

## HOUSE OF ASSEMBLY

Wednesday 22 September 1993

## ESTIMATES COMMITTEE A

Chairman:

The Hon. D.J. Hopgood

**Members:**

The Hon. P.B. Arnold

Mr D.S. Baker

Mr D.M. Ferguson

Mr K.C. Hamilton

Mr P. Holloway

The Hon. D.C. Wotton

*The Committee met at 11 a.m.*


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 Minister of Public Infrastructure—Other Payments,  
\$5 235 000.
**Witness:**

The Hon. J.H.C. Klunder, Minister of Public Infrastructure.

**Departmental Advisers:**

Mr E.J. Phipps, Chief Executive Officer.

Mr D. Gellard, Deputy General Manager.

Mr B. Barker, Director, Customer Services and Supply.

Mr R. Morgan, Director, Generation and Transmission.

Mr G. Haberfeld, Director, Corporate Finances.

Mr A. Scott, Government Liaison Officer.

Mr P. Newman, Departmental Treasurer.

Mr H. Salzmann, Project Director, Information Technology.

**The CHAIRMAN:** I refer members to page 129 in the Estimates of Payments and Receipts and to pages 331 to 347 in the Program Estimates. Does the Minister wish to make an opening statement?

**The Hon. J.H.C. Klunder:** No, Mr Chairman.

**Mr D.S. BAKER:** I note that there are eight officers here from ETSA. What is the estimate of cost for the day's hearing as he is so ably supported?

**The Hon. J.H.C. Klunder:** I need to point out that it was the Tonkin Government that introduced this parliamentary procedure. Eight officers are in attendance in order to ensure that all questions can be dealt with as expeditiously as possible, and I think in the long term it will save money rather than cost money.

**Mr D.S. BAKER:** I appreciate that, and I trust that answers will be forthcoming from those eight advisers. At the beginning of each session of the Estimates we have asked a broad range of questions in respect of boards and committees, such as the name of each member and when their term of office expires. The following questions apply to the whole day, so we will not have to go through this again this afternoon when we get to water resources.

For what boards, committees and councils does the Minister have responsibility within his department or agency? Who are the members of each committee, board or council? When does the term of office of each member expire? What

is the remuneration of the members? Who appoints the members and on whose recommendation or nomination is the appointment made? What is the role and function of each committee, board or council?

How many officers are now on contract of service rather than permanent employment, and at what levels are they serving, that is, EL1 or EL2 and so on? Who, if any, of these officers are subject to performance reviews? How is performance measured, who measures it, who reviews it and what are the consequences of failure to perform? Are any performance bonuses paid and, if so, what are they and how are they measured? What, if any, savings have been identified from the restructuring and where are they being made? Do the savings involve a reduction in staffing numbers? If they do, how many staff will leave, from what areas will they leave and at what stage of the restructuring will they leave? What, if any, improvements in efficiency have been made, how are they measured and what is the reward for improvements or penalty for failing to improve?

What problems have been identified as a result of this restructuring? For each department and agency for which the Minister is responsible, how many positions are to be abolished through TSPs? What is each position? How many persons have so far applied to take the benefit of TSPs? How many targeted separation packages have so far been accepted, and what has been the pay-out under each TSP?

Regarding agencies for which the Minister is also responsible, how many performance indicators have been established; what are those performance indicators; how are they measured; who measures them; how frequently has the Minister been involved in the review of performance indicators; and what has been the result of any performance reviews that have been undertaken? Those are stock questions that we have been asking all through.

**The Hon. J.H.C. Klunder:** I will take those questions on notice.

**Mr D.S. BAKER:** What stage have the negotiations for South Australia's entry into the national grid system reached?

**The Hon. J.H.C. Klunder:** I will ask Mr Gellard to deal with that question.

**Mr Gellard:** Initially, the national grid proposed that all the processes would be in place as of 1 July 1993. Subsequently, that date has been revised, and it is proposed to put in place a paper trial process, which will begin on 1 November 1993. There will then be a transition period which will be introduced on about 1 July 1994 before the final implementation of the national grid in its entirety, which will come into being on 1 July 1995. The whole concept is being put into place on the basis of enabling all the parties who agree to the process at least to look at what are the implications of joining the national grid, and the paper trial will allow that to happen. That is the current status of the national grid.

**Mr D.S. BAKER:** Supplementary to that, what are the financial implications to South Australia and does the Minister support our entry into the national grid system?

**The Hon. J.H.C. Klunder:** I will support the entry of South Australia into the national grid system provided that in either the short or the long term it does not disadvantage South Australia.

**Mr Gellard:** With respect to the impact that the national grid will have on financial aspects of the State, quite clearly we have taken the stance that we do not believe that the national grid should have an impact. Consequently, an interconnection operating agreement is currently in place. The

State has provided capital funds in both South Australia and Victoria to allow the interstate connection to be made. The operating agreement, which is currently in place for a period of 25 years, allows for significant savings to flow to this State. Obviously, in any approach that we make with regard to the national grid we will want to ensure that those savings continue. That is the basis on which we are negotiating with respect to the national grid in both New South Wales and Victoria where the interconnection is in place.

