhat larger than about 4.3 per cent. I do not believe it would be any larger than—based on my own opinion from having seen figures—about 1 per cent on top of 4.3 per cent.

The Hon. E.R. GOLDSWORTHY: Other than putting the Trust under direct Ministerial control, there is no legislative authority for the Minister or the Premier to tell ETSA what it should charge. There is no suggestion that

the Government should have no responsibility in this matter. To ensure that the issue is put beyond doubt, will the Minister consider amending the Act to put ETSA directly under Ministerial control?

The Hon. R.G. Payne: A consultative study was carried out into the future energy needs of South Australia. Included in the terms of reference of that study, which was carried out by Scott, was a requirement to address the question whether greater control of this area was needed and whether recommendations as to likely or necessary legislation and matters of that kind needed to be made. I have had that report for quite some time. The reason it has not emerged is that the Scott study and the Stewart Committee were carrying out parallel inquiries and there was a fair degree of overlap between the two. Part way along it became clear to me, to the Chairman of the Stewart Committee and to the consultants that there was a degree of overlap between the two. For that reason I have not proceeded with the recommendations of the Scott Report other than to appoint a small working party to study the report to ascertain which of its recommendations ought to be applied, and in what way they have been modified by any results or findings of the now public Stewart Report. I must confess that I wondered whether or not the previous Minister had similar thoughts. If he did, he never made them known. It is probably one of the few matters not openly canvassed while he was Minister. I say on that aspect of our future energy planning that it is being given consideration by me and the working party along with a large number of other proposals.

The Hon. E.R. GOLDSWORTHY: Will the Minister make available to the Committee the breakdown of those components that make up the suggested 16 per cent increase in tariffs? The Minister says that he has some advice from ETSA in relation to my second question. Can that advice be made available to the Committee?

The Hon. R.G. Payne: I do not have that information with me.

The CHAIRMAN: Will the Minister make it available? As I said when I opened the Committee hearing this morning, any information to be provided must reach the Clerk of the Committee prior to 19 October.

The Hon. R.G. Payne: I understand the position. I am sure that the former Minister knows that I am in a delicate position here, having indicated to the Committee that the Minister has no control over ETSA. If I am supplied with information by ETSA on a confidential basis, which is the way the information under discussion came forward, I am not prepared to provide that information to the Committee. I have no other motive for not supplying that information except the one of confidentiality.

The Hon. E.R. GOLDSWORTHY: So there is no way of checking the rather shaky memory of the Minister about the component of natural gas mentioned. That seems to be a fairly unfortunate situation.

The CHAIRMAN: If the Minister is not prepared to make a confidential document available for public perusal, that is his prerogative.

The Hon. E.R. GOLDSWORTHY: Will the Minister approach ETSA and ask whether it has any objection to his making public the breakdown of components that make up the 16 per cent recommended ETSA price increase and, if ETSA has no real objection, will he make that information available to the Committee?

The Hon. R.G. Payne: I will discuss the matter with ETSA representatives during the lunch break to show the Minister that I have no motive other than confidentiality for withholding this information.

Mr GREGORY: Mr Laws is a new appointee to the position of Director, Oil and Gas Division, following Mr Watts' appointment as Deputy Director-General. What is Mr Laws' background and experience?

The Hon. R.G. Payne: I know that Mr Laws has an impressive background because of the respect he is paid by his peers in the private sector of the industry. I ask the Deputy Director-General to provide further information on his background.

Mr Watts: Mr Laws joined us a year ago. He has had a long and distinguished career in private enterprise. For 10 years he was Exploration Manager of Elf Aquitaine in Sydney. He is a geologist and a graduate of the University of Sydney. He worked in Adelaide for Beach Petroleum during the 1960s, so he has a fair degree of experience in the South Australian exploration environment. He has a wide range of experience in both exploration and development. The Department was pleased to obtain his services.

The Hon. R.G. Payne: I believe that Mr Laws is an extremely valuable acquisition by the Department in an area where we obviously have an increasing need for highly competent and skilled people. He certainly fits that description.

Mr GREGORY: Is the Department still experiencing the same difficulty in recruiting skilled and experienced oil and gas personnel as was discussed last year during the Estimates Committees and what is required to attract and retain such persons?

The Hon. R.G. Payne: I think the short answer is 'Yes'. That is a situation that always applies because of the less rigid emoluments and other arrangements that can be arrived at outside the Government's service. I will ask Mr Johns to amplify on that answer.

Mr Johns: There is not a great deal I can add to what the Minister has said. We will always face difficulty in attracting and retaining good people because of the obvious attractions by way of salary and other benefits that can be applied by the private sector. I am afraid that this problem will always face us. There was a time when people might have been attracted to work for the private sector, but in so doing would have been required to make major decisions regarding housing, family and so on. That is no longer the case with such a strong local industry—much of it is South Australian based. It is a matter of record that the largest onshore petroleum developments are in South Australia.

There is a great deal of interest in exploration both onshore and offshore. That is a background to this problem of attraction and retention of good professional people. I suppose I would have to add that I believe we have things that attract good people. The turnover of staff is not high. Their ambitions, the rewards and what it is they do obviously hold something for them that the private sector does not offer. I suppose one of these things is the diversity of what they do. They obviously have different outlooks on life. Most of the people in this area have worked in the private sector. They are now with the Government and the fact that we are able to retain them suggests that there is something to be said and to be had for working with the Government and this Department.

Mr GREGORY: With the substantial increase in activity in both the oil and gas area, does the Department require additional staff to adequately oversee these activities?

The Hon. R.G. Payne: The need for additional staff is being addressed by the Department in a very sensible way. I believe I have interpreted the honourable member's question correctly. Provision exists in the lines for a fairly substantial sum of \$425 000 in relation to consultancy. This is the way the Department proposes to address the problem at present in relation to oil and gas activities. Mr Johns may have something to add.

Mr Johns: There are certain areas in which we have obvious deficiencies in covering, and proposals are afoot. A sum is allocated as a new initiative to hire consultants, particularly in regard to the development of the liquids in the Cooper Basin.

Mr ASHENDEN: I again refer to ETSA. Would the Minister advise the amount outstanding to ETSA as at 30 June 1984 in relation to bad debts for non-payment of consumer accounts? Will the Minister undertake to provide on notice full details of the ETSA consumer bad debt profile, including the number and amount of bad debts, the age profile of the bad debts (for example, 30, 60 or 90 days), and a comparison of the above information with the figure as at 30 June 1983? I do not expect the Minister to have all that information with him, but would appreciate if he could supply it for the *Hansard* record. Will the Minister give an indication of the figure for 30 June 1984?

The Hon. R.G. Payne: I find this sort of question rather peculiar, especially as the former Minister asked me a question a moment ago, namely, whether I had considered putting ETSA under Ministerial control. Where the information is not already public knowledge (some is contained in the Auditor-General's Report), I will ask ETSA for the additional information; that is the situation that must apply. I am not in a position to direct ETSA to do these sort of things, but I will certainly request it and endeavour to get it if ETSA agrees.

The Hon. E.R. GOLDSWORTHY: I would be very surprised if it objected.

The Hon. R.G. Payne: It may not, but I am not in a position to speak for it.

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

The Hon. R.G. Payne: Before the luncheon adjournment I was asked whether I would undertake to provide certain information that may have been desired to my office in relation to suggested required increases in electricity prices. I undertook to take that matter up with the Electricity Trust, and I have done so. That information will become available later in the afternoon and will be sent to me. I will put it before the Committee. In relation to the request I had from the member for Todd, I put that request to the General Manager of ETSA and he undertook to look at it. I take it that the honourable member was referring to the line in the Auditor-General's Report where the outstanding debtors (or whatever the term used) show a substantial sum of some \$30 million.

Mr ASHENDEN: Yes.

The Hon. R.G. Payne: I think that the honourable member will appreciate that there could be some confidentiality in a line like that where persons still owe the Trust money, for example.

Mr ASHENDEN: I do not want the names of companies. So that the Minister understands what I want, all I want is the debtors outstanding at June 1983 compared to the debtors outstanding at June 1984. For 1984 I also want a breakdown of those debts and whether they are 30 day, 60 day or 90 day debtors.

The Hon. R.G. Payne: Is that in relation to consumers?

Mr ASHENDEN: Yes.

The Hon. R.G. Payne: I took that as the honourable member's view. That information will be provided in writing.

Mr ASHENDEN: Will the Minister indicate what he believes will be the income derived from the tax that the South Australian Government imposes on the Electricity Trust this financial year? I think that it is 5 per cent, if I remember rightly.

The Hon. R.G. Payne: That information is contained in a Budget paper that has been available to all members for some time.

Mr ASHENDEN: I appreciate that, but that would have been written before the recent announcement of tariff increases. I know what the figure is, but I am asking what the Government now believes will be its income from this tax.

The Hon. R.G. Payne: I have no information on that figure at present other than what is published in the Estimates of Receipts, and that figure is \$24.6 million.

Mr ASHENDEN: I have already been contacted in my electorate office by not only individual consumers of electricity but also two individual small businessmen and a group of small businessmen expressing concern at the anticipated increase in electricity prices. Within the electorate of Todd there are about 600 small businesses. Those people came to me expressing extreme concern in relation to the effect that the Government's proposals may have on the cost of their business operations because they are high energy users and, in some instances, their businesses depend solely on electricity.

I do not wish to name either my constituents or the companies. If the Minister is aware of the electorate of Todd, he would know that particularly in Holden Hill there are quite a substantial number of small businesses. They are most concerned that the tariff structure is to be altered to penalise the larger user of electricity. They have pointed out to me that already their costs are increasing because of other Government impositions, and that they are genuinely concerned that, if the tariff structure is changed, they will be forced to bear yet another impost. Some of these people have expressed to me a genuine concern that this may even result in the difference between their being profitable and unprofitable. Of course we all know what happens once a business becomes unprofitable.

The Hon. R.G. Payne: I appreciate the honourable member's concern for his constituents. Matters like that make it very difficult to devise a tariff structure which has the elements of conservative use about it and which does not actually apply in too penal a way. That has been one of the difficulties. Skilled people have been looking at this for a fair period of time. I assure the honourable member that I have given it that consideration. My understanding of where we are now is that a further examination of the tariff structure is to be carried out, which will decide the tariff that will apply. I want the honourable member to understand that there is nothing in my ideas about a tariff restructure for collecting any extra money other than that which is needed to maintain the Trust in a viable operating condition.

Mr ASHENDEN: The Minister mentioned the viability of the Trust, but it is terribly important that we maintain the viability of small business in South Australia. The Minister has already indicated that without the proposed tariff increases the Government was anticipating an income of \$24 million from the tax that it imposes on the Trust. Would the Government consider either reducing or removing that tax because that is an area where there is direct Government controls. We acknowledge that at the moment the Electricity Trust is quasi autonomous. I anticipate that in this taxation area the increase would make the figure come close to \$30 million. If this tax was removed it would result in a reduced price for electricity to consumers in South Australia.

The Hon. R.G. Payne: First, without doing the mathematics, I will indicate the factors that apply. What is needed to be done to the figure in the Estimates of Receipts is to take 5 per cent of whatever percentage increase applies and modify that by the proportion of the year remaining that will apply. I rather think that it would get towards \$30

million, but I do not think that it would make \$30 million. It would be more likely to be \$28-something million on those figures. However, the percentage that applies is the mystery element in the calculation at the moment. One could apply the figures that have been in the press of 16 per cent, 14 per cent, 15 per cent, or whatever.

Certainly, that tends to indicate that there could be an increase in revenue, but it does not necessarily take account of what might happen to electricity sales, for example. The revenue derived by the State Government in this way has been derived since 1971. Let us get this clear. I know that it is not suggested that just this Government is placing this impost on the Electricity Trust; it has been a feature of Budgets for quite a few years. If there is a change in the sales, of course the turnover figure is that to which the percentage is then applied and that amount goes to the Government. So, it is not as simple as saying, 'Yes, it will go up that much'—it could go up that much. The other thing that the member asked me was whether the Government would consider reducing or removing the tax in this area. Everyone in the Chamber would know that removing an amount of money like that from the present budgetary considerations is not likely to occur unless very marked increases occur in State revenue in other areas. That matter needs to be considered.

Mr KLUNDER: I refer to page 137 of the Estimates of Payments and the Resources Division. What are the areas of speciality and skills covered by the Geological Survey and roughly how many people are employed under that line?

The Hon. R.G. Payne: I think that Dr Branch would be delighted to outline the skills contained in the branch that he heads.

Dr Branch: At the moment 143 people are employed within the group known as the Geological Survey of South Australia and another 41 people within the group known as Drafting, which together comprise the Resources Division. The role of the Geological Survey is steeped in history. The Geological Survey celebrated its centenary in 1982. Hence, it is one of the older institutions within the South Australian Government. H.Y.L. Brown was the first Government geologist. The Survey is to study and understand the geological structure of South Australia, and there are several reasons for this. I suppose we began first by wanting to know about the crust of the earth in South Australia. Secondly, we want to know what it contains and, thirdly, how in the best interests of South Australia may we exploit the various endowments that the crust contains.

The survey conducts fundamental mapping. We have people who go out into the bush during the year to look at rocks, map them, and discover their age, type and mineral potential. We also have geophysicists who measure the physical properties of the rocks in the same areas. These data, which are gathered by people within the staff of the Department, are integrated with information obtained from exploration companies. As exploration companies explore for minerals in this State they, too, gain further data to supplement that obtained by the Government. Our ultimate task as a Geological Survey is to integrate all the information available about the geology and mineral potential of South Australia and then present it to both the general public and in particular the mineral and petroleum industries so that they may better understand the resources of this State and know how best the industry can apply its resources in carrying out further exploration.

Mr KLUNDER: When there are economic or policy changes, is there a change in personnel to address those higher priorities?

The Hon. R.G. Payne: There is a degree of recruitment to replace personnel who leave and there is also some

reallocation of tasks within the Department. I think everyone would understand that in some positions it is not easy to substitute or add additional support where there is a requirement for a high level of qualification or training. I think that Dr Branch could give examples of reallocations that have occurred.

Dr Branch: There is one prime example: when I first joined the Department the fossil fuels area was part of the total group of which I was in charge. However, about four years ago it was decided that because of Government policy it was necessary to expand that area into a division in its own right. People were reallocated from within the Resources Division into a new Oil and Gas Division and, as we heard earlier, the staffing level within that area was expanded to allow further expertise to be gained. In adding staff to an area such as this—while we are also trying to reduce our overall staff level—it certainly leads to a reallocation of manpower resources.

The Hon. E.R. GOLDSWORTHY: I return to the question of ETSA and follow up questions asked by the member for Todd. The Auditor-General mentions in his report that ETSA commissioned a group of consultants, and from memory I think it was Bechtel. That review has been completed. The Auditor-General's Report indicates that some of the consultants' recommendations have been implemented and others are being considered. What changes have been implemented by ETSA in terms of the management structure, and what changes are still being considered?

The Hon. R.G. Payne: The consultant group is Cresap, McCormack and Padgett. The consultants were involved in a very large study of the E & WS Department, if I recall, a few years ago. The consultants have international standing. They have certainly completed their consultancy and recommendations have been made. Some changes have already been made within ETSA as a result of the recommendations. I do not have the details of those changes with me, because of the point made this morning when the honourable member referred to the relationship between the Minister and ETSA. I believe the Director-General has some knowledge of the changes that have been made.

Mr Johns: I am sorry, I do not have that information. While I have seen the proposed administrative changes, I am not familiar with personalities or responsibilities, so I cannot add anything.

The Hon. R.G. Payne: My role in the matter was to have what is usually termed a courtesy meeting with the consultants. They wanted to let me know, although ETSA had already done so, that they were conducting a consultancy. Two gentlemen from the United States visited me and we had a brief discussion. I have seen some of the results of the consultancy, but I prefer to take the question on notice.

The Hon. E.R. GOLDSWORTHY: I ask the Minister to make any information available. I do not believe ETSA would object. Although I had forgotten the name of the consultancy firm, two of its employees were directed to me, I believe by ETSA, having dealt with that organisation as Minister for three years. I gave the consultants my confidential views, which will not be identified as such in the consultant's report. I spent about two hours talking to the two gentlemen from the United States, giving them my views on ETSA and my experience having dealt with it as Minister for three years. I have more than a passing interest in what the consultants finally came up with. I think this information should be available to the public via this Committee.

Nothing about ETSA needs to be secret, particularly in relation to the way in which it organises itself, so I will appreciate it if the Minister could make that information available to us. The next question that I ask concerns the report that was commissioned by ETSA: The Review of

Electricity Distribution Policies in Bushfire Prone and Environmentally Sensitive Areas. Scott commissioned that report. What are the Minister's views in relation to the suggested payment of the cost of undergrounding powerlines?

Although the Minister has pointed out to the Committee—and we all know—that ETSA is not directly responsible to the Minister, the Act does not dictate that it is under direct Ministerial control. In fact, Government policy impinges on ETSA directly. If the Government dictates that something will or will not happen, ETSA does not have much option but to go along with the policies of the Government. One of the suggestions was that powerlines be placed underground in high risk bushfire areas. Has the Minister any views or has the Government developed any policy in relation to that?

The Hon. R.G. Payne: The report addresses the matter fairly reasonably, but it is probably early days to have a view. It is a very sensitive area—everybody knows that—and the period during which responses, comments, etc., from the public in general have been invited to the report that has been released is not yet complete. ETSA has taken the view, together with David Shetliffe of the consultants, that it should write to all of the interested bodies—local government, Hills associations and other bodies that might be interested—inviting their comments. Visits have been made to areas where bushfires have occurred, including Clare and the Mount Gambier district. Presumably, at the end of that time, which from memory is the end of October, we will have not only the report but a complete input of the public's study and understanding of the report and what it thinks should happen.

In relation to whether undergrounding should take place in certain high risk areas, my view is that that is so, but the report very properly draws attention to the sort of cost that would be involved if the Trust were to embark on a major undergrounding of very large areas. Figures like \$500 million have been mentioned. The report suggests that there ought to be a 20 year programme of areas that are suitably defined where the undergrounding takes place, thus limiting the cost to a figure of several million dollars a year, as a sum that might be able to be borne successfully by the Trust as an operation.

The question as to who actually pays for it is probably one of the hottest areas involved. The people who live on the Plains would be inclined to say, 'Why the hell should we pay for those who want to live in the Hills areas or areas where there is sufficient vegetation to constitute a risk?' The people who live in those latter areas may take the view that it is not only their responsibility to meet that cost, just as other costs are apportioned across the State in relation to water and various other utilities, and that there needs to be some balance.

A working party is to be set up to study the implications of the report and to take into account the comments that come in in an endeavour to devise a suitable scheme. If I were to say any more than that I would be trying to anticipate the outcome, and I do not believe that I should.

The Hon. E.R. GOLDSWORTHY: I declare to the Committee my pecuniary interest in the matter as a Hills dweller. What the Minister says is correct. The view being promoted that Hills dwellers pay higher tariffs has gone over like a lead balloon, as you can imagine, the reason being that the very high bushfire risk is in the hills face zone over which some of these high voltage ETSA lines pass through the parks, and the parks are maintained in the main for the visual enjoyment of the dwellers in the Adelaide Plains. Their bushfire hazards are another question.

The Hon. R.G. Payne: The Hills people go to the parks, too.

The Hon. E.R. GOLDSWORTHY: The visiting of the parks is minimal in terms of Black Hill, Morialta and some of those major parks that are just there to maintain a bit of scrub so that people can look out the back window and enjoy it. It is an enormous bushfire hazard; it is that rather than the powerlines that is the hazard. If the Minister is contemplating a policy whereby Hills dwellers pay higher tariffs because of the undergrounding, it might be cheaper to do something about the parks. That will go down like a lead balloon to the environmentalists, no doubt.

I want to follow up the question about tariffs that the member for Todd asked and about which we really did not get the answer. The member for Todd was asking the Minister about this proposal to structure the tariffs in such a way that the high users pay more. Does that scheme involve businesses as well as domestic consumers, or is the scope of that scheme simply to be limited to domestic consumers? That is far from clear.

The Hon. R.G. Payne: The structures with which I have been involved relate to domestic consumers.

The Hon. E.R. GOLDSWORTHY: Then the people in small business do not have anything to fear in relation to this element of ETSA charges?

The Hon. R.G. Payne: No. My understanding was that the member for Todd was concerned with any increase applying to small business where they have a difficulty in making it viable, and so on.

Mr FERGUSON: I refer to page 137 in the Budget line 'The Office of the Minister'. Is there any significance in the \$4 000 overspent in 1983-84?

The Hon. R.G. Payne: I am pleased to be able to say that in the office of the Minister we are trying to keep up with the times. At the end of the year we purchased a word processor, which was not in the office of the previous Minister. We now have one, which is already proving to be of considerable assistance. Virtually all of that overrun is covered; it is met from another line. It is not an overspending on the part of the Department, but it was a purchase outside that which was estimated for the year.

Mr FERGUSON: What exactly is embraced by this Budget line, and why is it separate from general administration?

The Hon. R.G. Payne: I have been Minister of Water Resources, Minister for Environment and Planning, Minister of Housing and Construction, Minister of Community Welfare, and in this instance, as Minister of Mines and Energy, I am a separate entity and not part of the Department. My office is in a separate location. As the former Minister knows, I took over the office he was using; before that the office was used by a former Deputy Premier, Des Corcoran. There had been no changes in the office until last week, when we acquired new chairs.

Mr GUNN: I believe that we are all concerned to ensure that the Electricity Trust is an efficient organisation that meets the aspirations of the South Australian people. From my experience, the Trust has been most co-operative and has been a reliable supplier of electricity. I note that a member of the Legislative Council has called for the Public Accounts Committee to investigate the operations of the Electricity Trust. I would be interested to know, in view of that criticism, whether the Government intends to accept this advice and criticism or whether it will take any other action to ensure that the Trust operates efficiently. Does the Minister intend to allow Mr Gilfillan to make what I believe is cheap political capital at the expense of what has basically been a very good South Australian organisation?

The Hon. R.G. Payne: I suppose that I am not in a position to prevent the honourable member from making cheap political capital because apparently he has already done so—I gather that the honourable member was referring to an article in a newspaper. The honourable gentleman is

entitled to his view, I suppose, but I would be very surprised if it was based on very much knowledge of the Electricity Trust. While the former Minister and I might have doubts about the degree of control between the Minister and ETSA, I am quite certain that he would hold my view that the Trust is a dedicated and efficient organisation. The Trust has in excess of 5 000 employees, and I saw information recently that shows that, for kilowatt hours generated per employee, the Trust's record is better than the record of all other State utilities. That would indicate the way in which it operates.

The Hon. E.R. GOLDSWORTHY: There is always room for improvement.

The Hon. R.G. Payne: I was not suggesting that there is no need for improvement. The issue that has been exercising everyone's mind for days and weeks is whether or not a certain percentage is justified in the circumstances, but what has taken place fairly recently in other States has not been given much airing. Everyone knows that a statement was made in New South Wales that appeared to indicate that electricity undertakings in that State were somehow able to impose increases that were considerably less than those bandied about in other States. There were changes six months ago, and one could assume that there would be changes according to seasonal and other factors. I understand that in Queensland the last increase was 13 per cent, and in Tasmania, even with the benefit of hydro-electric power (a benefit no other State has), which is recognised as one of the cheapest methods of generating electricity, at least over a period of time when amortised, there was an increase of 13 per cent. It has been overlooked in the press that all electricity undertakings are facing a difficult time, as enormous sums are required to provide equipment. Everyone expects things to light up when switches are turned on: we all expect mechanisms that are part of our lifestyle to work when we turn on a switch. The large sums involved and interest charges create an extremely difficult time for electricity undertakings generally.

I am sure that ETSA has been addressing its operations over a long period in a very efficient manner. That is not to say, as the former Minister said, that there is no room for improvement. I am confident that ETSA is trying to contain costs. Regarding the Stewart Committee findings, this is another way of our trying to ensure that expenditure commitments are made only at the right time, and that we do not take on interest burdens at the wrong time, thus adding to the possible size of tariff charges for electricity.

Mr GUNN: I appreciate what the Minister has said in relation to tariffs. A great deal of discussion has been focused on tariff increases over the past 12 months and on the present proposals. Some people in South Australia are already discriminated against: they are forced to pay a surcharge of 10 per cent just because a few years ago someone drew lines on a piece of paper and said, 'Those people will be supplied with electricity by their district councils' even though in some cases the mains go from Port Augusta to Port Lincoln. One person may be supplied with electricity by the Trust, his neighbour may get electricity from the council, but there is a difference of 10 per cent between the tariffs.

The Minister would recall that a deputation waited on him a few years ago in relation to this matter. Is the Minister now in a position to respond? These people fail to understand why they should be penalised in this manner. I could explain to the Committee the problems faced by people in other outback areas who are supplied with diesel generated electricity by the Outback Areas Trust. The tariff structure leaves a lot to be desired. I know that the Minister is familiar with this matter, because it has been debated in Parliament, and the Minister has given indications in the past that he may be in a position to make an announcement.

On the last occasion the Minister was given information that clearly set out the anomalies. He may be in a position now to indicate to those people that they will be treated in the same way as all other people in the State are treated.

When one looks at the matter fairly and objectively, one sees that there is no longer any justification for the continuation of the 10 per cent surcharge that these people have to bear. All electricity is now purchased from the Trust, and it has been proved that councils operate efficiently in this regard, particularly when one considers the distribution network on Eyre Peninsula and in other remote areas. I do not need to explain it further. Will the Minister indicate a time factor when these people will not have to pay?

The Hon. R.G. Payne: I am not in a position to indicate a time factor when these people will not have to pay what the honourable member calls an additional impost. The Government already pays a subsidy on behalf of 10 000 consumers in the areas referred to by the honourable member, amounting to \$3.2 million. I believe that that is a sizeable recognition of the plight of those people (if 'plight' is the correct word). I agree that the deputation was excellent: the people from the district councils presented themselves well and presented very factual information. They raised in my mind one point of which I had not been aware previously, and that is that in some cases people are still paying interest charges on distribution networks that have been taken over by the Trust. I am having that matter researched, but I do not have an answer for the honourable member today. However, I believe that the honourable member knows me well enough to know that I will consider the situation. The honourable member was a bit mean in not mentioning, in regard to people who receive diesel generated electricity, that I was able, after many representations by him and after a great deal of representation to the former Government (which did no good at all), to recognise that the first block of electricity supplied in those areas was too small.

It did not take into account the climatic conditions. Those people were entitled to a much larger block and I was able to arrange for the block to be increased. Certainly, it was worth while for the people concerned. I can report that I have not received one letter from those people giving thanks. I know that the member thanked me in the confines of the House, and I accept that, but the people who lobbied for so long must have been satisfied that they had obtained a small improvement in their situation yet did not bother to let me know. Perhaps someone will read this transcript and write a letter to the Minister.

Mr GUNN: The Minister has been around the political arena long enough to know that members are told quickly when things are wrong but when problems are rectified people are not as inclined to express their appreciation. I can advise the Minister that my constituents who benefited are most grateful to him. In regard to the supply of electricity, ever since I have been involved with Wilpena Pound and the Blinman area requests have come from those communities to have the power lines extended from Hawker to Wilpena Pound and Blinman.

The Hon. E.R. GOLDSWORTHY: And from the tourist industry.

Mr GUNN: Yes, the tourist industry is now involved. It was pointed out a few months ago that if electricity mains were extended to Wilpena the actual cost of extending the lines would probably be recouped by the Trust or the Government within about four or five years because the actual capital cost, although significant, must be considered in the light of the cost of the diesel generating capacity at Wilpena which is astronomical and which has associated maintenance costs. It would appear that, if we are going to continue to encourage the tourist industry and give local communities in the area what they are entitled to (that is, to be connected

to the grid system), then this matter should be quickly addressed. The Minister will be aware that the Wilpena caravan park has no powered sites. It is a nice park that attracts many people, but such a development would not be unreasonable. It is not unreasonable to suggest that Blinman is entitled to be connected to the system. I know that people object on environmental grounds to the extension of the electricity mains, but I believe that that attitude is not only selfish but should not be considered. I refer to great tourist spots throughout the world such as Innsbrook and Swiss tourist resorts where powerlines and pipelines are evident. I refer to the facilities in the hills surrounding Innsbrook. Power lines could be sited so that they are not visible from the road. Certainly, any suggestion that they be put underground is completely out of the question and should not be considered because of the cost factor. Has this matter been brought to the Minister's attention? Will he use his good offices to ensure that electricity mains are extended to these areas as soon as possible, because it is long overdue, for the benefit of local residents and the tourist industry?

The Hon. R.G. Payne: I am aware of the member's long interest in the supply of electricity to this area. I cannot undertake to do something about it immediately or as soon as possible (as the member suggested), because it is a further cost that will have to be picked up by someone. Indeed, that is what the discussion has been over in the last couple of weeks—who pays for electricity. I invite Dr Messenger to provide additional comments about a proposal (perhaps still a little way down the track and perhaps representing only a ray of sunshine on the horizon) for a combination wind generator and photo-voltaic system that could be used as a demonstration energy project involving an overseas Government to provide electricity to just such an area. I am sure Dr Messenger will be able to give additional details.

Dr Messenger: We have been aware of this position for some time. One of the problems is that it really has to do with whether diesel is the correct way to generate power at Wilpena or whether a mains power extension is the better way of doing it. Certainly, there is as much opposition to the idea of the extension of mains power as there is support for the concept. We have looked at an alternative means, firstly, of making the diesel generator more efficient and perhaps in the longer term replacing it altogether. We have put in a submission to the National Energy Research Development and Demonstration Council for a particular type of storage system that would enable the diesel plant to be operated only during the day; that would cut out the problem of noise, which is one of the problems at Wilpena. Also, we are looking at the prospect of testing a smaller version of this at another park, but the long-term intention is that, by making these changes to the diesel system, which involves eventually battery storage and an inverter system being added to the diesel system, it would make it easier and quite practical to apply either photo-voltaics or wind as a source of power. We have put to the Commonwealth Government and to an overseas country, which is looking at the prospect of a demonstration project, that this would be an excellent integrated area for such a large demonstration project to proceed, and there is some significant interest. It might not only lead to a high technology type of project but also remove the problem of the diesel generators without having to extend the power grid. It would also be possible for such systems to be located elsewhere in the Flinders Ranges and to continue to avoid the need to extend the grid.

Mr GREGORY: The sum under the heading 'Administration' is the third highest in the Department's contingency funds. Why is that administration cost so high when compared to, say, the high Government priority of oil and gas, which has a budget of only \$110 000? What additional items

are included this year, if any, to account for the increase of \$160 000?

The Hon. R.G. Payne: This relates to remarks I made earlier this morning. Fewer lines now appear in the Budget documents. All these unapportioned costs in the Department are picked up in the administration line. Mr Whinnen has a considerable amount of detail which would be of interest to members and I invite him to make it available.

Mr Whinnen: The budget of \$800 000 is sizable compared with the operating budgets of the more frontline divisions. However, three years ago the Executive of the Department decided, in order to ensure that the directors of each division had control over the funds that they were allocated in the Budget, that only items of expenditure over which they had direct control would be apportioned or funded to the division. Of course, there are a large number of costs that the Department must meet. It is impossible or not worth while costing them down to the users—for example, telephones, postage, security, minor equipment, stationery, photocopying expenses and so forth.

The Administration Division, which is my division, was the patsy that had to bear the costs that Department incurred over which each individual director had no specific control. We control these costs as individual total sums. That is why the amount of \$800 000 is shown under 'Administration'—it picks up things such as postal costs if the Energy Division is conducting a survey. It picks up all telephone, telex and facsimile transmission costs, which all departmental officers incur.

Mr GREGORY: I notice that this line was overspent in 1983-84. Will the Minister say what caused that overspending, where the additional funds came from, whether the Department can transfer moneys between lines and what approval mechanism exists to monitor such transfers of funds?

The Hon. R.G. Payne: The Department is able to overspend in some lines and pick up that cost from another line. However, such action requires the approval of the Minister; that is the inbuilt safeguard.

Mr GREGORY: The line encompassing accommodation and property maintenance costs seems to address the same sorts of costs. What is the difference between them and what charges are met by each?

The Hon. R.G. Payne: The second line involves accommodation and services costs, which are moneys paid to the Public Buildings Department. I think that that is rental and moneys for cleaning and other services associated with the head office building. The amount for building and property maintenance, the smaller sum of \$70 000 for the current financial year, relates to the maintenance of departmental buildings. I have been informed by Mr Whinnen that this amount includes maintenance of houses and that we have 16 houses to maintain.

The Hon. E.R. GOLDSWORTHY: My next question relates to page 5 of the yellow book. Can the Minister say what has been the expenditure on mineral and petroleum exploration outside the Cooper Basin? The Cooper Basin is a special case, of course, as there is an accelerated gas drilling programme going on there as a result of arrangements made by the former Government. I would like to know about mineral and petroleum exploration throughout South Australia outside the Cooper Basin and what the expenditure was in this area during the past 12 months. I would like to know, also, how that expenditure compares with the expenditure in the two previous years. Also, has the Minister detected any fall-off in uranium exploration? I would be interested to know any fine detail the Minister or his officers can give in relation to these matters, and what the exploration has been seeking. The Minister has made one or two press statements about diamond exploration. However, I would

like to know about exploration for base metals, uranium and petroleum outside the Cooper Basin, both on-shore and off-shore in the past three years and what was the expenditure in this area in the past 12 months?

The Hon. R.G. Payne: I have issued press releases in relation to the search for diamonds in South Australia. That search continues to be of considerable interest to prospecting companies because millions of dollars have been spent in this search over a period. I can recall that every so often licences are renewed, with diamonds still the target of the exploration. I hope, and I guess that the people spending their money on this exploration hope, that this will lead to the sorts of finds that have occurred in Western Australia. There is obviously enough confidence held by the companies concerned to continue that exploration because they continue to renew their licences, and that involves further expenditure considerations.

The amounts that have been spent in the years mentioned do not feature as part of our documents because they are expenditure by private companies, in the main. However, I expect that the Director-General has information relating to the mineral area and that the Deputy Director-General would have information of interest relating to the oil and gas area. I invite them to provide that information to the Committee.

Mr Johns: The mineral exploration figures for the past three calendar years are as follows: total exploration expenditures were; 1981, \$51.1 million; 1982, \$45.4 million; and 1983, \$34 million. The breakdown of the last full year's expenditure is as follows: uranium, \$540 000; exploration on the Stuart shelf—which is the Roxy Downs environment—\$22.2 million; searches for copper as the principal commodity of interest, \$1.1 million; base metals, \$2 million; coal, \$3.7 million; diamonds, \$2.1 million; and on other commodities—and there are a variety of them—\$2.1 million. It is a bit difficult to come up with any precise figures for the year to date that show how the search is progressing because of the requirement on companies to report on a quarterly basis and because there is some lag in reporting and receipt of those details. I believe that they will be closely comparable to last year's level of performance.

The Hon. E.R. GOLDSWORTHY: Mr Johns did not answer the question in relation to what the trend is with uranium.

The Hon. R.G. Payne: I will address that matter when Mr Watts is finished.

Mr Watts: I have some historical figures relating to exploration, drilling and petroleum. Unfortunately, I do not have the split between the onshore, Cooper Basin, and areas onshore outside the Cooper Basin as requested. There are presently 12 licences issued for areas outside the Cooper Basin. There were 11 last year, so there has been an increase of one licence. Next year the total expenditure for both onshore and offshore drilling is estimated at \$107 million, of which between \$20 million and \$30 million will be used in areas outside the Cooper Basin. I have to give that range because the figure depends on the cost of drilling an offshore well, which can vary from \$8 million to \$25 million, so there is a fair bit of latitude needed there. The level of activity for the whole State last year for both offshore and onshore areas was \$81 million. This compares with the figure the year before of \$58 million. Those dollars have all been converted to 1984 dollars. Do you want me to go back further?

The Hon. E.R. GOLDSWORTHY: I was interested in the level of activity outside the Cooper Basin. We are all aware of the fact that it is a going concern and that there is a big incentive for these people to prove up further discoveries. In terms of new discoveries will the Minister

obtain the breakdown over the past three years of what is happening outside of the Cooper Basin?

The Hon. R.G. Payne: Yes.

The Hon. E.R. GOLDSWORTHY: The mineral figures are a cause for considerable concern. The answer indicates that there has been a dramatic plunge from \$51 million to \$45 million, and to \$34 million this year. I am interested to find out what is happening particularly to uranium.

The Hon. R.G. Payne: I have some uranium figures here. In 1981 (calendar years are used) uranium exploration expenditure was \$6.936 million. (These figures are in the dollars of the day and are not brought up to 1984 dollars.) In 1982, the figure was \$5.122 million, and in 1983 the figure was \$0.541 million. Concerning uranium copper in relation to the Stuart Shelf, to which I think the figures should relate, the 1981 figure was \$20.723 million, the 1982 figure was \$26.051 million, and the 1983 figure was \$22.239 million.

The Hon. E.R. GOLDSWORTHY: They are compelled to spend that under the Roxby Downs Indenture. I want to follow up the questioning initiated by the member for Eyre. Concerning the loss of the \$30 million exploration programme that was mooted by Hematite, the Minister stated that he was not prepared to amend the Pitjantjatjara land rights legislation—

The Hon. R.G. Payne: Unilaterally I said.

The Hon. E.R. GOLDSWORTHY: —although I make no bones about the fact that we were double crossed by the Aboriginal negotiators. Those of us on the Government team were told that there would be no problem with exploration and, in the event, there was a hell of a problem. I understood that that \$30 million went 'offshore China'. Will the Minister be more precise in relation to the details of his efforts to get into that prospective country, particularly in relation to petroleum? Nothing would boost the economy of this State more quickly than another decent discovery of hydrocarbons. What the Minister indicated to the member for Eyre was a bit vague. What is actually happening in relation to exploration in that country?

The Hon. R.G. Payne: I thought that I outlined that situation fairly clearly, and certainly it seemed to satisfy the member for Eyre, who did not follow up with any questions. Subsequent to BHP vacating its position in trying to gain entry to the Pitjantjatjara lands, I had discussions with the Pitjantjatjara people on two occasions: once with a small number but secondly when I went to the lands and spoke to the people there. As I said before, a PEL offer is out and that is live to the end of November this year.

The Hon. E.R. GOLDSWORTHY: The Aboriginals agreed to it?

The Hon. R.G. Payne: At this stage that is the next stage that follows.

The Hon. E.R. GOLDSWORTHY: They haven't agreed?

The Hon. R.G. Payne: The Aboriginal people said to me that they did not necessarily not want exploration on the land. In simple terms they said that they had not been able to come to an agreement with BHP. They said that they could come to an agreement with a prospective explorer. We need to be very careful. One should not try to put words into the mouths of Aboriginal communities. I think that it was unwise for the honourable member to use words like, 'We were double crossed.' Neither the honourable member nor I was present at any of the discussions that may have taken place between BHP and the people on the land.

The Hon. E.R. GOLDSWORTHY: I am talking about the operation of the Act.

The Hon. R.G. Payne: I accept that the honourable member was referring to the Act. I do not think that we were double crossed. There is no gainsaying the fact that an arbitration provision existed that was never tried. Whether

or not there were reasons for that in the mining industry generally or with the actual proponents is not necessarily germane to the discussion. There was an arbitration provision that could have been exercised—that right was declined. I believe that the course I am following is correct. I do not feel that it is fair to unilaterally try to impose amendments to legislation that is seen by the Aboriginal people as something that they fought hard for and won over a long period of discussion, negotiations and all that happened in that era that both the honourable member and I were associated with. I am also endeavouring to obtain entry to the lands in the way I have outlined. I have indicated that we have had interest expressed, it would be true to say, from more than one company. Hopefully, by the time the offer closes on 30 November we will be in a position to make an announcement.

The Hon. E.R. GOLDSWORTHY: Does the Minister believe that he has a responsibility to the wider community of South Australia in balancing the rights of the people concerned? Does the Minister understand that he has a responsibility to the rest of the community who own the resources to seek to discover and develop them? The Minister is not quite clear on what I am saying in relation to those negotiations. As one of the negotiators for the former Government concerning land rights legislation, it is my memory and the memory of all of the Government team of negotiators—and there were about five of them regularly engaged in those negotiations—that the specific question of the right of entry for exploration to the Pitjantjatjara lands was raised at Alice Springs during one of the negotiating sessions. The memory of all of those officers and my memory is that they said there would be no problem and that they would be making no demands concerning exploration. At that stage nobody understood that exploration was, in fact, a mining tenement, and that all the arbitration clauses that had been painstakingly negotiated for an actual mining venture could equally apply to exploration.

So, that was an oversight on the part of the Government negotiators, and the undertakings we had gathered at that session were breached when the legality of the situation later became apparent to the Aboriginal advisers. Does the Minister agree that we have a responsibility to the wider community in that Aboriginal land rights legislation sought to strike a balance between the legitimate claims of the Aboriginal community (not necessarily that of their advisers) and the rest of South Australia and that those resources should be in the first instance, discovered and developed?

I ask this question in light of my knowledge of what transpired as one of the proponents of the legislation. The problem with the Minister's approach appears to involve the time taken with all this. Now that we are three years down the track it does not seem to worry him. I think that the question of delay is the very essence of the matter. We must get on and develop these things and not ride roughshod over the legitimate interests of the people concerned. Does the Minister feel no sense of urgency at all about these matters?

The Hon. R.G. Payne: Yes, I do have a sense of responsibility to the community in South Australia. The Deputy Leader referred to a \$30 million programme, which is correct if the programme had gone from A to Z. Actually, like most of them, it was a programme for both seismic and other operations to be followed, if the indications were favourable, by additional expenditure. In fairness, if the Deputy Leader is putting these other things he has mentioned into the record, I must point out that it may have been that not all of the expenditure may have taken place. I agree that it would have been in the initial operations.

The Hon. E.R. GOLDSWORTHY: That is irrelevant.