**Mr HAMILTON:** What is the status of the Osborne co-generation project?

**The Hon. J.H.C. Klunder:** This is an interesting situation, because the Osborne project has the potential to become South Australia's largest co-generation project, indeed a project on a significant scale in that, if it is successful, it will produce 5 per cent of the State's electricity generating capacity—a very significant part of the State's overall capacity to produce electricity.

In July this year, the boards of ETSA and Penrice Soda Products Pty Ltd signed a heads of agreement which sets out the principles, the responsibilities and the benefits for each party in pursuing co-generation at the old Osborne power station site on the Port River. The Osborne project grew out of joint consideration by ETSA and Penrice of options to secure the future steam requirements for the Penrice soda ash plant, which adjoins the Osborne power station. Currently, ETSA provides the plant with half its steam requirements, with the remainder being generated by the company's own boiler. However, given the age of the Osborne boiler and the high staffing levels required by both the ETSA and Penrice steam-raising equipment, as well as the anticipated increase in soda ash production, the most cost-effective option for the future is a co-generation scheme. This would involve the generation of electrical energy in a gas-fuelled combustion turbine plant, with the exhaust heat being recovered and used for the generation of process steam.

Studies by ETSA and Penrice, with input from the Office of Energy Planning, have identified a co-generation plant based on the gas turbine of 120 megawatts (as I said, one-twentieth of the total generating capacity of the State) as being appropriate for the needs of both organisations. ETSA is keen for the project to proceed when it has an economically justified need for additional generating capacity, which currently is expected to be in 1996-97. However, the timing will be subject to both ETSA's load forecasts and confirmation by the national grid processors that the requirement for additional capacity can best be met by the co-generation project. I am sure that all members are aware that co-generation is an economically and environmentally attractive technology which represents a very efficient use of fuel and will result in reduced carbon dioxide emissions.

**Mr HAMILTON:** The survey organisation NUS International undertakes an annual assessment of industrial electricity costs in Australian cities. The results of this survey normally receive considerable media publicity, but I have not seen anything on the outcome of the 1992-93 survey. Will the Minister provide details of that survey?

**The Hon. J.H.C. Klunder:** I will be delighted to do so, because one of the fascinating things about the NUS survey is that for a number of years it has had great production value, and it has been very widely cited. This year, however, for some reason or other the publicity value of the NUS report turned out to be zilch: it was not mentioned anywhere in any form whatsoever that I am aware. That leads one to suspect

that there may well have been a change, and indeed there was: instead of being somewhat critical in the past or having indicated that we were fairly low on the scale of Australian States, the NUS is now indicating that South Australia has risen through the ranks at a very considerable pace, and all of a sudden that became not newsworthy.

Most members will be aware that the NUS uses a manufacturing consumer model with a consumption of 450 000 kilowatt hours per month, with a demand of one megawatt, to track electricity price changes in 17 countries and, indeed, in all Australia's major cities. The latest survey indicated that Adelaide is now the third least expensive city in Australia for industrial and commercial electricity following a drop of 4.9 per cent to 7.72¢ per kilowatt hour over the past 12 months. However, in the same article, the NUS statement acknowledged that the new tariffs, which came into force on 1 July, had resulted in further reductions in South Australia, 'potentially making Adelaide the second cheapest city in Australia for electricity'.

ETSA has calculated the effect of the July reductions using the NUS model, and has confirmed that it further reduced the price to 6.78¢ per kilowatt hour, verifying the suggestion that Adelaide has now moved into second place. NUS stated that Adelaide was the most expensive of the capital cities surveyed in 1988—and that attracted considerable publicity. The move to the third or second cheapest since then indicates clearly the success that ETSA and the Government have had in improving this aspect of South Australia's competitive position.

**Mr HAMILTON:** Which are the cheapest States and which are the two cheapest cities in terms of electricity costs?

**The Hon. J.H.C. Klunder:** The series of tariff reductions that we have had over the past few years have made a major difference to the way in which electricity prices have moved in South Australia, as I have already indicated in my previous answer to the question regarding the NUS, but it is probably worthwhile indicating the general position, and possibly the best way of doing that is to read out the figures. For the medium to large industrial (that is, 1 000 kilowatt demand and 450 000 kilowatt hours per month) ETSA is now on 6.78¢ per kilowatt hour, Victoria 5.65¢, New South Wales (Sydney Electricity) 7.68¢, and Queensland 7.60¢. So, clearly we are ranking second of those major States. In large industrial, which is a 10 megawatt demand, for 4.5 million kilowatt hours per month the corresponding figures indicate that ETSA's costs are 6.13¢ per kilowatt hour, Victoria 5.65¢, New South Wales 7.19¢ and Queensland (South-East Queensland Electricity Board) 7.31¢. So, again, South Australia ranks second on that listing.