The Hon. R.G. Payne: It may be irrelevant, but I think it is still fair to state it.

The Hon. E.R. GOLDSWORTHY: You are attempting to down-play it.

The Hon. R.G. Payne: I am not. The relationship between the Aboriginal communities who have achieved some recognition in the form of legislation and that other part of the community referred to by the Deputy Leader is also very important. That is another matter that I have tried to take into account. I repeat: I am endeavouring to get entry into the lands, and I am taking the steps which may lead to that entry. In the circumstances, I believe that is the correct approach.

Mr FERGUSON: I refer to 'Contingencies' on page 137 of the Estimates of Payments. I understand that the Department rents additional accommodation apart from its head office at 191 Greenhill Road. What is this additional accommodation for and where else are departmental offices located throughout the State?

The Hon. R.G. Payne: There are two offices under that line. The first is an office used by what is now the Future Energy Action Committee, headed by Mr Stewart. As I understand it, the other office accommodates the energy management group associated with the Government Energy Management Programme. The Director-General may be able to assist the Committee further.

Mr Johns: The Minister has covered the occupation of offices. We also occupy offices at the opal fields at Coober Pedy, Marla and Andamooka. We employ people at regional offices at Naracoorte, Mount Gambier, Crystal Brook, and Angaston. I do not have the number of officers employed at the various offices.

Mr FERGUSON: How does the Department differentiate the charge to building and property maintenance as distinct from the capital line for land and buildings?

The Hon. R.G. Payne: When an improvement is of a major nature, it is normally treated as a capital item. When an improvement is of a minor nature, the reverse applies.

Mr FERGUSON: What energy-saving initiatives have been adopted by the Department of its own accord?

The Hon. R.G. Payne: First, there is the total Government Energy Management Programme. In relation to initiatives within the Department, I think Dr Messenger can provide some useful detail.

Dr Messenger: For some time within the Department we have made an attempt to use smaller energy-efficient vehicles. We also have a small experimental fleet of lpg-fuelled vehicles. In the context of the lead-up to the Government Energy Management Programme we have looked at lighting levels and general energy consumption levels within the building. The initial areas of most value where the potential fuel saving was greatest was with the vehicles, because liquid fuels are deemed to be the most precious fuel and energy resource to conserve. Many of our activities were directed towards doing work for and with other departments. For instance, a large energy audit was done with the State Transport Authority on their workshops, buildings and vehicle fleet. Many of our activities involved helping larger energy-users than ourselves. The Mines and Energy Department, by the nature of its operation, is not a large energy user.

The Hon. E.R. GOLDSWORTHY: The Minister said that uranium exploration had declined from \$6 million in 1981 to \$5 million in 1982 and \$500 000 in 1983. That decrease was predicted in view of the Government's uranium policy and the Government's decision in relation to the mines at Honeymoon and Beverley.

We asked a series of questions last year in relation to Honeymoon and Beverley. Has the Minister re-assessed his opposition to the projects because of the unsafe nature of the *in situ* leaching process? That was the reason put to the

Committee last year by the Minister. I can refresh his memory: it was suggested that that had done a lot to damage the economy of South Australia in terms of mineral exploration. The figures that the Minister just quoted to the Committee bear that out. It was predicted by the Chamber of Mines and by any in the industry who had any knowledge that, because the Government decided to close down Honeymoon and Beverley (a decision that it was not prepared to make before the State election but only subsequently), it would lead to a marked downturn in exploration. Events have proved that to be the case. The overall exploration scene has shown a dramatic slump, and uranium exploration has shown an even more dramatic slump.

The Government gave three reasons in relation to those projects: first, that there was some division of opinion in the community. That division occurs in relation to the general uranium question. Secondly, they were only small and so they did not matter anyway—a rather peculiar argument when small business was being rather assiduously wooed in other areas. Thirdly, the only one to which one could attach any credence at all (and precious little at that), this *in situ* leaching method had been tried and found wanting. The Minister said:

I am referring particularly to sluice mining *in situ*. It is not an exact science and not a perfect mining operation. It has a number of attributes which have been recognised in recent years, but there are also problems inherent in the process—problems that have become more widely known in the United States to the extent that at least in one State no further permits are being issued for such projects at this time.

I do not wish to embarrass the officer—I am not particularly worried about the Minister—but in effect Mr Boucaut contradicted his Minister, unwittingly I suspect. Later in the proceedings on this question, when he was giving evidence he said, and I share the Minister's appreciation of Mr Boucaut's expertise—neither of us would want to quarrel with that:

As previously mentioned, the risk of pollution in the aquifer systems at Honeymoon would be related to movement of pollutants into the aquifer system. The Underground Waters Technical Advisory Committee believed that that potential was low, particularly as the gradients in the water table in the various aquifer systems were very low. The movement of water naturally is very slow, and any excursion from the *in situ* leaching process would consequently also be very slow. So, we felt that there would be ample opportunity, should an excursion occur, to trace and, by well known techniques which have been proven, stop that excursion and retain the pollutants.

That was a sort of worst case scenario that Mr Boucaut was analysing, which would be the migration of pollutants in the aquifers. The project had been through all of the environmental strictures, both Federal and State; an EIS had been approved; a \$10 million to \$12 million pilot plant had been erected, and is now rusting out, I dare say, but certainly idle. The Minister stated that he was worried about the *in situ* leaching process. I made some inquiries and have done some reading, too, as the Minister has done.

The Hon. R.G. Payne: As well as travelling?

The Hon. E.R. GOLDSWORTHY: As well as travelling, I read, too. I read on the train and on the plane. I do not waste my time in riotous living on these travels; I read assiduously. I discovered that this process has been in operation in America for many years, and much has been learned about it. It is operating very successfully and has operated very successfully in a number of instances.

The Minister undertook to review the situation, to continue reading, to keep gathering information, and to let us know if there was any change. Has the Minister in his further reading found that what Mr Boucaut is saying is true, or is he still at odds with what Mr Boucaut told us last year?

The Hon. R.G. Payne: I certainly have not directed any of my reading to finding out whether Mr Boucaut was right

or wrong; my reading has been of a general nature. I note that Mr Boucaut was quoted as saying in *Hansard* last year that the potential was low; he did not say that it was non-existent. At least, it would be fair to say that the possibility was there.

Secondly, I have tried to follow up, and I can tell the Committee that the same gentleman to whom I referred this morning—who comes from Phelps Dodge and is entitled not to have his name in *Hansard* without his permission—in discussions fairly recently told me that one of the operations that they had got going was a failed solution mining operation that had got itself into problems in a State in the United States and had had its licence withdrawn. They were operating it not as a solution mining operation but as a more conventional mining operation. At least, there are places where, apparently, the operation does not always work. I would be the first to admit that that could relate to the skills of the people concerned or to the geology concerned having proved to be different to what was thought, and so on. There are failures. I think that the honourable member was trying to find out whether I still have the same concern as I had then about solution mining, and the answer is 'Yes'.

The Hon. E.R. GOLDSWORTHY: I do not want to embarrass Mr Boucaut; perhaps he has done a bit more reading. I just want to get the Minister straight on this. Mr Boucaut made no bones about the fact that in the unlikely event that the low probability of something going wrong did occur he was sure that it could be contained. There was no problem with Mr Boucaut's evidence when he talked about the techniques being proven and the ability to stop any excursion if the low probability eventuated. When I read that the probability was low, the Minister made a note; that could be his out. Mr Boucaut went further and was quite clear in his evidence that if the low probability led to an excursion he had no doubt that it could be contained. So that argument will not hold up at all.

The Hon. R.G. Payne: Have you heard of a ship called the *Titanic*? They thought that they could contain that.

The Hon. E.R. GOLDSWORTHY: Just because the *Titanic* sinks one does not stop all the ships around the world. Just because someone loses a driver's licence one does not stop everyone from driving on the road. That is an absurd argument. Have the Honeymoon and Beverley people got any hope with this Administration of getting their projects off the ground? As I say, Honeymoon is in mothballs. All of the Government requirements have been met. They were prepared to take the risk of finding the markets that the Minister says are not there. If they did not find the markets, at least they have provided employment during this very difficult period, and they spent their money in South Australia to create ancillary employment.

The Hon. R.G. Payne: The markets were not there.

The Hon. E.R. GOLDSWORTHY: That the markets are not there for them is an irrelevant argument. It has never been the Government's responsibility to run around and find markets for every entrepreneur who wants to do something in the State. Have they any hope at all of getting off the ground, or might they just as well pull things down?

I asked the Minister the same question in relation to Beverley, and he told me that one of the principals had had discussions with him and was composing himself in a spirit of patience. Have they any chance? Is the Minister prepared to take a lead within the councils of the Labor Party to see that these mines are opened? What is the present position? Do we have to wait around to see who has the numbers?

The Hon. R.G. Payne: I can only say that retention leases which contain rights to the areas concerned were offered, and the companies concerned chose to take out those retention leases.

Mr ASHENDEN: They did not have much choice, did they?

The Hon. R.G. Payne: I would have thought that, if they believed that there was no hope, they would have sold up lock, stock, and barrel.

Mr ASHENDEN: They hope that the Liberal Government is returned at the next election.

The Hon. R.G. Payne: I hope that that is not all they are basing their decision on.

The CHAIRMAN: Order! I know that the majority of Committee members want to hear the answer: I want to hear the answer. The Deputy Leader asked a question, and the member for Todd should listen to the reply.

The Hon. R.G. Payne: The proponents hope to get the projects under way, and they have taken out retention leases which retain their rights. I do not need to say any more. It is not up to me to decide whether they stay on the scene.

The Hon. E.R. GOLDSWORTHY: The Minister says that he could not care less. A related matter that was not canvassed this morning, another casualty of the present Government's policy, is uranium conversion, the step before uranium enrichment. There was a proposal based on the City of Port Pirie (where unemployment is particularly high), endorsed by the Labor controlled city council and certainly by the then Mayor of Port Pirie, that it should go ahead. Will the Minister give a status report in relation to the deliberations of the uranium conversion committee, which is examining the feasibility of uranium conversion based on Port Pirie? Has anything eventuated since last year? The committee was due to report, but we have seen no report from the enrichment committee. Has the Minister received a report and, if he has, can we see it? What has happened to the report?

The Hon. R.G. Payne: I do not think that I have anything to report in this matter other than that I believe that there is to be a meeting on Friday in Melbourne. As far as I know, Mr Wilmshurst will be attending that meeting.

The Hon. E.R. GOLDSWORTHY: I would like more information about this meeting. I understood that Mr Wilmshurst was going overseas this week.

The Hon. R.G. Payne: He is going to the meeting first and then overseas, I understand.

The Hon. E.R. GOLDSWORTHY: I wish to ask a supplementary question. What will the meeting be about?

The Hon. R.G. Payne: I have no information about the agenda of the meeting, but I will endeavour to obtain details if that is what the honourable member wants.

Mr KLUNDER: Will the Minister explain the wide diversion between the allocation for 1983-84, the actual payments, and the proposed allocation for 1984-85 for 'Energy Information and Education—Operating expenses, minor equipment, publications and sundries', under 'Energy Division'?

The Hon. R.G. Payne: The difference between the allocation and the actual expenditure last year relates to the national energy conservation campaign. It would be fair to say that that in effect might well have appeared under other lines previously. There has been some discussion between Treasury and Mr Whinnen in this regard, and I ask him to amplify.

Mr Whinnen: The allocation of \$83 000 in 1983-84 was basically for the operating expenses of the Energy Information Centre, as shown in last year's Estimates of Payments. The expenses were fully met from this budget, with the exception of rent for the Energy Information Centre, the cost of which was met from the administration line. About \$30 000 was underspent, reducing the \$83 000 to \$52 000, representing the ongoing operating expenses of the Energy Information Centre minus rent. Another \$80 000 has been allocated for the national energy conservation campaign. Under 'Miscellaneous' (page 139) last year \$112 000 was

allocated for that campaign and \$111 000 was spent, but there is no proposed allocation under that line this year. The combination of the two lines has resulted in a reduced allocation of \$30 000.

Mr KLUNDER: How many school groups and other groups visited the Energy Information Centre in the past 12 months?

The Hon. R.G. Payne: Dr Messenger has those details.

Dr Messenger: In 1983-84 there were 21 300 visitors to the centre, a surprising number, indicating the level of interest. There were 8 800 inquiries by telephone and 1 710 inquiries by mail. There is a very high level of activity and interest. On top of that, personnel of the centre visited country areas to give talks, and there were about 5 000 contacts at the Adelaide International Exposition from visitors who either picked up publications, asked questions, or viewed displays. There has been a quite high level of activity at the EIC this year.

As part of the expenditure covered by the re-allocation to the national energy conservation programme, each year we have produced a range of brochures, and perhaps the most outstanding one this year is the brochure on renovating a house for energy conservation. A lot of activity in the past has related to new houses, in regard to which it is perhaps easier to incorporate low energy features. Of course, the great majority of housing stock is older houses, to which energy saving techniques still apply. This year we put particular emphasis on this brochure, which has been well received. It was released about two weeks ago: some members might have seen details in the *Advertiser*. From comments received by the EIC, the brochure has been welcomed in the community.

Mr KLUNDER: What information in the form of pamphlets and so on was added to the range available last year at the centre, and what is the range of subjects to be covered this year?

The Hon. R.G. Payne: I will ask Dr Messenger to provide that information.

Dr Messenger: As well as the home renovating brochure, which was one of the most significant brochures, there was also a teachers guide to the EIC which is intended for teachers taking a class to the EIC to cover the range of displays and to cover the type of project approach for which a visit can be adapted. Because of the interest in slow combustion heaters, a brochure on this topic was added to the series on the selection and use of energy efficient appliances (brochure No. 10 is in respect of slow combustion heaters). We have also produced a brochure on metering and on how to read your meters: 'Meet your meters, electricity and gas', the intention being that the first step to controlling energy consumption is to monitor one's meter, understand it and then do something about one's energy consumption. To some people a meter can be a frightening piece of equipment, and this brochure indicates how simple meters are to read. They were the key publications.

We also have teacher kits and slide kits for schools, and we also did joint work with the Commonwealth on energy management brochures and industry brochures that were jointly funded. The intended publications for this year include a major brochure on low energy house design which is to tie into a thrust into energy efficient housing which will be a major activity this year through a national programme in which the States and the Commonwealth are co-operating. We intend to produce a brochure on hot water systems and, hopefully, a guideline to a so-called retro fit display village where it is intended to fit some older houses with ideas on how to save energy as a public display vehicle similar to that adopted for the low energy house erected at the Wynn Vale display of a major builder. We will have something on remote area power systems and, because of

the high demand in areas such as home heating and domestic insulation, a reprint and update programme of those brochures will also be undertaken.

Mr ASHENDEN: I wish to ask further questions about the effect of the Government's decision to close the Honeymoon and Beverley uranium mines. While I was overseas I held discussions with a number of people involved in the nuclear fuel industry. It was suggested to me particularly in the United States and France that officials could not understand the South Australian Government's decisions to close those mines. Several reasons were advanced. It was incomprehensible that a Government would cause the State to miss out on employment and investment opportunities. Already we have seen that \$12 million invested by the Honeymoon and Beverley companies stands to be lost completely by those companies. It was further pointed out to me that as a result of those decisions other exploration companies obviously would be extremely wary in investing funds to search for minerals in South Australia. The Minister spoke of \$6 million exploration in 1981 dollars; in 1982 he spoke of \$5 million in 1982 dollars; and in 1983 the investment level was down to \$500 000 in 1983 dollars. That is surely a plummeting of investment funds used to seek uranium in South Australia. I see that fall as being tied directly to the present Government's stance and the actions it took in regard to Honeymoon and Beverley.

People overseas cannot understand why the Government is turning down investment dollars and why South Australia is turning down jobs. More importantly, they could not understand why the State was turning down royalties. Certainly, whatever is sold overseas in respect of minerals includes a royalty that the State Government stands to gain. In turn, this reduces the burden on taxpayers in South Australia. That was an important point put to me. People overseas could not understand why decisions were taken that would actively discourage such exploration in South Australia, because virtually any mining company in South Australia would expect the most likely find to be uranium. Another point put to me was that people overseas were extremely concerned from their own point of view that at present Australia could still be in the box seat in regard to selling uranium overseas. In France it was suggested to me and my colleagues that unless uranium mining gets underway within two years in Australia we will have missed the boat completely because South America, South Africa and many other countries are developing uranium resources, and countries buying uranium will enter into contracts with those countries.

It was pointed out to me that such countries would much prefer to deal with Australia because they regard it as being more reliable politically in terms of supply and sale—although how they can believe that in terms of the present State and Federal Labor Governments is beyond me. Nevertheless, that is the impression of overseas countries. The concern expressed is not local. Polls show clearly that the majority of Australians favour the exploration for, and mining of, uranium, yet South Australia is being forced into a position where it has a resource and, unless action is taken shortly, that resource will never be of any value to the country—a resource that could possibly bring tens of millions of dollars of tax benefits to South Australia. Does the Minister accept that his Government's decision in closing Honeymoon and Beverley has had an adverse effect on exploration in South Australia and on the confidence of mining companies in being able to develop mineral wealth if they find minerals in their exploration?

The Hon. R.G. Payne: I accept that it could have had some effect on exploration in South Australia in regard to uranium. I am inclined to ask the member and his colleagues how we would get these royalties for exporting a commodity

for which one cannot get an export licence. No-one seems to want to address that question.

Members interjecting:

The CHAIRMAN: Order!

The Hon. R.G. Payne: It is worth putting on record the position in regard to other States when we are talking about mineral exploration, because that has not yet been raised. I refer to figures from the Australian Bureau of Statistics for 1981-82 and 1982-83—the latest information available for all States. One can see that the percentage differences between 1981-82 and 1982-83 on a State basis are a 21 per cent downturn in Western Australia, 29 per cent in Queensland, 27 per cent in New South Wales, 22 per cent in South Australia, 20 per cent in the Northern Territory, 17 per cent in Tasmania and 24 per cent in Victoria.

Therefore, South Australia did not necessarily fare all that badly. Certainly, there appears to be a downturn in the search for uranium, but there have been certain trends in relation to mineral exploration over the whole country. I wish, sometimes, that the honourable member would take that sort of thing into account.

Mr ASHENDEN: I do take that into account, but we unfortunately also have a Federal Labor Government that must be considered when talking about the Australian figures that the Minister has raised. Therefore, the Federal Government's actions are reflected Australia-wide and the State Government's actions are reflected within South Australia. I do not believe that there is any other State Government that has actually forced mining companies that have invested \$12 million to lose that \$12 million. The Minister would well remember a question I asked in the Parliament as to whether or not the State Government would reimburse those mining companies and he said 'No'. One cannot expect companies to invest \$12 million in a State, have that money taken away from them and not be unhappy about that. Other mining companies then look at this and ask why on earth they should risk capital because if they find uranium it will just be wasted money—money that could have benefited the company, the South Australian Government and South Australians generally.

I will pursue this matter further because I am unaware of any other State Government having forced mining companies into the sort of situation that has occurred at Honeymoon and Beverley. The Minister would probably remember that at this time last year I raised with him the direct effect that this had had on two of my constituents—one was working at one of the mines and the other was a secretary for one of the companies. Both of those people were advised at that time that they would lose their positions because of the Government's action in relation to those two mines. At the time, the Minister stated that the South Australian Government would do all that it could to find other employment for the people affected. Will the Minister tell me how successful he or the Government has been in replacing the jobs of those people who lost jobs?

The Hon. R.G. Payne: So far as I am aware, directly the Government only picked up one of those employees.

The Hon. E.R. GOLDSWORTHY: And 99 more went on the dole.

The Hon. R.G. Payne: I gave an undertaking; names were secured; a circular was sent throughout the Public Service; and a geologist was employed. Irrespective of whether or not the former Minister is disparaging about that, I am sure the geologist is happy. I was asked what other State is in a position where an enterprise is unable to proceed. I draw the honourable member's attention to Koongara and Jabiluka in the Northern Territory and Yeelirrie in Western Australia, so it seems that we are not alone in this matter, as he implied.

Mr ASHENDEN: Were they closed by State Governments or was closure forced on them by the Federal Government? That is quite different, because there is no doubt that Hon-eymoon and Beverley were closed by the State Government. My impression in relation to Jabiluka and Yeelirrie is that a Federal Government decision forced their closure.

The Hon. R.G. Payne: There may be that subtle difference but the fact is that there are other enterprises to which this has happened in other States. That is the point I put forward.

Mr GREGORY: Will the Minister say what progress has been made on the evaluation of the four coalfields under consideration and when a decision is likely in relation to them?

The Hon. R.G. Payne: The position in relation to the evaluation of those four coalfields is that consultants are presently involved, that Rheinbraun of West Germany and Bechtel, together with Mr Stewart and his committee, are at a stage where it is likely that the submissions will be in from the four proponents by the end of November. I have heard nothing that would allow me to say that they will not be able to meet that deadline. At that time there can be a further economic evaluation of the proponents' submissions. The last time I spoke with Mr Stewart was a few days ago before he went to Melbourne and he told me that things were proceeding.

Mr GREGORY: What action has been taken in connection with the alternative energy recommendations laid down in the Stewart Committee Report?

The Hon. R.G. Payne: I suppose one initial action that has been taken relates to the programme of wind measurement that has been announced. Five locations are currently being selected in the southern area for the location of equipment to take wind measurements and a further 23 sites will follow in other parts of the State. It might be of interest to Committee members to know that it is sometimes said that there has been a lot of wind measurement done in this State. Some people recall that ETSA took wind measurements in the 1950s. I think that that is the problem and why it is necessary to have an updated programme. I am told that the information obtained then was often recorded at fairly low heights. Obviously, measurements need to be taken at a range of heights in relation to the location of wind generated electrical energy. The other matters contained in the report are to be addressed by a subcommittee of the Future Energy Action Committee. Dr Messenger is on that subcommittee, so I invite him to provide details about this matter.

Dr Messenger: The major thrusts identified that needed to be followed up involved the wind monitoring programme, photo voltaic cells, cogeneration (which is a means of making electricity at the same time as heat is generated), load management and pumped storage. We have implemented a two-stage wind-monitoring programme, as the Minister has said. Initially, there will be five sites on the Fleurieu Peninsula south of Adelaide, which will be identified soon. Later this year the programme will be extended to the rest of the State. At the same time as this is progressing we will be looking in detail at the types of machinery being tested overseas, in particular from the point of view of maintenance and reliability aspects because it could eventually lead to a demonstration project where, obviously, reliability is an important aspect. We have already touched on photo voltaics today in relation to the Wilpena demonstration project, which is something we are putting effort into. The Australian Mineral Development Laboratory has been working with us on reviews of the technology involved and the future potential of fuel cells and also of inverters which are part of this total photo voltaic proposal.

The cogeneration aspect is being looked at first by a committee of the South Australian Energy Council and, also as part of the Government Energy Management Programme,

we are looking at a demonstration project involving a particular hospital. On the questions of load management and pumped storage we are working with ETSA and the E & WS to identify and promote particular practices and projects. So, it is a fairly broad ranging approach following on the Stewart recommendations.

[Sitting suspended from 4.1 to 4.17 p.m.]

Mr GREGORY: The *Economist* of 22-28 September 1984 contains a lead article on the shipping of uranium under the section dealing with 'Europe', as follows:

Since the wreck of the *Mont Louis* off the coast of Belgium last month, with a cargo of 225 tonnes of uranium hexafluoride bound for the Soviet Union, several important issues about the trade in radioactive material have floated to the surface . . . Last, and most intriguing, is the matter of why the *Mont Louis* was taking uranium to the Soviet Union in the first place . . . It should not have caused such surprise that the cargo on the *Mont Louis* was going to the Soviet Union. Sending uranium from western Europe to be enriched in the Soviet Union is common enough . . . Some 10 years ago, America had monopoly in the international enrichment business. Today, it has only about 35 per cent of the market. In the early 1970s, the Americans started raising prices, and setting stiff contractual conditions. This drove their European customers to look for other sources of supply.

The Europeans went into uranium enrichment for themselves, on the assumption that the growing use of nuclear reactors would eventually justify the expense. In a sorry display of European non-co-operation, however, they chose two different processes. France, in partnership with other countries including Iran, set up Eurodif, which uses an energy-guzzling gas diffusion process for enrichment. A plant was built at Tricastin, which has to be fed by large nuclear reactors. Eurodif had intended to build another plant for exporting enriched uranium, but the Shah of Iran was to put up 20 per cent of the money, and the plan fell through after the Iranian revolution.

Britain, West Germany and Holland set up an enrichment consortium called Urenco, having decided to try the unproven gas centrifuge technology. Work had been done on this by German scientists during the second world war, but it had never been put into practice.

The Europeans also turned to the Soviet Union, which had been enriching uranium for military purposes since the late 1940s. (More recently it has been supplying fuel for the expanding nuclear power programme in eastern Europe.)

The article goes on to talk about what is happening. A table in the article gives an idea of how much uranium the Soviet Union is enriching. (It talks about it in tonnes as separate work units.) Austria from 1979 to 1989 will enrich 1 075 tonnes. Belgium from 1979 to 1985 will enrich 1 300 tonnes. Britain from 1980 to 1989 will enrich 1 000 tonnes. Finland from 1979 to 2000 will enrich 7 441 tonnes. France from 1979 to 1983 will enrich 4 630 tonnes. Italy from 1979 to 1983 will enrich 4 225 tonnes. Spain from 1979 to 1990 will enrich 7 484 tonnes. Sweden from 1979 to 2000 will enrich 2 530 tonnes. West Germany from 1979 to 2000 will enrich 16 547 tonnes. Under this table it states:

Roughly 120 tonnes are required to keep a 1 000-megawatt power station going for a year.

Will the Minister comment on that?

The Hon. R.G. Payne: It tends to illustrate that which I tried to put forward earlier that it is not necessarily the window—the term used by the former Minister—that exists in getting into the enrichment game. All I tried to show earlier was that what the member put forward as a definite billion dollar project, with employment and all that sort of thing that goes with it, was not a sure fire proposition. Clearly, if one looks at the situation throughout the world there may be openings. I am not saying that there are none. Clearly, there is also a large demonstrated capacity already in existence which, by the tonnages that have been given to the Committee, indicate a fair degree of satisfaction with at least one place where they can have enrichment carried out. I thank the honourable member for drawing my attention to the article. I hope that I do not disappoint the

Deputy Leader when I say that I will take the opportunity to read it in full at a later occasion and do some more of my assiduous reading.

Mr GREGORY: The article also refers to the development of the laser process which will make other processes obsolete and which has a reduced cost of production.

The Hon. E.R. GOLDSWORTHY: I want to pursue the question of exploration and turn our attention to gas supplies (page 5 of the yellow book). Last year I asked some questions about our future supplies of gas, and the Minister is on public record as saying that our gas supplies were assured well into the 1990s. I think, from memory, that the Minister made a Ministerial statement which painted a very reassuring picture concerning our gas supplies. How much money is being spent in the search for gas in the Cooper Basin this financial year?

The Hon. R.G. Payne: I will ask Mr Laws to put forward that information as he is directly involved with the matter.

Mr Laws: The main thrust towards gas exploration in the past few years has been the accelerated gas programme, which is continuing in the current financial year. The accelerated gas programme was an undertaking by the producers to spend \$55 million from 1983 to 1985. That programme is approximately halfway towards completion. We have annual numbers for the programme. About \$18 million will be spent on gas exploration under the accelerated gas programme in this financial year. Additional gas exploration is being undertaken by the producers outside of the accelerated gas programme at the moment. This is occurring in a number of different directions, but perhaps an important area is the drilling on the Big Lake field. There are a number of wells being drilled there which address the deeper reserves in that field from the Patchawarra and Tittawatta formations. Some of those wells were drilled late last financial year. The programme includes four wells, which the producers are drilling under the base programme and three wells under the accelerated gas programme.

As a result of that drilling, a substantial amount of gas has been proven up in the deeper formations at Big Lake, and that has been added to the production schedule. There are additional wells, apart from Big Lake, being drilled by the producers over the past three or four months, outside the accelerated gas programme, and I refer to the Brumby Field, the Kidman Field and the Andree Field. Many wells are drilled where the primary target is oil, but they are deepened to the permian level, which is the main gas-bearing horizon. There are a number of wells which have a primary target of oil and a secondary target of gas, by deepening the wells by some few thousand feet. That is a common practice in the Basin. The exact amount expended on this deepening process has not been calculated, but it is about one-third of the cost of many wells with a primary target of oil.

The Hon. E.R. GOLDSWORTHY: What is the current situation in terms of acknowledged gas reserves to satisfy the Sydney contracts? The producers make encouraging noises from time to time, depending on the state of play. I think there was a press report in the *Advertiser* this week stating that all is rosy in the garden again. In fact, the Minister himself has stated that we need not be too fussed about the position because all is well. That was the tenor of his statement. We have also read another report in the media this week to the effect that a couple of wells have found gas.

During the Estimates Committees last year the Minister referred this matter to Mr Watts. At that time it was stated that we were really hanging our hats on tight gas produced in the fracking process. Mr Watts said:

As I have mentioned previously, over the past few years the Department has embarked on an independent evaluation of gas

reserves using consultants. That work is continuing. I can provide some figures. For example, we estimate extra drainage from known fields will amount to about 500 b.c.f. of gas.

At that stage I think we needed 750 b.c.f. to satisfy the Sydney contract. That was also the case during my three-year term as Minister and, in fact, that did not change until last year. Mr Watts continues:

The possible reserves converted to sales gas would be of the order of 570 b.c.f. of gas. The big problem with future gas supplies is that they are heavily dependent on the tight gas reserves. As mentioned previously, there are seven trillion cubic feet of gas in place in that category. That is as much as has been found in the Cooper Basin. The problem is whether those reserves are deliverable. Recent work is encouraging, but it is in the early stages.

As I have said, this was a result of the fracking process. I think that work has now been completed. Mr Watts also said:

Of course, it will be expensive gas. We place a very conservative estimate of 730 b.c.f. on those categories.

Recently I spoke to one of the producers and he said that the situation is very disappointing. He may have been feeding me a pessimistic line, while the *Advertiser* was fed an optimistic line this week when it reported that the Government may pursue an alternative and convert to coal.

Getting to the truth of the matter in relation to the reserves is one of the most intricate exercises that I have undertaken in the past five years. I have come to the conclusion that I do not think anyone knows. We seem to swing from pessimism to optimism, depending on who we are trying to impress. I was told only about 10 days ago by a major producer that it was disappointing that the fracking process had proved up only 70 b.c.f. of gas and, as a result, we have to look elsewhere. Last year the solution was tight gas; this year, we have to look elsewhere.

We have an encouraging announcement from the producers who want to make sure that they have part of the action in relation to future electricity supplies. I take that with a large grain of salt, quite frankly. I want any facts that the Department may possess. I do not want the optimistic gloss—I want the facts as the Minister knows them. What are the proven reserves of gas required to satisfy the Sydney contracts, and what is left over, if anything, for South Australia after 1987?

The Hon. R.G. Payne: On 19 September, the Cooper Basin producers declared that they had sufficient proved and probable gas to fulfil their contractual obligations to AGL. As I understand it, the declaration was not accompanied by much technical detail or data. However, the contractual arrangements that prevail are that AGL can accept that that is the position, or it has the right to have an independent assessment of what is being declared. One assumes that this would take about six months or so, and AGL has 60 days to exercise the right to either accept or call into account the independent advice. I think the answer sought by the Deputy Leader is not of a nature which can be given in concrete form.

I will invite Mr Laws in a moment to see what detail he can put forward, but I ask the Deputy Leader to consider that it is in our interests to see AGL's quantities declared, whether they be schedule A, schedule B or whatever. If that gas is there, one can fairly reasonably expect that future discoveries are headed our way and that that presumably is in our interests. I do not think that the Deputy Leader would quarrel with that. I am not sure that the fracking was only discovered at 70 BCF—I have not heard a figure on it; I know that there has been some disappointment with fracking results, taking into account the high costs, but I do not know that it is as conclusive a feeling as is suggested by the Deputy Leader. I invite Mr Laws to see whether he can put forward some of the BCF-type figures, which the former Minister seems to desire so much.

Mr Laws: As far as tight gas is concerned, this was partly explored for by the SAOG-Sole risk programme and also by the accelerated gas programme, looking at a number of different fields. The main one was the Big Lake field—the deep horizons, the Patchawarra and Tirrawarra formations in the Big Lake Field, and also looking in some very big structures such as McLeod, Burleigh and Kirby. The drilling on Burleigh and McLeod has been generally disappointing. The wells have not yet been fractured, but a well has been drilled on each of these structures and the results of the well were not particularly encouraging.

Some fracing will be carried out, but not until next year. The reservoirs were very tight and hot, and only very small flows of gas were obtained on a drill stem test in the wells. However, the main encouragement about tight gas has been that these deeper formations in Big Lake have been found not to be as tight as originally thought. Big Lakes 26, 27, 29 and 30 have been fraced. The most encouraging one was Big Lake 26, which gave a good flow of gas up to over 10 million cubic feet a day after fracing. But the most important thing is the realisation that many of these Big Lake deep sands have a free flow component of gas. One cannot call it tight gas at all.

The producers, in their recent submission to the Stewart Committee, have allocated 270 BCF of gas in Big Lake, which they have put into the production schedule. Up until a year ago all of this gas in the deep reservoirs was included in what was called the tight gas category. Now, there has been a realisation that this is not the case, and there have been some even more encouraging results in that Big Lake 31 recently flowed gas at 10 million cubic feet a day before fracing. That is certainly not a tight gas situation, but a free flow gas situation. Big Lake 33 flowed 10 million cubic feet a day from the Patchawarra formation and Big Lake 32 flowed a similar quantity of gas from the Patchawarra formation of five million cubic feet a day, from memory. Although the exploration for the very tight gas and the fracing results have not been particularly encouraging, we have come to understand that some of the reservoirs that we thought were entirely tight gas actually have an important free flow component. So, I do not agree that only 70 BCF of gas has been proved by the tight gas evaluation programme. On the producers' own figures, they have put over 200 BCF into the production schedule from reservoirs previously thought to be tight.

As far as the declaration of AGL is concerned, the reserves on which we have not yet got any detailed figures from producers on the quantities of gas from individual fields that go to make up this quantity of AGLA the declaration only having been made on 19 September. If we look at the producers last submission, which they handed to the Future Energy Action Committee, it stated that there were 2 533 petajoules of sales gas available in the production schedule plus 254 petajoules of ethane. In addition, there was 600 petajoules of gas, which they attested as being available, but which does not currently have economic and technical criteria to admit it to the unit, but was still available and producible. That gives a total of 3 387 petajoules that the producers attested in August as being available.

The Hon. E.R. GOLDSWORTHY: That is from now on?

Mr Laws: From 1 January 1984. If we look at the AGL contract between now and 2006, and also at the PASA contract until the end of 1987, the contract quantity that should be sold under those contracts of about 2 950 petajoules. However, the market forecasts done both by PASA and the producers suggests that the amount of gas that will be consumed will actually be some 200 petajoules less than that. So, if we take the 3 387 petajoules that the producers in August attested as being in the production schedule and subtract from that the market demand of 2 720 petajoules

to satisfy AGLA, AGLB, and PASA until the end of 1987, there are some 660 petajoules of gas available to meet Adelaide's demands after 1987.

The Hon. R.G. Payne: .05 is the factor.

The Hon. E.R. GOLDSWORTHY: What is the figure?

Mr Laws: The conversion factor is: 1 BCF equals 1.055 petajoules; so there is only a 5 per cent difference.

The Hon. R.G. Payne: It is a teensy bit smaller. You were looking for 750.

Mr Laws: If the 667 petajoules of gas available under the producers' figures supplied to the FEAC Committee in August does not take into account any allocation of gas for a petro-chemical plant (it would take something like 480 petajoules) and if that 480 petajoules is subtracted we are left with 180 or 190 petajoules available for South Australia's demands after 1987 plus the gas for a South Australian petro-chemical plant.

The Hon. E.R. GOLDSWORTHY: About 150 or 160 BCF or a bit more? That is about 18 months supply.

Mr Laws: About two years supply, yes. Taking into account that we have NPS 1 and 2 coming on stream in the same period. They can reduce the usage.

The Hon. E.R. GOLDSWORTHY: In current usage, it is about 18 months supply, but the projection is a diminishing use of gas for electricity generation, which will mean that South Australia will use less gas per annum, which will stretch it to two years supply after 1987.

The Hon. R.G. Payne: Yes, if nothing else is found and admitted to schedule and so forth.

The Hon. E.R. GOLDSWORTHY: When decisions have to be made in relation to our future electricity generating options, and I was told on coming to Government that we had to make a decision within six months—and that time has been spread out over three years to 4½ to five years down the track—we still have not made a decision. We have the Stewart Committee looking to make a decision in relation to our future electricity supplies. It does need to be made in the near future. From my advice, they should have been made 2½ to three years ago. That would hardly be a sufficient reserve of gas to ensure that we have got sufficient gas to last us until 2006, as proclaimed on the front page of the *Advertiser* a few days ago. Does the Minister agree with my assessment?

The Hon. R.G. Payne: I share some of the concerns and worries of the Deputy Leader but, unless my sums have gone awry, the honourable member does not take into account the possibility of further reasonable discoveries of recoverable gas. Mr Laws adverted to the fact that the thinking about what were previously called tight gas formations has already undergone a change. They continue to be a useful augmentation. It just does not seem logical to me that the producers do not understand their position: they can and will provide sufficient funds to carry out the necessary exploration work to discover further supplies of gas. I suppose that they would sooner find oil, but Mr Laws also pointed out that sometimes oil operations are carried out but gas is found as well. That is one of the bonuses we might be entitled to expect.

In relation to the time when a decision needs to be made, it is all very well for the Deputy Leader to have a point of view about when we must decide to obtain additional means of generating electricity: it is all very well for me to have a view. But we would be less than sensible if we did not listen to the advice of those people who are qualified to give advice. There has been no criticism of the Stewart Committee, its operations, its personnel, or the way in which it undertakes its task; in fact, there has been very little criticism of the recommendations. It was pointed out that we could run a sort of insurance policy by means of interconnection with Victoria so that power can be made available on an

opportunity basis. That matter is being addressed. I would suggest that we are advancing at the correct rate. We could obtain another form of energy, for example local lignite, in sufficient time.

Mr KLUNDER: What is the present status of negotiations on the interconnecting link with Victoria, and what is the likely time frame?

The Hon. R.G. Payne: I understand that officers continue to meet. There are many technical details to be settled and arrangements to be entered into. My last involvement was in relation to a further approach to the New South Wales Premier two or three weeks ago, if I recall correctly. All the States involved have indicated agreement with the proposition, and I suppose that we are at the stage of hammering out the details, the actual cost, who will pay what, the charge for energy supplied, and so on. Of course, that is an ongoing process.

Mr KLUNDER: What is the present status of NPS3?

The Hon. R.G. Payne: NPS3 seems to have returned to favour somewhat. There was a time when, because of what we believed to be problems with the winning of sufficient Leigh Creek coal at a cost that would maintain the economies for NPS3, ETSA was concerned and believed that NPS3 ought not be proceeded with at a planning stage. Mr Johns may be able to provide more recent factual information in relation to his work on the Future Energy Action Committee and so on.

I understand that ETSA's concerns about coal have been reduced. For example, a senior officer at Leigh Creek has been overseas to assess methods of dealing with the awkward seams and so on. That officer has returned and feels reasonably confident that the new equipment and methods being used at Leigh Creek will be more than able to cater for the additional supply. I am not very well versed in the technical details, but I believe that if NPS3 is built it will be an open station as distinct from the way in which two units are presently being constructed. That could lead to economies. Mr Johns may be able to add details.

Mr Johns: NPS3 is to be reconsidered late next year, by which time there will be further operating experience at Leigh Creek. We will be able to get a line on new developments or changes to which the Minister referred.

Mr GUNN: What would be the cost to Treasury or ETSA if the 10 per cent surcharge for electricity was abolished?

The Hon. R.G. Payne: I am not able to say off the cuff. I have seen the costed figure, but I do not have it available, and I would not like to make a guess and give wrong information. I will obtain that information.

Mr GUNN: I note that the yellow book refers to work on the Stuart Shelf. I take it that that is exploration work outside the area in which Roxby Management Services is operating. What work is the Department undertaking in those areas?

The Hon. R.G. Payne: An interest in some of the leases on the Stuart Shelf was relinquished, but there was not a total relinquishment. That was publicly announced. The honourable member is referring to an activity that has not come to my notice.

Mr Johns: The work referred to relates to test geophysical work carried out by departmental officers, in the nature of high resolution seismic surveying. I suppose it was principally directed towards assistance at Mount Gunson to attempt to extend the reserves there. Work was carried out in conjunction with the Mount Gunson proprietors and other explorers on the shelf, such as Carpentaria Exploration and Roxby Management Services, in an attempt to assist with interpretation of depth to basement and hence to assist with exploration. I suppose one could add in this context that the work is fairly advanced, to say the least. I believe that

the Department is the only organisation engaged in this sort of research.

In fact, we have contracted to do work to assist Mount Isa in its attempts to extend its understanding of mineralisation. It has been successful in resolving some of the uncertainties relating to basement occurrence, but I have to say that it has not been successful in finding ore to date; perhaps that will come.

Mr GUNN: In regard to South Australia's only gold battery at Peterborough, has the Department any plans to upgrade and improve that operation? I understand that some ore is still carted from Tarcoola and that there is still some interest in the old Teetulpa mines. Has the Minister any information about the amount of activity in regard to prospecting and mining? The Peterborough battery is unique and has tourist potential. Peterborough needs all the help it can get because of various closures in the town. Have plans been made to change the old battery at Glenloth to another position?