**Mr HAMILTON:** What is ETSA's strategy for the protection of the atmosphere?

**The Hon. J.H.C. Klunder:** A number of measures are currently in place within ETSA to protect the atmosphere as much as possible from various gases, including of course carbon dioxide, and probably the easiest way to deal with the question is to just list those measures.

There is the availability of an extensive customer advisory service to inform industry, commerce and the domestic population on the most efficient ways to use electricity; secondly, the availability of an energy audit service; and, thirdly, the development of sequential wave form distortion (SWD) technology for direct load control. I might add that this is a South Australian invention that is being trialled in South Australia and it has enormous potential. Next, there are revisions to arrangements for parallel operators with private

generators to ensure co-generation is not discouraged; the implementation of a \$9 million research and development plan into alternative energies over the next five years (that is, 1993-97); investigations into coal technologies and investigation and application of efficiency improvements with existing plants (that is, re-blading turbines, which had a quite remarkable result in the Torrens Island power station), and such things as improved condenser cleaning systems; 17 element demand site management programs are under way; financial support for targeted greenhouse related research at a national level through the Electricity Supply Association of Australia; involvement in developing relevant recommendations of the State Government's climatic change committee; wind monitoring and wind energy evaluation for Kangaroo Island; a study by the Woods and Forests Department, providing information on the capacity of native vegetation in South Australian conditions to take up and store carbon dioxide as an offset to carbon dioxide emissions from electricity generating using fossil fuels (until the results of this study were available, estimates of the relative uptake of emissions had to be based on studies from significantly different climatic and soil conditions and, of course, we now have relevant South Australian information); energy labelling regulations by ETSA in the Office of Energy Planning (now the Office of Energy).

Continuing with the list of measures: energy demand management studies by the same two partners; co-generation systems using natural gas by SAGASCO, the Office of Energy and ETSA; wind energy monitoring/wind turbine generator performance evaluation at Coober Pedy by ETSA and the Office of Energy; investigation of coal gasification combined cycle electricity generation by ETSA and the Office of Energy; sponsorship and involvement in an extensive ESAA study on an Australia-wide socio-economic aspect of greenhouse emission reduction strategies; and the development climate change policy during 1992.

ETSA is also carrying out a long-term strategy review to evaluate possibilities of further reductions of carbon dioxide emissions. It is obvious, I must add, that any significant measures taken in this regard will be reflected to some extent in the cost of electricity.

**Mr HAMILTON:** The Minister mentioned greenhouse emissions and financial support for those particular projects. What sort of money are we looking at for support of such measures?

**The Hon. J.H.C. Klunder:** Probably the easiest way to a deal with that is to indicate that, apart from a number of the things that I have already mentioned, the Board of ETSA in March 1993 approved a \$9 million research and development plan in alternative energy for the next five years. The plan includes three major programs comprising activities associated with the three technologies that have at present the greatest potential for application: fuel cells, wind and solar thermal technologies.

These three particular technologies have been selected because fuel cells are likely to be the energy source of the future. They are one of the most efficient technologies known for converting fuel energy into electricity. They have the potential to reduce carbon dioxide emissions by up to 50 per cent and nitrogen oxides by up to 90 per cent in comparison with the conventional generation of power.

It may well be useful to inform the Committee that there are three main types of fuel cells at the moment. The first is the phosphoric acid fuel cell. Units generating up to 11 megawatts are currently available commercially and the

efficiency of these systems is up to 41 per cent. However, that technology looks like being overtaken by two other fuel cells. There is the molten carbonate fuel cell, which is in an advanced stage of development but not yet commercially available as far as I am aware. The expected efficiency of using these cells is likely to be in the range of 45 to 60 per cent, which is quite staggering in terms of generation. The third fuel cell type is the solid oxide unit, which is still at a relatively early stage of development, but the energy is up to 60 per cent, which, if it is in a combined cycle configuration, can actually get to an 80 per cent efficiency rate, and compared with current power technology that is really quite staggering.

Relying on the experience of the CSIRO in the ceramic area, Ceramic Fuel Cells Ltd was formed in 1991 to develop ceramic oxide fuel cells with the aim of commercialising this technology in the future. ETSA has recently taken a seat at the table and become a partner of Ceramic Fuel Cells Ltd.

The second technology I mentioned was wind power, which is, of course, one of the cheapest renewal energy technologies available today. Current research and development will presumably improve the technology and reduce production costs. However, of course, it is at the moment only capable of being balanced against, say, off-grid applications such as diesel fuel for the generation of electricity. It certainly comes nowhere near the grid cost of producing electricity.