The Hon. R.G. Payne: I am delighted that the member has asked this question because I have a kind of fascination with gold batteries, and one of the things that I have been able to do since becoming Minister has been to look at the remains of the Mount Torrens battery and visit the Peterborough battery. As a Government and as a Department we have a responsibility to try to have at least one viable gold battery in operation. Although I do not know the number, people are continually prospecting and working at gold in a small way, and there is always the chance that one of these people will come across a find of importance to this State. If there is not any convenient means for them to get the services of a battery, it would not be in the interests of South Australia. Certainly, I accept that the Peterborough battery has definite tourist potential and I have had some discussions with the Department, although I do not remember whether or not we have a final plan to upgrade the battery, but we have been undertaking extensive improvements as a form of upgrading. We made an arrangement to put in an electrified drive, although the old engine should never be let go because it is a marvellous piece of equipment. As I have been so involved recently with gas and electricity, perhaps I have not been brought up to date on some of these matters and I will ask the Director-General to comment.

Mr Johns: We have taken steps to upgrade the Peterborough battery in terms of paint and in terms of making it safe for visitors. There is interest as a result of tourist activity at Peterborough. We have put in handrailings, steps and other improvements to make it safe. We have splashed paint around to make the battery appear as though someone belongs to it. Increasing capacity is another question. The battery is to some extent a living museum piece. It keeps pace with parcels of ore as they come in to be treated, but it has a slow throughput, as members are probably aware. If we had a major gold strike we would have to do something like expand the plant considerably, but we could not justify expanding the present capacity. We might consider sooner or later bringing in what is left of the battery at Glenloth. Present demand does not justify that at present.

The Hon. R.G. Payne: Probably the member understands, but we run the battery at a loss. That is justified because we need to have at least one working facility for people who are still trying to find gold.

Mr FERGUSON: I refer to page 138 in regard to contingencies in the Engineering Service Division. As a result of the appointment of a business manager, can the Minister indicate whether an increase in water drilling has been experienced and in what sectors?

The Hon. R.G. Payne: There has been some increase in water drilling. Probably it is not as large as we had hoped,

but it has become somewhat steady in nature recently; this leads us to believe that we might continue to get work in that area.

Mr FERGUSON: Will the proposal to mine coal at Kingston using dredging techniques be of an advantage in terms of amelioration of the effects on the ground water supplies of local landowners? Will the mixing of waters from two aquifers occur during the removal of the coal? If so, what will be the effect on water quality?

The Hon. R.G. Payne: The position is that Western Mining Corporation as the proponent will need to prepare an addendum to the EIS and many matters will be addressed in that. Subsequently there will be an assessment of what is in that addendum to the EIS. I will ask Mr Boucaut to give his expertise to the Committee again, even if this results in the Deputy Leader's being able to ask me a question next year not dissimilar to the question that he asked today.

Mr Boucaut: We do not have firm details as to the dredging process that will be carried out at Kingston, but we have had preliminary discussions with Western Mining Corporation and certainly the early indications are that the impact of that dredging operation on the ground water resources in the South-East will be small in comparison with the previously proposed dewatering operations. There probably will be a small well field established that will be used as make-up water in the pit during dredging operations to make up the water that is pumped away with the coal. The effects of this will be confined to one or two kilometres of the mine site. I understand that the operations of the dredges themselves can be closely managed and that their level can be controlled within centimetres. This will enable operators to leave the clay layer underneath the coal. It is the barrier between the confined aquifer and the upper unconfined aquifer. This will ensure that the mixing of the two waters will be slight, if at all. The changes in water quality effects as a result will be small, obviously. As there will be no great change in the heads of the confined aquifer or the water level in the upper unconfined aquifer, this mixing will be close to what occurs at the moment. This will result in minimal changes to water quality in the area of the coal.

Mr FERGUSON: Substantial building changes are in progress at Thebarton. What is the Department's plan for the future of the depot there?

The Hon. R.G. Payne: I have not visited the depot since last Christmas, so I cannot say first hand that there have been changes there. However, I have been informed that considerable changes have been made in the area and that there has been demolition of unwanted buildings and buildings in a poor state of repair. I believe that the depot is now more of a credit to the area than it was before. Mr Whinnen will give the Committee details of the construction that has occurred.

Mr Whinnen: The most obvious change has been a complete repaint of the workshop, which was in need of repainting. It is a fairly substantial building. That was consistent with the construction of a new office block. The area involved has been acquired piecemeal and there are a number of blocks of land in the vicinity that are not part of the complex. In order to consolidate the area and to implement a more efficient operation, a demolition programme has resulted in the removal of some of the old stores and buildings. The long term plan is to purchase an adjacent block of land, if possible, as that would enable the Department to sell off some of its other landholdings so that it ends up with a smaller and more compact depot which will cater for the storage of Departmental equipment, which is considerable. Most of the time the depot appears to be empty, but when drilling plant, rigs, trucks and support equipment are in the depot, a compound is needed to secure

them. There has been a general upgrading of the area and this year's capital programme includes an allowance for an amenities block for the men which will provide showers and a better, long overdue facility.

The Hon. R.G. Payne: I am pleased to hear confirmation of the improvement of the ablution block because I noticed last Christmas when I was there that a good portion of it was not of a standard that workers are entitled to expect nowadays.

The Hon. E.R. GOLDSWORTHY: I will now pursue the question of gas supplies and the related question of electricity supplies for South Australia in the future and where the fuel for generation of that electricity will come from. I will give some background to my question. While in Government I was told by ETSA and its advisers—and they had had Bechtel do a study in relation to fuel sources for power generation—that the most economic option available was the importing of black coal from New South Wales. Will the Minister say whether the Government intends to choose the option for future electricity generation for South Australia that is the most economic? I think that this question is timely in view of the reaction to the proposed increase in electricity charges.

I will explain my question. I was told when Minister that, of the options available for generation of electricity, we should import coal from New South Wales. That advice was clear. Of the options being put forward at the time, the one that appeared capable of containing electricity costs in South Australia was the one saying that we should continue to burn natural gas so long as the price did not escalate dramatically over a long period. That is why I have been pursuing this question in relation to gas reserves. There is no good in the producers telling the Government one story, telling me another and the press another. They want to secure top prices for their gas and have the whip handle in terms of contracts. It is to their distinct advantage not to write a long-term contract but to hook the Government and ETSA into using gas because then, if they find it, no matter how dear it is we must buy it.

The only option that will allow us to keep tabs on the escalation of electricity prices in the immediate future, let alone the long term, is that we secure at least a 10-year supply of gas at a known price so that we can make judgments on the basis of that price, because an enormous amount of capital is tied up in the Torrens Island power station, which generates the bulk of our electricity. We cannot just write this station off. Conversion of this station to burn black coal would have a major impact on electricity charges in South Australia. We are talking here about \$200 million to convert the station so that it can burn coal. The environmental hazards are another question. I am just pursuing the economic argument.

I say that we must have a strategy in relation to this matter so that we know where we are going in the year 2 000. I am not talking about the life of this Government or a succeeding Government, either Labor or Liberal—I am talking about what will happen to electricity tariffs at the end of the century, because that will be vital to the South Australian economy. I am pursuing these questions in relation to gas reserves because I think that they are fundamental to this matter. This matter has been delayed for a long period and the prognostications of geologists since about 1973 have been proven wrong. I say this with due respect to the geologists present here today. As I have said before, I have the highest regard for officers of the Department, but from my observations geologists are born optimists. If they were not, they would not stay in the game. When I gained intimate knowledge of this scene everybody was saying that the gas was there and that we only had to dig the holes and we would find it. History proves that since

1973 all that has happened has been a downgrading of reserves and we are still in a fix.

Clear advice given to me was that we should import black coal from New South Wales. Politically that is not particularly acceptable. Economically, if that is the best we can do, we will never be able to contain electricity charges in South Australia to match charges in the Eastern States because the cost of moving anything around the seaboard of Australia or getting things here by rail is prohibitive. There has even been talk of opening the Greenfields mines to supply ETSA. There has been some real fairyland stuff said, in my judgment. Coming back to the Stewart Committee Report, it seems to me that we are going down the track of developing our low-grade mines, apparently. I cannot believe that we will contain electricity costs in South Australia if we have to significantly write off Torrens Island power station and if we have to get into mining this low-grade coal, because such mining will not be cheap.

The efficiency will also be low in terms of its combustibility. I was told that we could not burn this coal anyway. (I am sorry that this explanation is long but it is part of a most important topic that is fundamental to the future of this State.) I was told that nowhere in the world were they burning coal of the type proposed to be burnt in South Australia. I arranged to go to Greece as I had been told by someone, it may have been the Consul, that Greece burnt pretty rubbishy coal. Mr Sykes of ETSA has caught up with that; I had a conversation with him. There have been tests in Germany and America on this coal and it was found to be combustible.

It concerns me that if we go down that track and it becomes a major component of our power generation, it will be expensive power. I have not carried out any fine economics, but I think that common sense is enough to tell one that if this coal is to be dug up in those circumstances it will be pretty expensive and its burning efficiency will be low. Is the Minister sure that we are going down the right economic track in terms of keeping tabs on the cost of our electricity? If we are not, then we are crazy.

The Stewart Committee wrote off the nuclear option. I am not advocating that, but it should be part of the equation. It was always written off by ETSA as it could not fit a nuclear reactor into the power grid. (I am leaving aside any philosophical argument about the desirability of it and I am just following the economics of it.) In view of all the other advice I have had, I doubt that advice too. Advice over my three years when Minister was revised so often that I had to go overseas and make a few inquiries, as I advocate the Minister should do, to make up my own mind. The Stewart Committee—and there is a member of that Committee here today—stated:

... it should be noted that present Government policy does not support establishment of nuclear power stations in the State, and consequently nuclear power is not an eligible option.

There is then an analysis of the nuclear option, and it says that it is not on, anyway. I also want to ask a few questions about that. The Committee's comments include:

... a lead time of the order of 15 years could be expected.

This lead time concerns nuclear power. I know that this was the sad experience in the United States. The lead time in Europe is nothing of that order. If there was a proposal for a turn key operation where someone was to build the reactor a more realistic assessment could be a lead time of six to eight years. One must acknowledge that America is in a most invidious situation regarding this whole question. The Stewart Committee then referred to the publication 'The Costs of Generating Electricity in Nuclear and Coal Fired Stations' 1983 OECD Nuclear Energy Agency as a reference. But, it did not refer to the fact that the conclusion reached in that publication was:

For Europe and Japan, however, it can be concluded that nuclear will have a cost advantage over coal stations commissioned in 1990, ranging from 30 per cent to 75 per cent...

This is ruled out anyway because of Government policy, so it seems rather fruitless for the Committee to pursue it, but, it did, and I query some of its conclusions. The other argument that has always been mounted is that it could not fit into the grid. The Stewart Committee stated that the requirements during the 1990s, which will be the crunch period when we are talking about where we are going by the year 2000, were that in each of the years 1991-92, 1994-95, 1996-97 and 1998-99 a 250 base load was required. If one takes the nuclear option—and I repeat that I am not advocating it—

The ACTING CHAIRMAN (Mr Klunder): I ask the Minister to wind up his explanation.

The Hon. E.R. GOLDSWORTHY: Why is that, Mr Acting Chairman?

The ACTING CHAIRMAN: It has been going on for over 10 minutes.

The Hon. E.R. GOLDSWORTHY: The Minister for Health next door in answering a question went on for an hour and then referred it to another person. His answer took an hour and a half.

The ACTING CHAIRMAN: Order! I am not interested in what is happening in the other Committee. Will the honourable member start to wind up his question?

The Hon. E.R. GOLDSWORTHY: Under what Standing Orders am I told to wind it up?

The ACTING CHAIRMAN: The honourable member could continue with his question but I think that other members wish to ask questions.

The Hon. E.R. GOLDSWORTHY: I do not think that anyone on my side is unhappy about me pursuing this line of questioning. It is either whack it in with this question or ask more questions later. But, I will stop now and have another go in my next question.

The Hon. R.G. Payne: I have some sympathy with the Deputy Leader in this area because I think that he is quite genuine and is expressing a concern that many of us have about South Australia's future energy supplies and the cost thereof. After a fairly long explanation, which I think was worth while, he asked me whether I was sure I was going down the right track. I am not sure that I am going down any track yet because there is still the question of the evaluation of the four coal possibilities. Economics will certainly come into the matter. Does the Deputy Leader believe that any other State will sell us coal at a price that will give us an advantage over their industries using the power we generate here from that coal? Secondly, we know that there can be industrial difficulties from time to time and if they occur in one's own State it may well be that the Government can have an influence in a successful conciliation that it is not always possible to achieve in another State. If we embark on the use of local lignite—and Wintinna and Sedan lignites are already burnable in conventional boilers that can be ordered now—according to expert advice and evaluation in burn tests there does not appear to be a technological hang up, although Wintinna is a fair way off. The local lignite is low grade coal, which means that its price should not escalate, except at a rate which is necessary to continue the mining of it.

This lignite does not have an export value, although that needs to be qualified in respect of Wintinna to some degree. The control of the costs for gaining the coal are within one's own State and are not subject to external factors. So, that needs to be taken into account. With the Government, I am trying to take into consideration all these sorts of things. I have not mentioned the development aspects associated with a local project of the magnitude of opening up a new

operation altogether to supply, over a period of time, a 750 megawatt installation of three 250 megawatt lignite fired boilers and generators. So, when looking at economics it is fair to take into account the other spin off effects associated with having a local project of that nature.

If I have any criticism of the local Chamber of Mines it is this: it is entitled to its view of the Government in relation to uranium, but it has apparently never perceived the value in the mining world of a project which develops one of our lignite deposits and what that actually means for the State. If it has, it has never come out and said that. In an endeavour to ensure that the Government goes down the right track, we have set up the Stewart Committee, and other activities are also occurring.

The honourable member's second question related to the possibility of nuclear power for South Australia and the economics of it in relation to the two places he mentioned. I think it is difficult to determine the true economics and the true cost of nuclear power. There has been so much Government subsidisation over a period of years in relation to the nuclear fuel cycle that to determine an actual cost in isolation per unit of generated power or whatever is probably not that simple. Certainly, I have seen comparisons of figures which suggest that, in some countries which have not been subjected to what is described as the massive regulatory requirements that have occurred in the United States and some other countries, nuclear generated electricity can be shown to cost less than equivalent coal-fired plants. I have also seen recent articles which suggest the opposite: that there is a never-ending need for the nuclear industry to demonstrate super ultra safety to the public, a requirement for rebuilding and upgrading of safety equipment, and so on which will increase the cost.

The Hon. E.R. GOLDSWORTHY: A couple of points made by the Minister worry me. The magnitude of the task of opening up low-grade deposits generates an enormous amount of activity and a lot of employment and adds expense to the project. That was the point that I was making. I am concerned about the economics of the exercise. There is no point in developing a mine which will employ many people if the cost of the electricity which results is such that people cannot afford to use it. The spin-off effects mentioned by the Minister will be that industry—let alone householders—will not be able to afford to use it. It is quite dangerous to argue that we should choose that option simply because it will generate a lot of activity in South Australia. The end result could be that it will require a lot of activity to develop the mine and because it is low grade coal a lot of it will have to be moved, which is the point I was making in relation to the cost of coal. The amount of electricity generated and its cost is the bottom line. The bottom line has to be the economic argument.

We must look at all the options, including the nuclear option. We do not have to buy a 1 000 megawatt unit. A good example can be seen with Agea Atom in Sweden, which is a 600 megawatt power station; Mitsubishi in Japan, 800 megawatts; and, Framatome in France, 900 megawatts. A lot of information is available in this area. The Minister said it is hard to find out what it will cost, but it is also difficult to find out what other energy sources cost. I suspect that the Stewart Committee ruled out the nuclear option because it felt that it would be wasting its time given the Government's policy in this area. The stakes are so high for South Australia down the track that if we do not examine every option, including the nuclear option, we will have enormous problems in the future.

Does the Minister believe that it is not worth while pursuing the nuclear option simply because it is too difficult? Does the Minister believe that it is an option that should be considered? As I have said, the clear advice given to me

is that we should import black coal from New South Wales. The Minister mentioned industrial strife. The idea is to gather a large stockpile. Many coal mines have closed down in Britain at the moment, but that has not interfered with life there because there is an enormous stockpile. I do not see it as a particularly acceptable solution, but that is the economic solution put to me as the best option available at the time. The only option open to us in the short term is to find a lot of gas to keep down electricity tariffs. It is a tragedy that our gas is flowing over the border into New South Wales.

The Hon. R.G. Payne: In the interests of brevity I curtailed my previous answer, but I could have gone on and addressed the question of gas. If I had, I would have agreed with the Deputy Leader that the best option is to get maximum utilisation from Torrens Island, where there is 1 280 megawatts. It is very desirable if we can continue to supply gas. Gas at a price is the key. If the price of gas reaches a stage where other options become more economical, we may well have to address the conversion mentioned by the honourable member. That is not a choice that we would want to make, but it could occur. Much of the Stewart Committee's time in the 12 months that it has been in existence has involved trying to convince producers that they do not have the State locked in a stranglehold and that there are alternatives. If the price for gas reaches a stage where it is no longer economic, it will be in our interests to pursue an alternative.

The Deputy Leader also asked about the nuclear option. I understand that the Stewart Committee carefully considered this area. I do not lightly discard the committee's advice (admittedly it was given last April), which was that nuclear energy is not an option. It may well be that it will become an option in the future, but by then it will be up to whoever is around at that time. The Stewart Committee pointed out that the Government's policy does not allow for nuclear generation in South Australia, and that is the situation at the moment.

The Hon. E.R. GOLDSWORTHY: Does the Minister see any point in trying to come to terms with the Sydney contract where there is assured gas until the year 2006? We cannot write a contract for two years after 1987, let alone 10 years. The decision must be imminent as to what we will do in the 1990s in relation to electricity generation.

Does the Minister intend to pursue the negotiations to rationalise the contracts in relation to the gas flowing to Sydney? The former Government was pursuing this option because it believed, despite the fact that the cards were stacked against us in terms of the contract, that it was quite unconscionable that our prime source of energy should flow across the border into New South Wales and that New South Wales was expanding its markets, sending gas to Canberra and wanting to get hold of more gas; here we are starved and we were pursuing that option with some vigour because we believed that we should be sharing that gas. Is the Minister pursuing that option or does he think that now those contracts are satisfied we know that anything further that is found will belong to us and we will go down that track?

The Hon. R.G. Payne: The present position is that there is certainly a recognition of the possibility, dealing with the latter part of the Deputy Leader's statement first, of our in simple terms being damned unlucky if there were not any further finds of gas, accepting that AGL's needs have been met until 2006, although I cannot say that it is not impossible. I take it that the Deputy Leader is referring to gas sharing ahead of time, and South Australia's getting access to some of AGL's contractual gas and repaying that later with gas that is found, should it be found.

If the Deputy Leader is not talking about gas sharing, he is really talking about the Government's arbitrarily abrogating

a contract. That is a serious step for any Government, and he would probably agree. Where contracts exist it could lead to contests in courts and so on. I can only suggest that, as the former Minister, he is in a position to have read a lot of the material that is concerned here: covenants, deeds and God knows what that exists in this area.

I am inclined to agree with him that everybody looking back in hindsight can see how they ought to have written contracts in a much nicer way for those of us who are here now. Unfortunately, they did not. They do have some validity and contain rights. We heard earlier today about the rights of companies in relation to uranium. But these are contractual rights, enshrined in legislation, that have been there for years. To consider arbitrarily knocking those off is a pretty hefty step.

The Hon. E.R. GOLDSWORTHY: I am not advocating that, although the Government has a pretty good record with Honeymoon and Beverley.

The Hon. R.G. Payne: Always the Deputy Leader must have it both ways: he wants to be critical and at the same time to say what he would do when he is not there to do it. We are required to take this step. The Deputy Leader was there for three years and did not do anything about that matter. It was only two years ago that he was still there. Where is the Bill that was brought into the House at that time to institute this sort of thing?

The Hon. E.R. GOLDSWORTHY: The Bill drafted was not along those lines, and you know it.

The Hon. R.G. Payne: I have heard about more Bills from the Deputy Leader today than I have heard for some time. I am trying to find that other Bill that he said earlier today that he had ready. I have asked someone to dig it out. I have not found it so far.

The Hon. E.R. GOLDSWORTHY: Ask your secretary.

The Hon. R.G. Payne: I intend to. It is already under way.

Mr GREGORY: Under 'Engineering Services Division', what drilling programmes will be carried out using departmental funds, and what is the purpose of such programmes?

Mr Boucaut: The Department has some \$980 000 allocated this financial year to carry out drilling programmes for the Department itself. About half of this sum—about \$400 000—will be used in ground water exploration. We will concentrate in three main areas: first, in the Keith-Willalooka irrigation area, which is about to be defined under the Water Resources Act. We fear that the ground water resource there is being over-exploited. The other area is in the Adelaide metropolitan area itself, where more and more use is being made of ground water by the big users: the golf clubs, the councils on their parks, schools and industrial users. We are also doing a deal of work in the Murray Basin in conjunction with the E & WS, where we are looking at the effect of ground water on the Murray River in terms of salinity increases. This study has been going on for some years, and we hope to complete it in the next financial year.

Our other major programme of drilling is stratigraphic drilling, related to ascertaining the sub-surface geology throughout the State. This is to provide additional information to our regional mappers in the preparation of their regional map reports. The stratigraphic drilling also has a connotation in relation to resource exploration. Most of the holes are designed to search for a resource, whether it be hydrocarbons, coal or mineral resources. We will spend something like \$380 000 on that programme. We will spend about \$120 000 in a study related to possible gasification of Leigh Creek coal; that programme will commence shortly. The remaining sum of about \$100 000 will be spent as part of our geophysical programme in drilling holes for seismic programmes.

Mr GREGORY: In response to my earlier question you indicated that when drilling for water and determining the outline for various areas of ground water, you are also taking note of the core samples and interesting mineralisation that you might find. How much interesting material do you find, if any?

Mr Boucaut: You are talking about this year's programme or what we have done in the past?

Mr GREGORY: What you have done in the past, because you have not done this year's programme yet.

Mr Boucaut: A deal of our exploration over the past few years has been related particularly to hydrocarbon exploration. We have done some drilling in the Officer Basin, which has been quite successful.

Mr GREGORY: I believe that Roxby Management Services will obtain its water supply from the Great Artesian Basin. What volumes are required, and what controls will be placed on the extraction? Will there be any adverse environmental effects on the mound springs?

The Hon. R.G. Payne: Once again, I defer to the expertise of Mr Boucaut.

Mr Boucaut: The water supply for the Roxby Downs development will be obtained from the Great Artesian Basin by means of a pipeline 100 kilometres long to the north of the Olympic Dam site. The quality of water varies depending on the development of the programme. At present, they are using about half a megalitre of water a day, which is being trucked by watercarts, as the pipeline has not yet been constructed. By 1984 that water requirement will increase to 12 megalitres a day, and by 1994 to 33 megalitres a day. It is anticipated that well field A, which is being developed at present in the vicinity of Bopeechee, will be able to supply about 15 megalitres a day, which will be the requirement until about 1993.

The area of this well field has been designated in conjunction with Roxby Management Services, and will be proclaimed under the water resources Act as a defined area. The method of management of the extraction of water from the well field will not be in terms of quantity of water extracted but in terms of the effects of the extraction of that water. Monitoring bores will be established at the boundaries of this designated area, and the water levels in these bores will be measured constantly. The terms of the water licence to be issued under the indenture to Roxby Management Services will limit the draw down in these bores to two metres. We believe as a result of our computer studies of the extraction of water from this area that two metres in these monitoring bores will ensure very minimal effect on the nearby mound springs.

The major area of concern is possibly Hermit Hills springs, the nearest springs adjacent to the well field. Special monitoring bores will be established at the Hermit Hills springs complex. These bores will be closely monitored during the life of the well field. Additional supplies beyond 1993 will be obtained from well field B, which will be further north-east. Only minimal studies have been carried out on that area to date, and the actual area of the well field has not been specifically delineated.

Mr GREGORY: The Minister's earlier response indicated that some of the money for the drilling programme will be used for investigations into the possibility of gasification of Leigh Creek coal. I take it that that means that the coal is unrecoverable by present-day mining methods.

The Hon. R.G. Payne: I understand that the project is being undertaken to determine whether underground gasification of deeper coal or coal that is difficult to obtain in an area that we would not normally be able to open cut is feasible. As far as I am aware, some seams would be very promising if only we could achieve viable gasification *in situ*. I am unaware of the precise detail in relation to drilling.

Mr Johns may be able to amplify in regard to the length of the programme.

Mr Johns: *In situ* gasification of coal has been investigated in Europe, the USSR and the United States for some years. In theory, it has a lot going for it. If we can burn the coal in the ground and recover the methane generated, obviously there is a lot of promise in terms of saving on recovery of coal through mining and installations. Varying success has been reported on the methodology. I am quite sure in my own mind that there is no question that, if we could recover coal by conventional methods, we would do so; however, in circumstances where coal is deep and beyond the range of conventional recovery techniques, it seems to be appropriate to investigate this approach.

We have sought and received support for funding for testing at Leigh Creek in an area that is beyond the limits of any foreseeable mining activity: it is quite inconceivable that there will ever be open pit mining in that area. Plans are in hand in this regard. Dr Messenger would be able to enlarge on the specific proposal at Leigh Creek and the funding.

Dr Messenger: The key characteristic of Leigh Creek coal is the steeply dipping seam. At a certain stage it becomes uneconomic to mine by open pit. However, such a steeply dipping seam is quite advantageous for coal gasification, which involves drilling holes into the seam and burning or partially oxidising the coal between the seams. This produces a burnable gas at the surface. Leigh Creek is important because of the dipping characteristics of its coal deposit and the infrastructure that is already there. Thirdly, as a basis for a test programme, there is a reasonably large power demand at Leigh Creek, so the gas produced could be used on site in a 60 megawatt turbine to produce sufficient power to fuel the Leigh Creek operation. It would not be a wasted operation: it would be a meaningful demonstration project for which the product would obviously be used.

A preliminary feasibility study was undertaken funded by Commonwealth grant. The next stage is to define in more detail the coal seams and the coal, and this has been done using largely departmental funding and funding from SEN-RAC. This will involve drilling four holes to evaluate the prospects for the next stage, with a significant amount of outlay for the next stages of the project. There is the question of where that money will come from. We are going ahead one step at a time, with the geophysical evaluation programme next being undertaken. The prospects are quite promising not only here but also elsewhere in Australia. There has been significant interest from Gulf Oil and a number of companies in the United States have also shown interest. Their technology package may be advantageous to us in developing the programme.

Mr GREGORY: You indicated that gas could be used for producing 60 megawatts of power for a gas turbine generator operating on the gas field. When is it anticipated that that will be working?

Dr Messenger: That is some distance down the track. First, the geological work would take a year or so and there is the question of funding a demonstration project. We are talking about quite a few years, but still in the late 1980s.

Mr GUNN: I seek information about a matter that has been attracting much of the Minister's attention, that is, in regard to increases in electricity charges. The late edition of the *News* this afternoon states:

South Australian electricity charges will rise 12 per cent from November 1.

That was announced by Mr Sykes, and the report continues:

ETSA would have to carry an accumulated deficit for two or three years. Consumers who received their account in the first three months would be charged at the new rate on a pro rata

basis... In the past electricity users had not been charged higher rates until their first billing period.

On 18 September in a reply in the House the Minister concluded by stating:

I am able to say that we are very close to a decision on the restructuring of ETSA's domestic tariffs which will have considerable benefit for consumers on middle and low incomes while encouraging conservation. These benefits will be achieved without affecting costs to local industry. That is the answer to the question raised by the member for Mitcham by way of interjection.

What has happened to this restructuring of ETSA's domestic tariff?

The Hon. R.G. Payne: If I ever get out of this place I will be able to go and have another meeting about the tariff structures and then perhaps they will be finalised.

Mr GUNN: I suppose it is unfortunate that the meeting of this Committee coincided with the Minister's meeting, but that is not the fault of the Committee. Members are charged with the responsibility to seek information.

The Hon. R.G. Payne: I am not ascribing fault to anyone. I am simply stating a fact. Obviously, while I am here I cannot have a meeting outside.

Mr GUNN: I seek further information about electricity charges in respect of accounts of domestic consumers. Can the Minister provide the Committee with information about the average account when the tariff was increased on 1 December 1982 and again on 1 November 1983? Has an estimate been carried out on the average domestic consumer account taking into account the latest increases?

The Hon. R.G. Payne: I will obtain that information.

Mr GUNN: I noted in the Programme Estimates that funds are to be spent in respect of the Burra copper mine. What has the Minister in mind? There have been reports in the local press that people are interested in developing that mine for tourist purposes. Is the Minister's plan related to that assessment?

The Hon. R.G. Payne: I understand that that relates to part of the State's Jubilee 150 celebrations. The Director-General can give more detailed information.

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

Membership:

Mr Lewis substituted for Mr Ashenden.

The Hon. R.G. Payne: I point out to the member for Eyre that, when answering a question he asked, I misread a line and said that the study relating to the Burra mine that he was asking about related to the Jubilee 150. If he looks at page 21 he will see where I got that idea from, as that appears in the next line. Mr Boucaut will now provide the information required.

Mr Boucaut: Geologists from the mineral resources section of the Department have been working in the Burra copper mine since it closed as an operating mine some two years ago. The purpose of their work is to complete geological mapping of the mine subsequent to the work carried out by the company. The purpose of the exercise is to complete knowledge of mineralisation in the Burra copper mine so that we can use that information for future work and gain experience in that type of mineralisation perhaps elsewhere in the State.

Mr KLUNDER: I notice from page 138 of the Estimates of Payments, and from page 143 of the Auditor-General's 1984 Report, that the Department paid Amdel \$200 000 in advance for work to be undertaken in 1984-85. Can the Minister indicate whether that \$200 000 is part of the \$1 325 000 mentioned on page 138 under 'Amdel'?

The Hon. R.G. Payne: Yes.

Mr KLUNDER: Will that advance be maintained, or will it be offset against Amdel work performed in 1984-85?

The Hon. R.G. Payne: If the honourable member looks at the figure shown in the right hand column of \$725 000, he will see that the effect of \$200 000 that is held will be \$925 000 worth of work being done this year.

Mr KLUNDER: What additional work did Amdel under-

take to spend the additional \$475 000 in 1983-84, and why was that additional work allocated to that organisation?

The Hon. R.G. Payne: There is a considerable list of what that work was. I think it is of interest to Committee members. The details of the projects are as follows:

	Responsible Department	Cost		
		AMDEL Labour	External Costs	Total
Feasibility study on gold tailings recovery	DME	20 000	—	20 000
Chemical treatment of low rank coals	DME	90 000	10 000	100 000
Product testing of new calcining plant	DME	8 000	—	8 000
Gas producer/wood burner performance on pine	DME	15 000	—	15 000
Evaluation of Cheese Whey Fermentation Process	DME	20 000	—	20 000
Thai ceramics dating project	Museum	60 000	5 000	65 000
Construction of zinc oxide paper coating machine (\$10 000 already allocated)	DSD	15 000	10 000	25 000
Instrument development for E & WS—Flow Gauge (\$16 000 already allocated)	E & WS	40 000	5 000	45 000
Level Gauge		35 000	5 000	40 000
Trace element analysis for medical research at Flinders University (\$10 000 already allocated)	Flinders University	20 000	—	20 000
Consulting to Public Buildings Department on historic building preservation	PBD	15 000	—	15 000
Forensic investigation (\$100 000 already allocated)	Police	20 000	—	20 000
Coastal morphology and biology study for development plan	DEP	55 000	—	55 000
Analytical work for Department of Agriculture	DA	2 000	—	2 000

The Hon. R.G. Payne: I think that that list indicates the wide range of work undertaken at Amdel and shows how, over recent years, and subject to the amendments that took place to the Act earlier, it has been able to venture into areas it originally did not cover. I think the honourable member asked what was the reason for this: it was further assistance by way of projects made available to Amdel at the time of a downturn in the industry.

Mr LEWIS: My question relates to the prospect of development of the lignite deposits at Kingston. I want to find out from the Minister whether officers from his Department have made an assessment of the likely risk—

Mr FERGUSON: This question has already been answered.

Mr LEWIS: How does the honourable member know what I am about to ask?

The CHAIRMAN: Order! The honourable member for Mallee.

Mr LEWIS: What risk is there of the ingress of salt water through fresh water springs which may be starved of fresh water and which occur subsurface offshore in the sea? In asking this question I need to point out that, to my certain knowledge as a scuba diver, there are patches of fresh water offshore at Kingston with a current flowing quite strongly in the spots where I have come across them. These springs change the nature of the underwater vegetation—seagrass meadows, for instance, vanish altogether.

It is not at all difficult to find these spots. Given that they exist, and given that so far as the best information available to me to date indicates that they arise from the Dilwyn aquifer, which extends offshore, what will happen if the aquifers depressurise near the coast and the flow, being from generally east or south-east to west or north-west, is cut off by the depressurisation and pumping from the mine site? Is it likely or possible that salt water could enter that aquifer through those fissures in the sea floor?

The CHAIRMAN: I am advised that a question of a similar nature has been asked. If the Minister has additional information the Committee would appreciate hearing it. I ask him not to repeat himself.

The Hon. R.G. Payne: It is my feeling that a question of a like nature has been asked, but I do not think it contained some of the specifics put forward by the honourable member. I am certainly not an expert in some of these matters and

Mr Boucaut might be the proper person to provide that information.

Mr Boucaut: I assume that this question relates to the original proposal to de-water the mine for an open cut-type operation.

Mr LEWIS: Yes.

Mr Boucaut: The springs off-shore are certainly from the deeper pressure aquifer which occurs up and down the coast from past the Victorian border right up to Kingston. The work that has been done by us and Western Mining in terms of modelling this situation and our general understanding of the nature of the aquifer systems indicates that the draw down from the de-watering operation from the mine would not extend a sufficient distance from the mine site to lower the pressure sufficiently to affect the springs. We believe that they would keep flowing during the life of the mine.

Even assuming that they did dry up and the flow was reversed, the passage of salt water would be very slow back towards the mine and we would be talking many years before it would get anywhere near the mine. I can illustrate that by citing the case of the water table in the irrigation area on the northern Adelaide Plains, where it has been drawn down some 30 metres below sea level. This cone has existed since 1960. During that time water was able to flow, theoretically, back from the sea towards that cone. Observations in bores along the coast have shown that that has not occurred to any measurable extent. I use that to illustrate the fact that the passage of water through these pressure aquifers is very slow and there would be no chance of salt water getting back through that passage to the mine site or affecting any other water supplies in the area during the life of the mine.

Mr LEWIS: Given that that is relevant to the initial proposed technology of dry open cut mining that Western Mining prepared their EIS on and that it now considers that wet dredging would be appropriate as a means of winning the coal, is the Minister or are any of his officers aware of any changes that have occurred in technology for wet dredging since 1981? An executive of Western Mining in 1981 told a public meeting at Kingston that wet dredging was inappropriate technology. The first reason given for it being inappropriate at that time was that the coal was not compact or solid enough, it would become too much of a slurry, be uneconomic to separate from the water and would not be

able to be contained in the dredge buckets as it would slop everywhere.

The second reason was that there was a layer of coarse sand—not sandstone, just sand—of varying thickness immediately overlying the seam and that this would simply soak into the water and form a slurry with the coal. This would then find its way into the furnaces as it would be impossible to separate from the coal. In the furnace where the coal is subject to heat it would stuff up the furnace with glazed coal, and therefore increase the cost of the maintenance and replacement of the furnaces and boilers, making mining and power generation using that technology uncompetitive and unviable.

From memory there was a third reason which, I think, was that there was only one pit site—the northern pit site—at which the artesian aquifer would not come over the surface when the pit was opened up for wet dredging. The Dilwyn aquifer's pressure was such that it would come up over the surface if all other lodges were opened up and the same volume of water would have to be pumped to the sea, as is the case now. So, there was no advantage in cost terms in wet dredging. Obviously, there have been some dramatic changes in technology for Mr Cant to now be able to say, on behalf of Western Mining, that it will not only be cost comparable with dry open cut mining but, in fact, several percentage points cheaper than wet dredging.

The Hon. R.G. Payne: In relation to the technology, I have been told by Mr Cant of Western Mining, and have been shown some literature that suggests that what he tells me is accurate, that they have engaged consultants from Scotland and Belgium who are experts either in wet dredging or the construction of wet dredges on site. At this stage the proposal is yet to come further forward. It will be a submission and Mr Stewart, with Bechtel and Rheinbraun are consultants in the matter. Presumably, if there is any doubt in their minds as to the possibilities that are before them in relation to the technology to be used, they would seek assistance with consultancies, if necessary. So, that is probably all the useful information that I can give the Committee at this time.

Mr LEWIS: Given that the EIS, the responses prepared and the appraisal by the Government agencies were in fact based on the assumption that the mine, if developed, would use open cut dry pit mining techniques that required de-watering, what is the position now in relation to the EIS given that it was done on that basis? Do we now have to have the company prepare a supplementary EIS and put it to the District Council of Lacedpede and other vitally interested or concerned parties, with the expense of responses and also have the Government make an appraisal of it in the same way it appraised the EIS based on the dry open cut pit mining technology? Do we have to have another EIS?

The Hon. R.G. Payne: I understand that the preparation of what might be termed a supplementary EIS or addendum to the existing EIS, which takes into account variations in the proposed mining method, its effects, and so on, is in progress.

Mr LEWIS: We do have to have another run down?

The Hon. R.G. Payne: Yes.

Mr FERGUSON: My question relates to contingencies under the Mining Division line. What is the reason for the 10 per cent increase in funds allocated to the mining inspection function? Does it include the increasing costs associated with the development of Roxby Downs?

The Hon. R.G. Payne: Last year we were a couple of officers short in that area, and that is reflected in the under-spending in that line. They are now up to scratch and the allocation takes into account some of the servicing of Roxby Downs.

Mr FERGUSON: Does the Department have an officer stationed at Roxby Downs and, if not, what are the future plans there?

The Hon. R.G. Payne: Perhaps I should have added that some of the expenditure under that line could relate to additional plane trips. We do not have an officer stationed at Roxby Downs at present. However, in the future there may be a need for a reappraisal of the way in which the project is currently serviced in relation to inspections and other requirements. However, at this stage I am not aware of any detailed plan in relation to that. The Director-General may have something in house which may be of use to the Committee.

Mr Johns: Until there is a committal to a project, there is no intent to expand our presence at Roxby Downs. Certainly, once there is a committal we will need a permanent office there and the number of officers will depend on the mine's rate of development.

Mr LEWIS: I refer again to the prospective development of the lignite mine at Kingston. Is it true that the estimated cost of a powerhouse at Kingston would be between \$1 000 million and \$1 430 million and that it will cost Western Mining between \$300 million and \$400 million to build a 1 000 megawatt power station?

The Hon. R.G. Payne: It seems to me that the figures mentioned would be of that order. I do not have an exact estimate at this stage, although one might exist. I would expect costs of that order to set up a power station of 1 000 megawatts and a mine.

Mr LEWIS: Given that that is so, what happens if approval to commence mining lignite is given to Western Mining, and another party, such as ETSA, is locked into the capital outlay of some \$1 400 million to build the powerhouse? It could be that Western Mining then finds that its wet dredging technology simply does not work. In that case the State would be locked into a \$1 000 million investment. Would the State then be over a barrel and would we have to agree to allow the company to de-water the mine site, notwithstanding that there is significant disagreement between hydrologists as to the consequences of doing that for a period of 30 years, the life of the mine and the powerhouse? Permission for the mine is initially granted on the basis that wet dredging mining would be used. Who foots the bill for the outlay of \$1 000 million to \$1 400 million to build the powerhouse, and do we go ahead and wet dredge the mine?

Another reason why wet dredging will probably fail is that, as the Minister knows, there are perched water tables which in wet winters actually come to the surface. In fact, the dredges would be sitting on mud. The weight bearing capacity of the dredges has never been very great. Even drain digging equipment, which uses huge pads of coir matting in some years on some soil types in the South-East, was found to become hopelessly bogged. The tonnage of that equipment is not even of the same order of the wet dredging equipment. The load bearing platform of the wet dredge would have to be so expansive and expensive that it would be either prohibitive or likely to sink into the mud. If the dredges become bogged and the company wants to de-water or it simply says that for some other reason it cannot get the coal out by wet dredging, are we locked in to the project, and who pays the bill?

The Hon. R.G. Payne: I think the answer to the honourable member's first question is that it is a job for the evaluating committee. Reference has been made to the consultants and the persons involved. They will decide on all aspects of the proposals that are put before them by the end of November. For example, Mr Doug Stewart has had a lot of experience in the open cut method of mining coal. He has a great deal of experience in that area. The consultants involved, Rhein-

braun of West Germany, have the necessary expertise. I have seen figures relating to the type of material movement that takes place in West Germany in the recovery of low-grade coal, including the removal of towns, villages and the replacement thereof. Everything appears to be put back after the event, the power is generated, the coal is burnt, and so on.

If there were any doubts in relation to the proposed technology, the consultants would know about it and they would advise the Government accordingly. I can only assume that the remainder of the honourable member's question is hypothetical, so I will not try to answer it. In relation to whether the dredge will become bogged, I understand that the dredge floats, anyway. I do not think that the drain digging equipment mentioned by the honourable member is of a floating type. Without trying to further usurp the role of a civil engineer or other qualified person, I defer to the Director-General. It is all a bit in the future, but I feel certain that consultants of the calibre I have mentioned, Mr Stewart and others he may call on are capable of evaluating the sorts of questions raised by the honourable member. That is the task that they have been given after all, and they give advice accordingly.

Mr LEWIS: I have little questions like 'Who pays the bill?' if wet dredging for some reason or other is found to be non-feasible, or do we then simply say, 'Okay, you can de-water the site'?

The Hon. R.G. Payne: Wet dredging is feasible because it has been going on for a long time in the recovery of tin and other minerals.

The Hon. E.R. GOLDSWORTHY: Is it better than *in situ* leaching?