Referring earlier to efficiencies of up to 80 per cent, I forgot to mention was the current efficiency of generating electricity, and that is about 36 per cent. So when we talk about efficiencies of about 60 per cent to 80 per cent for the solid oxide fuel cells, we are talking about a doubling of the efficiency or generating twice as much electricity for the same amount of fuel with consequent major reductions in the production of carbon dioxide. The costs associated with solar thermal technology are presently higher than those in respect of wind power. It is still seen as a quite promising technology, and future programs will investigate the practicalities of using this technology in South Australia.

**Mr D.S. BAKER:** The Minister pointed out that we now have some of the lowest power costs to consumers in Australia. I presume then that in November 1993, when we go into the national grid, there is no likelihood of our major customers, 10 megawatts or above, negotiating contracts with other electricity suppliers?

**The Hon. J.H.C. Klunder:** That depends on many assumptions, one of which is that there will be proper transparency of transactions. One of the things we fear in South Australia is that the other States, with a huge oversupply of generating capacity, will in some way try to utilise that capacity at a marginal cost rather than with a properly costed approach. That is one of the reasons why I am very pleased to see a paper trial first, because that will enable us to make absolutely certain that, before the grid starts in earnest, it will be a level playing field, and a transparent one at that, if one can have a transparent playing field. The costs of our electricity are such that I think it is highly unlikely that another State could offer electricity to our major customers in such a way as to provide it at a significantly lower cost than the electricity with which we can provide them.

**Mr D.S. BAKER:** I think it is part of the protocol that those major customers automatically have the right to negotiate with other generators, once we go into that national grid. I assume that the Minister cannot stop that from happening.

**The Hon. J.H.C. Klunder:** No, it will be part of the national grid. From memory, anybody who is capable of generating more than 30 megawatts can put electricity into the grid, and anyone who has the capacity to take out more than 10 megawatts will be able to deal with any of the generators on the grid. That will be part of the national grid structure. Consequently, anybody in any State who takes more than 10 megawatts can deal directly with anybody in any State who provides more than 30 megawatts.

**Mr D.S. BAKER:** The Minister cannot interfere because it is part of the national grid negotiations; is that correct?

**The Hon. J.H.C. Klunder:** If we go into the national grid, that will be one of the conditions.

**Mr D.S. BAKER:** I have a report that was prepared before the merger was announced. It states that, should ETSA lose any of its customers as a result of the national grid, the impact on ETSA will be considerable, and it goes on to recommend that something be done about ETSA's overheads, which amount to some \$350 per day per worker. It states that it is very difficult for the division to compete with anyone from the private sector based on those figures. It also states that, unless we restructure, even the best work practices will be to no avail. It says further, 'The changes proposed in this report are essential if we are to survive.' This was before the merger was implemented. Will the Minister comment on this report, 'CSS division: change or perish', and does he agree with its findings?

**The Hon. J.H.C. Klunder:** A couple of points need to be made. First, if that report to which the honourable member refers was prepared prior to the announcement of the merger, it was also prepared prior to reductions in the cost of electricity on 1 July. In other words, his report is outdated to the extent that those reductions have improved our capacity, as I indicated in my answers to the member for Albert Park. Secondly, the report draws attention to the need to reduce costs, particularly in the area of support services. I point out that that is the area that is targeted by the merger—the reduction of costs in the support services area.

**Mr D.S. BAKER:** I appreciate the Minister's answer. It was written before the merger was proposed, but a lot of the comments are on stages since then. The report also states:

There is little doubt that, if ETSA is to survive, it must become more efficient. . . In July 1991 the ETSA board and senior management endorsed micro-restructuring recommendations for the CSS Division that were intended to achieve the following. . . However, our tentative approach to the stop-start change program has meant that nearly two years later [now 1993] we have not achieved a great deal of change. Our level 5 people, not yet appointed, are extremely disillusioned. They don't know their roles or their lines of business. Level 4 officers, who are still in the old mode of the boss or supervisor/foreman and transition support officers, who are still in place, further confuse the work force.

Does the Minister think that the merger will cure these problems that have not been addressed in the past?

**The Hon. J.H.C. Klunder:** As I understand it, the honourable member is referring to the Backhouse report, which I understand contained private views and was not a formal ETSA report. It has, in any case, been overtaken by the work that has been done since then, particularly by the fact that the merger has been proposed. The merger does seek to address a number of the concerns that were raised in the Backhouse report. So, I would argue that, if the honourable member was really concerned about some of the matters raised in the Backhouse report, one way to overcome them would be to support the merger.

**Mr D.S. BAKER:** As a supplementary question, what the Minister is saying—and he did not answer this in the last part of the question—is that, although the matters raised in this report have not been addressed in the past two years, they will be addressed when the merger takes place, so some magical wand will be waved. Is that a criticism of the board or the previous General Manager, or is it an endorsement of the proposed manager of the joint service?

**The Hon. J.H.C. Klunder:** I cannot accept the member's statement that nothing has been done in the past two years. Indeed, if he looked at the numbers in ETSA in the past couple of years he would notice significant reductions in cost and significant increases in efficiency, and indeed the NUS report pays tribute to those changes and indicates that there have been significant reductions in the cost of electricity in South Australia in its commercial sphere. I might add that ETSA has produced higher dividends and reduced its debt at the same time, so to argue that very little has happened is very much a private view as distinct from an official ETSA view.

**Mr FERGUSON:** The Victorian Government is in the process of dividing its electricity generation into three sections—the power houses, the transmission lines and whatever remains in the third section—with a view to privatisation. I think the Loy Yang Power Station will eventually be put up for sale. Has ETSA carried out any evaluation of its transmission lines and power houses? Has it looked at whether privatisation would be of any benefit to the State at all?

**The Hon. J.H.C. Klunder:** The honourable member is quite right. On 10 August 1993 the Victorian Government announced what it called its reform program in respect of the Victorian electricity industry, which includes a restructuring of the Victorian State Electricity Commission by 1 October this year. The intention is to separate the Victorian electricity industry into three separate businesses comprising generation, transmission and distribution. There is no doubt that the Victorian Government believes that that is an appropriate thing to do. To some extent it is driven by the national grid requirements, which provides for transmission to be separate to allow individual agencies to feed into the grid.

South Australia believes that it is inappropriate to completely separate these organisations, but we have indicated that we will have ring-fenced subsidiaries of ETSA which will, for accounting and transparency purposes, be transparent for entry into the national grid. We have not formalised matters in the way Victoria has divided up its commission, but in an accounting sense we have ring-fenced it and created subsidiaries so that what we are doing will be very clear.

**Mr FERGUSON:** Have you looked at the question of privatisation as opposed to our present set-up? Have you looked at privatisation in relation to electricity prices, what sales figures might be achieved, what valuations might be around the place and so on?

**The Hon. J.H.C. Klunder:** We have looked at the experience in the United Kingdom where the supply of electricity was privatised, and the news is certainly not good. The problems that have arisen there have been quite astronomical. The oversupply of electricity-generating capacity has been exacerbated there rather than easing off, so that does not give us any real incentive to look at it here. In any case, Government policy is not to privatise the electricity industry, so it will not be done.

**Mr FERGUSON:** In relation to the privatisation of the electricity supply in Victoria, has ETSA looked at the possibility that the price of power from that area may increase rather than decrease, because after all the companies have to pay a dividend and they have to make a profit?

**The Hon. J.H.C. Klunder:** I need to correct the honourable member in one area. The Victorian Government is not privatising its electricity industry—it is corporatising it and splitting it up. It may well be that at a later time the Government will be tempted to sell it, but that is not its current view. Certainly the consequences of privatisation in the UK are such that even the Victorian Government would want to look very carefully at the situation, because in the UK the consumer is paying more for electricity and not necessarily getting a better service.

**Mr D.S. BAKER:** I return to my previous question, which the Minister said was out of date. I was quoting from a report. At page 3 it states:

There is little doubt that if ETSA is to survive it must become more efficient. . .

An independent person has gone through the report, and his comment on my last question was as follows:

The division is out of control with overtime budgets exceeding by 40 per cent, no planning, non-frontline people earning normally \$35 000 per annum, making twice that amount using overtime rosters, all of this at the time when ETSA is supposed to have been restructured.

Can the Minister comment on the lack of action that is occurring now?

**The Hon. J.H.C. Klunder:** It is interesting that the member indicates that somebody has looked at this report independently and that Parliament is supposed to take that person's qualifications, etc. on trust. The situation is that ETSA has become more efficient. At the same time as this report was being written, a number of systems and a number of changes were taking place to ensure that ETSA became more efficient. The results are there for everybody to see: retiring of debt, an increased contribution to Government, a reduction in the real price of electricity and a reduction in the number of ETSA's employees. They are pretty fair indicators that this organisation is doing a very considerable job to increase its performance.

Indeed, the merger gives us the capacity to take the next step to increase efficiency and to do a number of the things mentioned in the report by combining services and support staff in such a way as to provide the same service every bit as efficiently but with fewer people.

**Mr D.S. BAKER:** So, the Minister denies the statement that I put to him. Does he say that it is incorrect?

**The Hon. J.H.C. Klunder:** I am not necessarily denying any statement without having a careful look at it. I am saying that, to argue that ETSA is not improving its efficiency and effectiveness, flies in the face of the facts that I have just outlined.

**Mr D.S. BAKER:** Page 43 of the report refers to the rationalisation of vehicles and equipment, as follows:

The current fleet of ETSA-CSS vehicles is spread across the State. Utilisation figures would frighten even the most confirmed robber baron. EPVs have an average usage rate of 300 hours per year compared with the SECVs—

that is, in Victoria—

of 800 hours per year. A private contractor would not even consider purchase at these usage rates.

Does the Minister still consider that ETSA is in good shape and that the rationalisation that has taken place was necessary?

**The Hon. J.H.C. Klunder:** I do not think that a Minister should be expected to know this level of detail about a statutory authority, so I will ask Mr Barker to answer the question.