The Hon. R.G. Payne: Wet dredging is well in front of *in situ* leaching; it has been going on a lot longer, and they have all the bugs out of it. Whilst I appreciate the honourable member's concern, there is no point in my trying to give him possible solutions to the hypothetical problems that he puts up. It is the job of the evaluating group to be practical and realistic in the circumstances, and it will be. If it has any doubts about a process that is put forward, it would say so, or require further demonstrative evidence of the technology concerned.

Mr LEWIS: My next question relates to the likelihood of its being necessary to de-water the mine site. Whilst the current proposal is to examine the feasibility of wet dredging the coal, I am nonetheless compelled to ask this question because of the possibility of a decision being made ultimately to mine the deposit and not use the wet dredging technique. What attempt, if any, has been made to evaluate the effects of cavitation in the limestone or the aquifer, which is the water bearing strata, through which vertical pressure curtains would be placed by recharge bores around the mine site to prevent the extension of the cone of depression? If no evaluation of cavitation has taken place, will the Minister undertake forthwith to examine the effects of recharge in the fashion that has been suggested as an appropriate means of ensuring that the cone of depression does not extend beyond what are said to be the acceptable limits?

Mr Boucaut: The EIS and the assessment report put out by the Department of the Environment make it clear that most Government departments, including ourselves, believe that further work is required at Kingston to refine the concepts of de-watering that are presently proposed. We believe that they are correct in their broad sense, but certainly other refinements are required to confirm this. One of those requirements will be a study into the feasibility of reinjection of water to control the extension of the cone if it becomes necessary. I stress that we as experts in the ground water field believe that that will not be necessary. We believe that the results to date—and the EIS states this as well—are

very meaningful and reflect what will happen should an open cut mine be excavated and the de-watering carried out to do that. But, should reinjection or injection be required, certainly further work would be required to confirm its feasibility. That would be necessary before final approval could be given to the operation.

Mr GREGORY: Could you advise the Committee what benefits can be anticipated from the oil and gas line and what items of expenditure go to make up the \$425 000?

The Hon. R.G. Payne: This sum was sought by the Department in this year's Budget to provide advice and consultant assistance in relation to the proper and orderly development of oil fields in the Cooper Basin area. I understand that there are ways in which, if oil is recovered from reservoirs in a certain manner, there is a loss to the State of a portion of the resource that might otherwise be recoverable, for example. That is just one of the points that I have at least absorbed.

Mr Watts: This is a new initiative, as the Minister has said, and it really addresses a new industry in South Australia; that is, the oil and liquids production industry, which has been operative since the completion of the Stony Point liquids scheme. Prior to 1982 South Australia had only three dry gas fields operating. We now have 24 dry gas, wet gas and oil fields, with another 41 fields to come on stream. We now are supplying 40 per cent of Australia's natural gas, 4 per cent of its oil and 25 per cent of its LPG. The \$1.5 billion investment in the liquids production facilities at Port Bonython, Moomba and the liquids pipeline have been mentioned before.

Over the next 10 years the gross value of the product coming down that line will be of the order of \$3.2 billion. I mention these figures because this is obviously a significant new industry which adds a new dimension to the Department's workload. The State has obviously got an overwhelming interest in it from the point of view of maximising the resource and the recovery of both the oil and the liquids. As the Minister has said, poor management or production or reservoir engineering practice can lead to leaving large quantities of oil in the ground if it is not recovered and done in a technically proper manner.

It is also important to maximise the recovery in terms of maximising the State's royalties. So this new project involves technical assessments in a variety of very specialist disciplines, such as reservoir engineering, production engineering, very sophisticated computer applications and resource seismic interpretation. This is a fairly massive technical effort and most of this expertise is very high priced and available to the Department only through consultants, although we make every effort to use these consultants to train our junior staff to build up our in-house capability. Without going into detail, about two-thirds of the amount of \$425 000 is dedicated to specialist manpower expertise, and the remaining one-third is to be expended on software for the necessary computer programmes.

Mr GREGORY: Will the Minister outline the interests in the Pitjantjatjara lands following the BHP withdrawal of interest in that area?

The Hon. R.G. Payne: I adverted to that matter generally in reply to similar questions. There is an offer out for a PEL in that area which closes on 30 November, and the Director-General has informed me that there has been a fair degree of interest. An information package was prepared and it has been made available. What has happened in the past is not always a guide. In relation to the relinquished areas in PELs 5 and 6, we sold about 40 packages but there were not many starters. There has been some interest in the oil and gas bearing areas, and we hope that there will be a starter.

Mr GREGORY: What is the progress of the accelerated gas programme in regard to money expended and sale of proven gas reserves?

The Hon. R.G. Payne: Mr Laws cited figures in this regard, but he may be able to give further details.

Mr Laws: The accelerated gas programme commenced in 1983, and since then the Cooper Basin producers have drilled seven wild cat wells, nine appraisal wells and five tight gas evaluation wells. This reflects the three pronged ambitions of the programme, the three main areas in which we believe we will be able to make new gas discoveries in the Cooper Basin. We know that there are large volumes of gas tied up in tight rocks, and the question is whether this gas can be produced economically. That was referred to earlier.

There are completely new prospects, and seven wells have been drilled. Appraisal wells have been drilled around the edges of known gas fields, in seeking to extend those fields. In 1983, \$19 million was expended on the programme and this year the producers will have to drill a few more wells to complete the programme—they will have spent \$22.5 million by the end of 1984. We have had sufficient time to evaluate the results of the 1983 programme, and the increase in reserves as a result of the two wild cat wells and the five appraisal wells that were drilled last year is, according to the calculation of the Department of Mines and Energy, 150 billion cubic feet of sales gas, and that rate of finding gas is quite good compared to previous rates. Of course, few wells for gas have been drilled since 1975. To the beginning of 1983 the Cooper Basin producers drilled only a handful of wells specifically to find gas, so there were fairly good prospects available for drilling last year. It was considered to be quite successful that 150 billion cubic feet of sales gas was found.

The programme this year has not been as successful to date, but it has not concluded. A number of wells have been drilled and cased but have yet to be tested. The programme will continue next year. There has been a change of emphasis in the programme: as initially set out, specific wells on specific prospects were set out in the agreement. Some aspects of the programme have been changed by agreement between the Department of Mines and Energy and the Cooper Basin producers. There has been a decrease in the emphasis on tight gas in the programme. This year the producers believed that they needed more time to reflect on some of the earlier work and as a result many more wild cat and appraisal wells have been drilled in a search for free flow gas instead of tight gas. We hope to find gas somewhere near the rate at which gas was discovered in 1983.

The Hon. E.R. GOLDSWORTHY: I was interested to hear Mr Watts refer to \$3.2 billion worth of gas that will flow through the pipeline to Stony Point. Does the Minister still think that we went too fast?

The Hon. R.G. Payne: I point out that the question of whether or not we went too fast (and I believe it was my colleague on the Select Committee who made that comment, not me)—

The Hon. E.R. GOLDSWORTHY: You were the lead speaker for the Government, and I believe that you suggested that we were going too fast.

The Hon. R.G. Payne: I believe that the honourable member would agree that, if I remember rightly, we had about 11 days or a fortnight to complete a matter that involved the possible payment of royalties to the State for quite a long time. I was concerned at that stage that we properly address the matter. The then Minister, who was the Chairman of the Select Committee, asked for and obtained briefings from Treasury. I still think that the project would not have suffered if we had had a bit more time to study the details

of the indenture and perhaps time will prove that what I thought then was justified.

The Hon. E.R. GOLDSWORTHY: If we had not got it through in December, the financing would have fallen in a heap. I was prompted to ask that question because of the enthusiasm that everyone now exhibits in regard to the project and we have felt that enthusiasm since day one. Dr Messenger was very intimately involved with keeping up the pace. At page 21 of the yellow book, under 'Achievements/Improvements' it is stated:

Major advances have been made in the treatment of gold tailings and work in this regard is to continue.

I am prompted to ask this question because one of my constituents approached me a week or two ago because he was interested in gaining access to one of the tailings dumps at Mount Torrens, from memory. I made a few inquiries, but unfortunately neither Mr Hill nor Mr Johns was in the office when I telephoned. Will the Minister or one of his officers tell me what is involved in an individual gaining access to the tailings dump with a view to processing? I believe that it was Crown land or reserve land. What are the mechanics? I believe that Ministerial approval may be required. I would like the position clarified, because obviously the Government is becoming interested in these gold tailings. I suggested that my constituent and his company approach the Government for further advice. As this is a matter of interest to me I would like to know the position.

The Hon. R.G. Payne: Coincidentally, I have been approached at my electorate office by a group that also had some discussions with the Department about access. I first became aware about 12 months ago of the considerable quantity of tailings at Mount Torrens containing gold that was lost in the processing by the battery. Those tailings belong to the Crown because of the way in which the material was treated. The material poses an environmental hazard because of the cyanide leaching, which is of a nuisance and irritant value to pastoralists in the area. I believed that, as there was a downturn at Amdel and as it was a specialist in this area, Amdel could tackle the recovery of the gold at the site of the former Mount Torrens battery and any other battery of which I was not aware by constructing a plant that would perhaps work to a break-even point or even provide some profit to the State. As often occurs when a Minister or other people have a brainwave, the difficulties then begin. However, Amdel in conjunction with departmental officers did a survey of the economics of the proposition and ascertained what was involved.

The Hon. E.R. Goldsworthy interjecting:

The Hon. R.G. Payne: I am using the term loosely. A certain sized plant was designed having regard to the throughput of the tailings. Further discussions took place and it was suggested that a mobile plant be constructed to service both batteries rather than just one. We believed that if we could clear up the tailings, extract the material of value and remove it, there would be historical heritage value in the remains of the battery at Mount Torrens and so forth. It has transpired that the economics are such that, because the Mount Torrens battery is in a watershed zone, any treatment *in situ* would not be good environmental practice. We would require a site removed from the battery to carry out treatment. Then arose the bugbear of transport costs involved in moving tailings to a suitable site. It became an important cost factor in the operation. I suggested that it could be a CEP project, because it would be useful to clear that environmental hazard from the area. That is about where we are. We are still collecting details to put before the CEP funding body. The project is in the system. There are difficulties, and they are probably what the former Minister is remembering. Permits are required and environ-

mental standards must be met. One cannot hop in and start washing tailings in a cyanide pool.

The Hon. E.R. GOLDSWORTHY: Will the Minister allow a private company to have access to the tailings? The company believes that it has a process or adequate technology to handle the tailings on site and overcome the environmental hazards associated with handling them. Has the company any chance at all or is it wasting its time approaching the Department? There is no question of carting the tailings away. The company believes it has access to a new process under which it can make a profit.

The Hon. R.G. Payne: There has been a fair amount of interest. The member and I have both referred to approaches, and other approaches have been made by outside organisations. The mere mention of gold seems to stir imaginative schemes in all sorts of people. Obviously, people are entitled to come to the Department and, if they have a scheme, it will be looked at.

The Hon. E.R. GOLDSWORTHY: I do not want them to waste their time if the answer is going to be 'No' from day one. I understand that the company requires Ministerial authority to go on to Crown land, which is a Government preserve, and they have to overcome any problems in regard to the E & WS Department as to pollution. The company believes it can do that, and there is a third requirement as well. It is pointless my steering the company to the Department if the answer will be 'No' from day one. I assume that, if the Minister suggests the company should go to the Department, it will have a chance, but not just a 1 per cent chance, and it will be a reasonable chance of obtaining access to the tailings. Money and overseas expertise are involved and the company needs to make some decisions.

The Hon. R.G. Payne: The offer stands. The company is welcome to establish contact. That will not cost it much and officers will be willing to discuss details of the proposal.

The Hon. E.R. GOLDSWORTHY: Whom should the companies approach?

The Hon. R.G. Payne: Mr Hill, the Director of Mining.

The Hon. E.R. GOLDSWORTHY: I refer to page 19 and the reference to the energy labelling scheme that was mooted some years ago. The Minister has received a letter from one of the environmental groups asking what the Government is doing about energy labelling, and I have been sent a copy of it. Where are we at? Where are we going?

The Hon. R.G. Payne: Some months ago the position was looking good, but it does not look so good now. I will speak only on the aspects about which I know and possibly Dr Messenger can add information. I know that at the first Ministers meeting I attended after we came into Government I became aware of this scheme and that all Ministers and States—some grudgingly—support the scheme. It was said that all manufacturers were in favour, too, and that was in regard to refrigerators.

We were pleased with ourselves after the Ministers' meeting thinking that we had done something useful. However, manufacturers started to approach us a little later saying why they did not want to do what they had said they would do. There have been further discussions and correspondence since that time, and I ask Dr Messenger to provide some of that detail.

Dr Messenger: As the Minister has said, the matter has become a little confused, partly because there have been some changes of attitude on the part of manufacturers. It has been suggested that a mandatory scheme being phased in might be a way of solving this problem. Unfortunately, the matter is proceeding slowly. I think that the best way of demonstrating this is by saying that there is no provision in the Budget in this financial year for a further payment. The \$22 000 from last year's Budget will carry forward and cover whatever costs are involved. This means that we

expect that funding will carry through until the end of this financial year.

To attempt to progress this in conjunction with discussions with manufacturers, there is a system of check testing of refrigerators being undertaken, partly because there is some argument about how far the potential savings have already been realised. Therefore, there is an element of trying not to force matters too fast for the manufacturers who, as I have said, have become a little edgy about the prospects of the scheme. We believe that there is an element of misunderstanding involved here. It is important that this scheme should proceed, hopefully with the co-operation of the manufacturers, because it is the first stage of a series of labelling systems for vehicles and other appliances. This was seen as being one of the simpler places to start, but it has not turned out to be that way. For that reason, we are continuing to talk in an attempt to resolve the problems with the manufacturers.

Mr FERGUSON: I refer to page 138 of the Estimates under the contingencies line referring to the resources division. What has been the cost to the Department of exploration for lead and zinc deposits in the Flinders Ranges national park, has the programme been successful, what has been the involvement of BHP in the programme, and will drilling be recommended?

The Hon. R.G. Payne: Mr Boucaut will be able to provide that information.

Mr Boucaut: Work carried out by the Department of Mines in the Flinders Ranges has now reached completion of what is called Stage 2, which is the completion of geological mapping, geochemical work, sampling of material in the area and surface geophysical work. The total cost to date of the programme has been \$50 000 approximately for the geophysics, \$28 000 approximately for the geological work and approximately \$11 000 for work done by Amdel on analysis of samples collected.

We believe that this work has been successful. We delineate two or three anomalous areas of mineralisation and there are one or two geological, structural features that we believe are worthwhile following up. There is still some work being carried out at Amdel by way of analysis of samples. Based on the results of this work and on a complete review of geophysical and geological work to date, a report will be prepared detailing the results of the studies. We hope that that report will be completed within two or three months. That report will be submitted to the Minister and in it we will be recommending a course of action, if we consider it necessary, for further work. This could involve drilling as the next stage.

Mr FERGUSON: What about the BHP involvement?

Mr Boucaut: The BHP has had no active involvement. We have talked with its geologists and discussed the results of our work to date. They have taken a few samples for analysis in their own laboratories. That has been their involvement to date, which has been a passive one involving discussion with our officers.

Mr FERGUSON: I understand that the Department has been responsible for the location of construction water and road building materials for the reconstruction of the Stuart Highway. How has that been carried out and has the programme been successful? Also, has there been any cost to the Department?

The Hon. R.G. Payne: Mr Boucaut will supply that information.

Mr Boucaut: The Department has been responsible to the Highways Department for the provision of water supplies for construction purposes along the 1 000 kilometre length of the Stuart Highway. In that arid environment obviously ground water is the only feasible source of permanent water. The requirement of the Highways Department, ideally, is

to have a bore every 20 kilometres supplying two to five litres of water per second and within two kilometres of the roadway. Obviously, in a geological environment and a climate like that, that is impractical. We have generally met the requirements within reason. Sometimes it has been a little further than 20 kilometres between supplies.

Between 1978 and 1984 we drilled a total of 146 wells, of which 76 were successful. The total amount of drilling has been of the order of 10 000 metres and the total cost of drilling has been greater than \$1 million. This has been carried out on a recharge basis to the Highways Department, which has covered all the costs. During our search for water, we have used several techniques, including geophysics. We have made extensive use of Landsat imagery and aerial photography. Water supplies we have found have been of the order of one litre per second to 10 litres per second. In the case of smaller supplies it has been necessary to establish a well field where there are two or three wells all pumping to a central point.

The drilling for these wells has been carried out by the Department's drilling fleet. All in all it has been a very successful programme. The water we have obtained has varied in quality from 800 grams per litre, which is drinkable water, to 30 000 grams per litre which is close to seawater. We have had a useful follow up to this work—that many of the bores have been taken over by local farmers for use for stock supply purposes. Many areas that previously could not be grazed because of a lack of water now have a good supply of water. In fact, one of the new townships, Glendambo, uses one of the bores for the town's water supply.

Mr LEWIS: My question relates to the accuracy of information given by parties unknown to me to the Committee of which Mr Doug Stewart was Chairman about different identified coal deposits in South Australia. Did the Minister know that there were large discrepancies (in fact, substantial inaccuracies) in the information Mr Stewart and his committee members had to use in coming to their early appraisal and report preparation?

That was publicly released six months ago. As examples I refer to the strip mining ratio at the Wintinna deposit where information given to the Committee of which Mr Stewart was Chairman indicated that it was in the order of 13:1, when in fact the exploration principals—the people who had the licence and claim—have shown me evidence that it is only 8:1; also, the energy per unit weight—how much heat one gets out of a tonne of coal—was out by some multiple of degree rather than a percentage of several fold on the Wintinna coal. An assessment by experts called Fluor confirmed the information that the proponents of the development of that site gave me earlier. In addition, the CSR has exploration rights on Anna or Sedan, where again, in its opinion, the likely cost of winning the coal and its energy capacity to be converted to electricity was inaccurately reported either by an agent from whom Bechtel sought the information or Bechtel itself. I cannot say that much about the Wintinna deposit, but certainly I can speak about the Sedan deposit. Is the Minister aware that there were inaccuracies in information given to Mr Stewart?

The Hon. R.G. Payne: No, but I suppose that there could be inaccuracies in information given to any committee. I did not sit in on the hearings of the committee. Some of the matters mentioned by the honourable member seem to be of a factual nature. Perhaps the Director-General, who has been to committee meetings in relation to this matter, may be able to provide some further information to the Committee.

Mr Johns: The committee, of course, could only consider what it had before it. There was a mountain of material before it. I do not question that there are errors of fact and perhaps some misinterpretation placed on some of the facts

given. We readily admit that mistakes and some inaccuracies are inherent in that report. The committee is aware of some misstatements and inaccuracies. To redress this problem the proponents were provided with segments of the report that related to their projects and were invited to comment on them as to accuracy or interpretations placed. Each of the proponents took the opportunity to redress that balance, and I am aware of the things that have been mentioned regarding strip mining ratios at Wintinna, of energy content and the Sedan shortcomings. Each of the proponents had some comment, and some questions were raised. These have been recognised and each proponent has now been given an opportunity to make good those deficiencies. The next stage is the assessment of the various options and they will be totally redressed by virtue of the fact that the various organisations, including ETSA, will be putting up proposals based on their knowledge and interpretation. So, it will be their data that will be assessed.

[Sitting suspended from 8.45 to 9 p.m.]

Mr LEWIS: What quantities of jade have been mined in and exported from South Australia, and does the Minister see it having any benefit, especially in relation to China?

The Hon. R.G. Payne: I do not have any figures to hand at all in relation to this matter. The Director-General may be able to supply further information.

Mr Johns: I do not have any figures as to how much jade was exported, but no doubt we can obtain that information. However, 7 750 kilograms of jade was produced last year, valued at \$40 000.

Mr LEWIS: Therefore, production is not significant and the countries to which jade is exported, if at all, are not known.

The Hon. R.G. Payne: Essentially, I believe that is correct.

Mr GUNN: Has any interest been shown in further developing the chrysoprase mine at Mount Davies, where I believe some work was done some years ago? Have any companies shown any interest in developing that deposit, because I understand that the material was of reasonably high quality?

The Hon. R.G. Payne: I am aware of that mine, and I actually visited the area some years ago. I do not know of any current interest in that area, but Mr Johns may have some information.

Mr Johns: I know that there was some production about three years ago, but no mining is occurring at present. The people involved at that time have left, the equipment has all gone, and I am informed that the workings are derelict.

Mr GUNN: Has a final decision been taken to alter the size of claims permitted to be pegged by opal miners? The Minister will recall that there has been some divergence of opinion on this matter from field to field. It appears that perhaps the miners at Mintabie want a different size than is wanted by the miners at Coober Pedy and Andamooka. Can the Minister advise the final outcome or say whether there are any plans to alter the size of the claims or the conditions that attach to the operating of those mines?

The Hon. R.G. Payne: The honourable member will be aware, because I told him on another occasion, that I felt that this was an area in which the consultative process ought to be involved. Over a period of several months I received, in answer to correspondence sent out concerning this matter to the various mining and/or progress associations concerned, letters saying that at meetings agreement had been reached in relation to changes. I also received letters subsequently, saying that the first meeting was wrong and that there was not agreement to change. I received one from Coober Pedy only about two weeks ago and another last week from Mintabie. So, at this stage, I am assessing the current attitude

on the various fields to see whether there ought to be any change. That is exactly where we are.