**Mr Barker:** The size of the vehicle fleet in the Customer Service and Supply Division is the subject of a review, which was started in the middle of this year and which is currently under way.

*Mr D.S. Baker interjecting:*

**Mr Barker:** No, it is since that report. Initial indications are that a reduction in the fleet operating costs of about 15 per cent should be achievable and results so far—and the review has been done on roughly half the division—show that a reduction of about 12 per cent will be fairly easily achieved. So the need for a fleet review has been recognised, it is under way and reductions will be achieved.

**Mr D.S. BAKER:** What is a 'robber baron'?

*Members interjecting:*

**The CHAIRMAN:** Order!

**The Hon. J.H.C. Klunder:** In so far as it has any meaning at all as distinct from just being a pejorative term, I will ask Mr Phipps to respond.

**Mr Phipps:** It is a difficult question, but the term 'robber baron' is often used in organisations which are strongly decentralised and in which the various business divisions have a semi-autonomous operating status in their interaction with customers. That semi-autonomous status is important; however, the writer obviously is of the view that it has perhaps gone a little too far and that there should be stronger collaboration between the business divisions so that the total performance of the corporation is better. More and more modern organisations are trying to strike the right balance between the semi-autonomy of various business divisions and a strengthening of the collaboration and the sharing of resources which adds to the efficiency of the overall organisation.

**Mr D.S. BAKER:** I refer to the Noarlunga Blueprint project undertaken within ETSA. It is held up in many areas of the public sector both here and interstate as a success. It was an in-house program involving both structural and cultural change and it was highly commended by the ETSA Board. Will the Minister confirm my information that ETSA is still hiring external consultants (the Australian Centre for Best Practice of New South Wales) to repeat what has already been done successfully and that this consultancy will cost in excess of \$300 000 and will involve many hours of time of ETSA officers to redo what was done in-house by way of the Noarlunga Blueprint project; and does the Minister still say that ETSA is ripe for merger with the E&WS?

**The Hon. J.H.C. Klunder:** I visited the Noarlunga project some time ago. It was an interesting area within ETSA where there was a ring fenced section which allowed new things to be tried with the cooperation of the union movement to see whether better practices could emerge. I will ask Mr Barker to comment in detail.

**Mr Barker:** The Noarlunga Blueprint project involved about 100 ETSA employees. A number of new initiatives were trialled to demonstrate that some improvement in performance was possible. However, to shift that thinking from a relatively small ring fenced group to a large division of 2 200 people spread right across the State is an enormous task. While some initial thought was given to using an in-

house process to transfer that thinking and experience across the division, initial indications were that that would not be successful and that assistance would be needed from external consultants to allow that process and thinking to be transferred widely.

The consultants used (the Australian Centre for Best Practice) have been involved in a number of significant workplace reform programs throughout Australia with a considerable degree of success—so their credentials are extremely good. That process is now being used within the Customer Service and Supply Division to involve all employees of that division in the process of workplace reform. During that process the experience of many others has been taken into account, including the experience of the Noarlunga Blueprint. So that experience has not been lost, but the mechanism by which it has been transferred to the much broader ETSA community has been through a well recognised process using a consultant.

**Mr HOLLOWAY:** What is the current projected growth in electricity demand, and what will the consequences of that be for a new generating plant?

**The Hon. J.H.C. Klunder:** Present load projections indicate an average growth in electricity demand of about 1.6 per cent per year over the next decade. This includes the effects of recent trends towards more efficient electricity use, but it will be subject to revision as more reliable information on the longer term effects of new demand management efforts becomes available. Even bearing that in mind, it is impossible to project future demands accurately in times of economic uncertainty and with potentially conflicting objectives with regard to such issues as the greenhouse effect and economic growth.

In addition to demand uncertainties, the proposed introduction of a competitive electricity market from July 1995 is intended to provide a national approach to electricity supply. The implications of this are not yet clear and there are some major issues to be resolved, but obviously it will have a significant impact on the provision of new generation capacity within this State. Consequently, ETSA's plans must incorporate a high degree of flexibility, and they must ensure that commitment by way of new capital investment is not made any sooner than absolutely necessary.

During the 1980s ETSA had the clear view that its next base load capacity ought to be introduced in 1992 but, by holding off until the last possible moment before making a decision, it has gradually emerged that we will not have a base load requirement until the next century. So, there is a real advantage in ensuring that decisions are timely rather than being made at too early a stage. Indeed, we have avoided some of the pitfalls that other States have fallen for in their capacity for generation, with both Victoria and New South Wales having vastly more capacity than it has turned out they need, and that is part of the problems those States are experiencing at the moment.

There is no current commitment to a new plant. It is possible that an additional peaking plant might be required in 1994 and that a base load of up to 500 megawatts may be required early in the next century. Potential sources of such base load capacity include surface capacity interstate, a new gas turbine plant, some co-generation capacity and, of course, demand management. It is, therefore, unlikely that we will need to build another power station for base load in South Australia in the foreseeable future—certainly in the rest of this decade.

There are several base load alternatives and, in addition to Northern Power Station 3, which is one of the alternatives, there are possibilities, including other local coals, additional use of gas in combined cycle generation plants, supply from interstate power stations and supplies from alternative energy. While one would not wish to dismiss alternative energy options such as wind and solar, they are not likely to be economic for base load generation during this decade, unless the decision is made that the emission of greenhouse gases will carry an economic penalty.

**Mr HOLLOWAY:** Supplementary to that, what would be the situation involving peak load generation?

**The Hon. J.H.C. Klunder:** Depending on how you count it, the present generating capacity of ETSA is somewhere between 2 300 and 2 350 megawatts. The maximum load so far has been 2 090 megawatts and consequently we are starting to come fairly close to the situation where, if a single large generator, say one of the Northern Power Station generators of 250 megawatts, happens to trip out at a peak requirement, we would be forced to rely on the interstate connection to avoid browning out or blacking out some areas of South Australia. When that situation arises, the normal response would be to include some peaking plant, and that would overcome the situation in the short term.

At the moment, an investigation is being carried out as to whether or not a peaking plant in the next year or so will be necessary and whether the increased base load that may come about as a result of the Osborne co-generation plant will diminish the need for a peaking plant because of its lifting of the overall capacity of the State. At this stage, a number of factors are being looked at. It may be possible that the interstate interconnection could supply some degree of peaking capacity.

**Mr HOLLOWAY:** What is the current premium paid by ETSA for bushfire risk insurance?

**The Hon. J.H.C. Klunder:** Immediately following the Ash Wednesday fires in 1983, ETSA was unable to gain insurance for the protection of the people of South Australia at any price. When insurance was obtained in April 1984, it was at a premium of \$8.26 million, which was a cover of \$91 700 per million compared to a total premium of \$56 000 in 1982. Since 1984, when we got that coverage of \$91 700 per million the cost has decreased quite significantly. ETSA, instead of paying \$91 000 per million of cover, is now paying \$10 262 per million for a cover of up to \$550 million with a \$20 million excess, and the premium for 1993-94 is \$5.439 million. I have to stress that one of the reasons why that premium decreased so markedly is not the kindness of insurers: it is the fact that ETSA pushed for the introduction of vegetation clearance legislation and this, in the eyes of our insurers, has significantly reduced the risk of another event such as Ash Wednesday 1983 occurring. Consequently, it is the fact that the vegetation clearance regulations are in place that has decreased the cost for bushfire insurance by the Electricity Trust.

**Mr HOLLOWAY:** What is the current scope of the activities of the Powerline Environment Committee? What are its finances?

**The Hon. J.H.C. Klunder:** In May 1990, the eight people comprising the Powerline Environment Committee were appointed, and their brief was to expand the State's program of undergrounding existing overhead powerlines for community benefit. From the early 1970s until 1990, about \$14 million was spent on undergrounding or otherwise altering the overhead distribution system to improve the

aesthetics where there was a benefit for the community at large. Until 1990, the scheme was managed by a committee called the Electricity Reticulation Advisory Committee (ERAC), which consisted of three members of the community and two ETSA officers operating as an ETSA advisory group. ERAC was responsible for recommending projects which cost ETSA an average of about \$600 000 per annum. Those funds were matched by local government and, in some cases, where alterations to main traffic routes were involved, the Department of Road Transport also contributed.

In recent times, it was clear that the community had a preference to see an accelerated rate of undergrounding and that particular attention be given to the tourist routes in the State. Consequently, it was decided to increase ETSA's contribution to a maximum initially set at \$2.6 million per annum, provided local government contributed also. The ratio was set that ETSA would provide \$2 for every \$1 contributed by local government, and that is, of course, different from the ERAC contribution of 50 per cent each. This decrease in the local government contribution was put into place on the basis that it would allow the local government dollar to go further, so we would have an increased rate of undergrounding. The level of ETSA funding was raised in line with power tariff increases to \$2.75 million in 1991-92 and \$2.76 million in 1992-93 to maintain the level of such activities.

The Power Line Environment Committee (PLEC) is directly responsible to me. It has representation from local government, the Department of Environment and Land Management, SA Tourism Commission, the Conservation Council, the Department of Road Transport and ETSA, and it has two community representatives. Since the beginning of the 1990-91 financial year, 74 proposals involving 33 councils have been approved, with a total project value of over \$13.4 million, with contributions coming from ETSA, local councils and the Department of Road Transport.

**Mr D.S. BAKER:** Supplementary to my last question, will the Minister confirm that the consultancy that is necessary in excess of the in-house work under the Noarlunga Blueprint project will cost more than \$300 000?