The Hon. E.R. GOLDSWORTHY: Page 19 talks about some expansion of the Energy Information Centre. What is envisaged there?

The Hon. R.G. Payne: The reference to the expansion relates to considering the possibility of providing a mobile display. The obvious success of the Energy Information Centre and the desire of many people to get sensible, impartial advice on energy matters was demonstrated earlier today, in answers given to the Committee, by the number of visits that it receives, telephone calls and letter inquiries—surprising figures!

It seemed to me and to officers within the Department who raised it with me that a useful expansion of that activity would be to provide a mobile service. Regrettably, I have not been able to arrange the funding necessary to do such a thing entirely this year, but I still have it in mind as a desirable improvement and will see whether it can be done as and when funds permit.

The Hon. E.R. GOLDSWORTHY: I seek some more details in relation to programmes on page 18, where the subprogramme is listed as 'coal/oil shale, oil/gas, uranium, synthetic fuels, alternative energy'. What is happening in all those areas? We have dealt with oil and gas fairly substantially. We have talked a little about uranium: we really have not found out what the Government is spending its money on there; it is spending a bit of money on it. There has been no talk about synthetic fuels, alternative energy, or coal oil shale. We have not been told where money will be expended. Will the Minister give details of those subprogrammes?

The Hon. R.G. Payne: Some of the information sought by the Deputy Leader is shown at page 16 of the yellow book under '1984-85 Specific targets/objectives/significant initiatives/improvements results sought'. That is an all-embracing phrase, if ever there was one.

The Hon. E.R. GOLDSWORTHY: It does not indicate how the money will be spent.

The Hon. R.G. Payne: The officers may be able to give further details. Details of spending are reflected in the lines.

Mr Whinnen: The Department is divided into 10 programme areas for the purposes of presenting programme budget reports. The energy resources, exploration and development programme and the subprogrammes for coal, oil, uranium, synthetic fuels and alternative energy embrace part of the oil and gas division, part of the energy division and part of the resources division. Much of the expenditure is apportioned on the same ratio as that on which manpower is allocated to the programmes. Apart from the information provided at pages 16 and 17, the directors of those divisions will be able to give details about ongoing projects.

The Hon. R.G. Payne: Mr Laws will give details about ongoing programmes for oil and gas.

Mr Laws: The coal exploration section is within the oil, gas and coal division. As Mr Whinnen said, the responsibilities in relation to coal are split between different sections of the Department. The licensing function comes under a separate division. A coal co-ordinating group was established recently, with representatives from those involved in coal, including hydrology and licensing people. In the oil, gas and coal division, the coal geologists are involved in, first, grass roots exploration, doing basic regional geology work to try to determine where in the State reserves of coal that are currently not being assessed may be found. From the geological environment of areas and by going through old bore records we are able to say whether or not coal may be found. As a result, drilling funds have been allocated for next year to examine the cretaceous Winton formation near Marree. A computerised data base of coal information in

South Australia is also slowly being built up.

We do not have a large budget for this, but we have an ambition because certainly there are now four significant deposits being assessed to ensure that the Department gets all the information that is available on these deposits, and as much of that in digital form as early as possible. Some of the emphasis has shifted. The Coal Division has lost one of the geologists who has been transferred to oil and gas duties. The Coal Division is headed by a senior geologist who maintains a watchdog role on all exploration within the State.

The Hon. R.G. Payne: I ask Mr Peter Hill to give further uranium activity information.

Mr Hill: The main activity in regard to uranium is at Olympic Dam, where there is underground development going on in the area of the mine, which is high in copper and uranium. The amount of surface drilling has dropped off. Most of the drilling is now being done underground and development drives are being put through areas of interest.

The Hon. E.R. GOLDSWORTHY: How is the \$107 000 being spent?

The Hon. R.G. Payne: I hesitate to table the diagrammatic information at this hour—*Hansard* will go mad. Mr Whinnen tried to explain that there is a proportional allocation based on the manpower distributed to the various divisions. If anything, this situation illustrates how programme performance budgeting, when applied across a Department with a range of activities such as those in the Mines and Energy Department, has to be illustrative rather than actual.

The Hon. E.R. GOLDSWORTHY: I want to know on what the \$107 000 will be spent in regard to uranium projects.

The Hon. R.G. Payne: It would relate to the salaries of some people, including the Director, and probably Bob Major, who is involved in that activity. We are starting to make the \$107 000 look a bit sick.

The Hon. E.R. GOLDSWORTHY: They do not spend all their time at Olympic Dam.

The Hon. R.G. Payne: That is part of the activity in which they are engaged. I cannot assist further now, but I can undertake to get a written breakdown that will be of use to future Committees.

The Hon. E.R. GOLDSWORTHY: As I am interested to know where the money will be spent—Mr Johns and Mr Major would not spend all their time at Olympic Dam—and as \$107 000 is allocated to uranium work, I accept that the Minister will get more information, because I am interested in further details.

The Hon. R.G. Payne: I will ask Dr Messenger to provide information in regard to the subprogramme of synthetic fuels/alternative energy.

Dr Messenger: This is a fairly broad-ranging set of programmes, as outlined in the programme description, ranging from some we have already mentioned, such as the pre-treatment of coal and the underground gasification of coal, through to some of the gasification projects we are looking at where the intention is to produce gas to be used in conjunction with a combined cycle power generation arrangement. We have a project that we are evaluating with the German company Uhde and we are also looking at a possible project with a Japanese company Sumitomo in the gasification area.

We also have projects taking place at Amdel and at the South Australian Institute of Technology in the coal area to do with the pre-treatment, removal of salt and some of the dewatering aspects. That covers basically the synthetic gas aspects. There is very little synthetic liquids work in progress, but the LPG programme is included in this area—the attempt to develop further the utilisation of LPG in the

State. Aspects of the wind programme are in here as well, as covered by the outline. Basically, it covers salaries and contingencies associated with the studies.

The Hon. E.R. GOLDSWORTHY: I am interested in the Thebarton workshops. I heard with some pleasure about the rebuilding mooted during our time in Government being completed. However, there has been a degree of controversy about what goes on at those workshops. Can the Minister or his officers tell me what is going on in relation to the letter that went out to schools offering the services of the Thebarton workshops and the garage down there to service tractors or any other vehicles that schools might have? I know that the Minister knows that there was a question or two asked in Parliament, one by the member for Light in relation to petrol being supplied and, on the same day, one by me about the letter relating to offers to schools. I would like to know just what goes on down at the workshops with particular reference to a number of schools to which this offer was made. I would also like to know what is happening in this area—and I am interested in the fine detail.

The Hon. R.G. Payne: First, I think it fair that I refer to the remark made by the Deputy Leader in relation to petrol being supplied. The answer to that allegation was dispelled pretty smartly by way of an answer given in the House of Assembly, and I think it was accepted in the way it was given, that there was not a great deal of substance in the original allegation. In relation to the number of schools that have been approached with this service offer, I do not have the exact detail of that. Mr Watts may have some information that will be helpful to the Deputy Leader in relation to this matter.

Mr Watts: I do not have those numbers with me.

The Hon. R.G. Payne: We do not appear to have the information on hand and I undertake to provide it in writing.

The Hon. E.R. GOLDSWORTHY: I was hoping that as it was a current issue and has been raised in Parliament the information would be available. Failing that we will have to wait and see what the Minister can provide. I was interested in the range of activities now undertaken at the workshop. When I was Minister they were making caravans for the Health Department, and there was a downturn in some areas of activity. How are they getting on at the moment? I notice that the Budget papers indicate that they are losing money. We know that an offer was made to schools. A question was asked and that there has been no real response to it in Parliament.

The Hon. R.G. Payne: There is no desire to keep any information from the Committee; it is just not available. I have quietly discussed this with Mr Whinnen and I believe that he can provide some information to the Committee. I invite him to do so.

Mr Whinnen: There were two letters: one offering drilling services and an engineering workshop service and the second providing more detail about the engineering workshop letter. The letters were sent to schools. We are not clear which schools received the extended letter, which was not intended for them; it was intended for Government departments and agencies. We will try to get more details on who got what for the Committee.

At the moment the depot is probably doing exactly what it has been doing for the past 10 or 15 years; half its output is back-up for the Department in drilling, light engineering, providing a transport fleet and any other workshop oriented requirements to meet the Department's needs. We then offer drilling and other engineering services to Government departments, and then drilling to the private sector. That has been going on for years. Of course, drilling always attracts workshop back-up work as it is an undertaking that requires back-up welding and boiler-making work. One really finds it hard to differentiate between the two.

Concerning the level of work at the depot presently, we have turned a fairly significant corner during the early part of 1984, from the time in September 1983 when the Director-General and I spoke to the Minister about the current financial projections for the workshops and the drilling section that really comprise the Engineering Services Division. We consciously embarked on a more active promotion campaign. Over the past 12 months, we have turned the corner and are currently heading towards a break-even situation this financial year.

The Hon. E.R. GOLDSWORTHY: We receive many complaints from private contractors who are concerned about the advertising programme of the Department in relation to its search for drilling work. I was told that this week—or recently—a departmental advertisement appeared in the *Stock Journal*.

This is causing a great deal of consternation among private drilling contractors, because the Department is in direct competition with them. The only difference is that the private contractors cannot make a loss because they will go out of business. The Department has been doing this for some time. We receive reports of the Department quoting for jobs in the private sector at prices which would not cover its costs. Is it Government policy to maintain this level of activity? Does the Minister have any other solution to this problem, or any information that can be given to the private contractors who are bitterly opposed to the level of competition coming from the Department? The work could be done by private contractors, and I refer to drilling bores in golf courses, and so on. Is it Government policy to steam ahead at the present rate?

The Hon. R.G. Payne: Government policy is that the people employed in the Department have the right to be gainfully employed, and they wish to be so employed. The former Minister referred to reports that he has received. I am advised that the costings used and the quotes provided are legitimate and take into account the correct rates. I suppose I am right in saying that the workshop and drilling people do not have to add a profit component to their quotes. Perhaps that is what is upsetting some people. As has already been said, the level of activity which is occurring at the moment has been going on for 10 years and occurred during the time of the previous two Governments, although perhaps not with the same level of advertising and seeking of work that occurs now. I think that what is occurring there at the moment is reasonable. At present I have no other alternative to offer.

The Hon. E.R. GOLDSWORTHY: The Minister mentioned the previous Government, of which I was a part. The previous Government had a policy of no retrenchments: there was no question of putting people off. There was a distinct policy of running down operations which were unprofitable or which could be catered for more successfully by the private sector. It is quite clear that there is over-capacity in the workshop division in relation to the normal responsibilities of the Department. That is highlighted by the fact that the Department has offered to do this work for schools. Even so, the Department is still not making a profit. It is hard to understand how the costings can be considered to be realistic.

Page 21 of the yellow book mentions exploration in the Flinders Ranges Park. I am interested in the results of that exploration activity, because a great deal of controversy surrounds that work by the Department.

The Hon. R.G. Payne: I suggest that the Deputy Leader read the *Hansard* proof to obtain that information. I am not being critical, but I believe the Deputy Leader was absent when Mr Boucaut gave a detailed reply to a similar question.

The Hon. E.R. GOLDSWORTHY: I was absent for five minutes—that must have been the critical time. On page 28 the subprogramme is described as 'Establishment of mineral petroleum resource industries and further processing' and \$507 000 is to be spent. What is that programme all about and what is the money being spent on?

The Hon. R.G. Payne: This subprogramme title and the expenditure have the same attributes as a matter that we canvassed earlier concerning another page. If the Deputy Leader wishes amplification, I can call the various heads of the Department to outline how half their salaries might be apportioned in a way to suit programme performance budgeting and how the various expenditures take place. Does that suit the Deputy Leader?

The Hon. E.R. GOLDSWORTHY: I want to know what is involved in the programmes.

Mr Johns: It is a reflection of the subprogramming of what it is that is otherwise treated in the line budget. A fair proportion of my time, for instance, is against that subprogramme. On page 27, one can see from the nature of the projects that are being progressed—listed there as relating to the various coal developments, the development of Roxby Downs, the accelerated gas programme implementation—an illustration and breakdown of the reporting somewhere in the papers, the apportionment of the time of my deputy, the various directorates, and me against that programme; some estimate has been made, and they are the estimates and the numbers that relate to that level of activity. That recognises the equivalent of 10 full-time occupants.

The Hon. E.R. GOLDSWORTHY: Will some of the other directors comment on this matter?

Dr Messenger: The two key things in the energy or associated areas are the petro-chemical project team, into which a fair bit of my time goes, and the evaluation that we did of the potential mini-refinery at Whyalla. Some full-time staff are there, and some part-time equivalent people; some contingencies money goes on travel and whatever that is associated with the evaluation of those projects.

The Hon. E.R. GOLDSWORTHY: As a subsidiary question, is that mini-refining project still on the go or has it been knocked on the head? Santos was asked for an appreciation, as I understand it, by the Government, as to the viability of the project. From my conversation with Santos representatives, it was never a goer from the Santos point of view (not from the Government's point of view). Is that still a goer, and has money been spent? What are the prospects for that refinery?

The Hon. R.G. Payne: I understand that the proponents have withdrawn to marshal their forces and to organise funding. That was the state of play some time ago. Dr Messenger may have more up-to-date information.

Dr Messenger: We have continued to offer the assistance that any development project would receive. Recently, they told the Premier that they are proceeding to evaluate the project with private backing and that they may come back to us in due course for assistance. They are no longer seeking a Government guarantee and they intend to proceed as a private enterprise project at this stage.

The Hon. R.G. Payne: Mr Hill will refer to the future of programme performance budgeting.

Mr Hill: Work is still being carried out not only in relation to uranium. The EIS for the Beverley uranium deposit comes under this heading. A number of other projects have come in that people want assessed in some way or another.

The Hon. E.R. GOLDSWORTHY: A gentleman by the name of Mr David Hyde has approached the Opposition and the Minister. He stated that ETSA is acting illegally; he claims that ETSA has no right to enter properties and cut down trees. Will the Minister put clearly on the record, if

he can, ETSA's legal position under the Act and the legality of its actions?

The Hon. R.G. Payne: I am advised that ETSA published earlier this year in the *Government Gazette* the regulations under which electricity is supplied to all consumers, claiming authority and power to carry out necessary actions in relation to the protection of supply lines. I do not have the details before me, so I will not be more specific than that. I know Mr David Hyde quite well: I was either in the Navy or coming out of the Navy when Mr Hyde was in the naval reserve, so our acquaintanceship goes back a long way. Mr Hyde telephones me on occasion, and he is of the view that ETSA is acting illegally. However, to this time he has not taken the opportunity to test his allegation.

The Hon. E.R. GOLDSWORTHY: To the best of the Minister's knowledge, ETSA is in the clear?

The Hon. R.G. Payne: Yes.

Mr LEWIS: In regard to the earlier question I asked about jade, what is the quality of the deposit on Eyre Peninsula compared with deposits mined elsewhere in the world for commercial purposes? What goes to make up good quality jade? What are the criteria?

The Hon. R.G. Payne: I will ask the Director-General to lead on the question of the quality of jade and its characteristics.

Mr Johns: The valuation of jade and the value put on it is really in the eye of the beholder. One of the problems encountered by the local product in its promotion is that it must overcome a prejudice in regard to jade, which traditionally is green; New Zealand jades are green. However, the bulk of the Cowell jade production is black. Some people need to be persuaded that, because it is not like other ornamental materials that they see in Singapore and elsewhere, it really is jade. The problem we have in furthering acceptance is proving that it does not suffer because of a colour difference. Certainly it takes a high polish and is extremely hard. One factor involved in the assessment of value relates to the size of the blocks recovered. The materials that have been crafted are first class and some fine pieces have been carved.

The Hon. R.G. Payne: The exhibition showed that up.

Mr Johns: Yes. An exhibition was mounted to coincide with the Adelaide Festival of Arts and the producers of the local Cowell nephrite jade and the people involved with crafting the material displayed work. It is still a cottage industry as shown from the figures given. This small industry nevertheless is an important aspect of mineral production and development. We have done much in the past and we are still trying to assist in its promotion and acceptance.

Mr LEWIS: In regard to the alternative energy programme that was started a few years ago when funds were being allocated to the establishment of alternative energy crops, particularly at Roseworthy College, I am interested to know whether those stands of vegetation are being maintained and whether funds are still being allocated to that programme in an ongoing way to ensure that species such as *euphorbia* and the like are being evaluated as possible sources of hydrocarbons for the future. I am also curious to know whether the naturally occurring *dunaliella* algae of the salt lakes that occurs between Tailem Bend and Kingston around Coomandook and Meningie in particular has been evaluated. I understand that that algae produces hydrocarbons, and it seems that there is no difference between the salt lakes in that location and elsewhere—that is my layman's opinion and untrained eye appraising the situation—and I would like to know why it does not grow elsewhere. Could it be grown elsewhere? What is being done by way of research to keep abreast of it?

I ask this not as a Micky Mouse fill in, but because of the particular importance of research done at the Waite

Institute during the 1950s, for instance, on potential oil crops for human consumption in Australia, things like linseed, rape and sunflower. People at that time thought how ridiculous, that we did not need oil because we had plenty of fat. Subsequently, the oil crops have become major crops of economic significance and importance, albeit 30 years down the track. Will the Minister say what is being spent on programmes in relation to those species of plants and/or animals, because I do not know whether algae are plants, animals or a combination of both?

The Hon. R.G. Payne: I suspect that we do not have any money in any of the lines before us in relation to this particular matter. Dr Messenger may have some useful information about this matter.

Dr Messenger: The Minister is correct. The funding, if there were any, would be under the SENRAC line. It is perhaps premature to say what will be under the current SENRAC line, but I can say that there was no application for funding in this area this year. I will explain. The Roseworthy people are continuing their work on hydrocarbon yielding plants and fast-growing eucalypt species. I understand they have some residual funds and also enthusiasm to continue this work.

The other aspect of the hydrocarbon plants was the work to extract the hydrocarbons; that was being done at the Institute of Technology. Neither of those projects is currently being funded because what work is being done is being carried on as part of the ongoing previous grant work. It is going on at a lower level and partly reflects the fact that the price of oil is in a fairly stagnant situation in real terms. This does not mean, seeing that these are longer term projects, that they should not continue to be worked on, but they are being worked on at a slower pace. I can assure you that the Roseworthy people are continuing to work in this area.

So far as widening the range of plants is concerned, I am not aware of the second plant mentioned. Certainly, the work on euphorbia has been continued. As far as the algae are concerned, nothing is being done here. We have not been asked to fund it and have not formulated a programme; nor has anyone else formulated a programme. Like all these things, if someone wishes to formulate a programme and comes to SENRAC, we will be pleased to consider possible funding for it. The only people who have worked on algae were located in Melbourne and the work was done in Melbourne. There has not been a proposal for work to be done in South Australia.

The CHAIRMAN: I draw the Committee's attention to Sessional Orders, which provide that the debate on the remaining votes allocated for today shall cease at 10 p.m. and no further opportunity will be available for debate. Are there any further questions? I remind the Committee that there are three votes to be taken before 10 o'clock.

Mr LEWIS: I have not been here all day and do not know whether or not the Minister has answered questions put to him about sharing product from the Cooper Basin

where it underlies the State of Queensland. I asked a question of the former Minister about this matter several years ago and also asked the present Minister a question about it. I have heard the Premier make a pronouncement that he would make sure the gas came this way and that the producers in this State would pay their royalties. What is the present state of negotiation with the Queensland Government? Has it reached an impasse and been closed off or not?

The Hon. R.G. Payne: Discussions have been held with Ivan Gibbs, the Minister in Queensland, and there has been no closing off. The matter is under investigation. He advised me by letter that the Queensland Cabinet was addressing the matter. I had a telephone call a few days ago from Jack Woods, who is the counterpart of Mr Johns in Queensland, and he wanted me to know that the matter had not been put aside and that I could expect to hear something in the next few weeks. That is exactly where we are.

Mr LEWIS: Did the Premier speak to the Queensland Premier about it? The Premier said that he was going to put his gloves on and hop in the ring with him for a couple of rounds and suggested that he would sort him out.

The Hon. R.G. Payne: I do not know what the Premier has been doing about the matter. I have answered the question in relation to my activities in the matter.

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

Works and Services—Department of Mines and Energy,
\$3 515 000—Examination declared completed.

Minister of Mines and Energy, Miscellaneous, \$793 000—
Examination declared completed.

The CHAIRMAN: I express my appreciation to the members of the Committee and the Minister for the co-operation they have shown to the Chair today. I say a special thanks to all the officers who have attended. I know that it has been a gruelling session. Seldom do officers attend for the whole session; usually they are split into various sections, but the Mines and Energy officers have been here all day. I appreciate the tolerance they have shown and the frank manner in which they have answered the questions.

ADJOURNMENT

At 10 p.m. the Committee adjourned until Thursday 27 September at 11 a.m.