**Mr Barker:** The expected cost for that consultancy is a little short of \$250 000.

**Mr D.S. BAKER:** Has the consultancy been completed?

**Mr Barker:** The work is currently under way. It has been running now for three months, and I would expect that the work will continue for at least another couple of months.

**Mr D.S. BAKER:** It must be a fixed price contract. In the unlikely event that the merger goes ahead, there is some confusion about what will happen regarding employment. I have a message to E&WS people from Mr Phipps which states in part that there is a total commitment to a no-retrenchment policy, ensuring job security for E&WS employees.

Yet another document I have received, which I know is in the Minister's possession, states that in the long term the number of employees will go from 7 120 in the proposed merged utility down to 5 100; in further information for E&WS and ETSA people it states quite clearly that Government policy is that there will be no retrenchments. It says that an E&WS person who misses out on a position will have the options of redeployment within Southern Power and Water or the wider Public Service or possibly a separation package. I glean from that that any of the savings on labour through the merged proposal will be taken up by the wider Public Service because they will just transfer people to other areas. So, the savings in the merger proposals are fallacious.

**The Hon. J.H.C. Klunder:** The honourable member has made some statements regarding the expected decrease in numbers in the merged organisation which I think are probably somewhat exaggerated, but the two statements that people's jobs are safe and that there will be a decrease in numbers are not necessarily mutually exclusive, and indeed they have not been mutually exclusive in the history of either of the two organisations so far, in that it has been possible mainly through the use of VSPs—and, now of course, as they are coming in, TSPs—to reduce the number of people in those organisations in line with the requirements of those organisations. I see no reason for believing that that situation will change when there is a reduction as a result of the merger. So, in fact in some areas we have had more people who have wanted VSPs than we have been willing to grant. I do not see that the problem which the member foresees is a real one.

**Mr D.S. BAKER:** Therefore, is the Minister confirming that E&WS people who do not accept separation packages, or who are not found redeployment within Southern Power and Water, will be employed in the wider Public Service, as stated in this document?

**The Hon. J.H.C. Klunder:** My advice is that the requirements for redeployment, which is what the honourable member is referring to, have existed only to a very minor extent. Of course, such redeployment, one would hope, would then go to other places enabling people in other organisations to take VSPs, because they could be replaced by people redeployed from, say, E&WS.

**Mr D.S. BAKER:** From that answer there will be a lot of giddy people, because my question was: all people in E&WS who do not take a VSP, or do not get redeployed in Southern Power and Water, will be, according to this document, found positions in the wider Public Service. I do not care who comes back from the wider Public Service: is that statement factual?

**The Hon. J.H.C. Klunder:** E&WS figures over the last couple of years have come down from somewhere in the order of 3 850 to close to 3 000. I do not immediately have in front of me the details for ETSA over those two years, although I am sure we could make them available.

At 30 June 1991 ETSA had a total of 5 290 full-time equivalent employees and by 30 June 1993 it had 4 369 full-time equivalent employees. When those figures are taken together there is a significant decrease, and I understand that fewer than 100 people in that total covering those two situations were candidates for redeployment.

**Mr D.S. BAKER:** I do not care what has happened in the past. Here I have facts from E&WS Business Services—the date is on it, the time is on it—and it says quite plainly that anyone in E&WS who does not get employed by Southern Power and Water or does not accept a separation package will be employed in the wider Public Service: is that fact or is it not?

**The Hon. J.H.C. Klunder:** What I have tried to point out to the honourable member is that that has happened in the past, it will continue to happen in the future and it has been of a very minor nature in the past. It has affected remarkably few people and there is an expectation that that will continue, that a relatively small number of people will be caught in that situation.

**Mr D.S. BAKER:** The expected financial outcomes involving this financial deal—and the Minister has a copy of it—indicate that 7 120 employees are budgeted for in 1993-94 down to 5 700 in 1997-98. That does not take into

account the people who will be found work in the Public Service because they cannot be found work in the proposed merged entity.

**The Hon. J.H.C. Klunder:** Let me first indicate that the figure we are working on is not 5 700—it is 6 420. If the honourable member persists in assuming that when people are redeployed into the rest of the Public Service they will be surplus to the requirements there, that is something that needs to be argued, because it is highly likely that this will enable people in other areas to pick up VSPs, if indeed there are people from E&WS who are transferring into other parts of the Public Service. The fact that it will enable VSPs or TSPs to be offered across the entire Public Service will largely absorb any redeployed people moving from E&WS into the rest of the Public Service, if indeed there are any.

**Mr D.S. BAKER:** The way in which ETSA is judged from the customer's point of view is how many minutes per customer per year customers have been without power. I know those figures are taken within the organisation. How many minutes per customer per year have customers been without power over the past five years, so that we may be able to assess some trend?

**The Hon. J.H.C. Klunder:** I will ask Mr Barker to respond.

**Mr Barker:** I have two figures: the average customer outage time—that is, once a customer is without supply, the average time taken to restore supply—was 91 minutes for 1992-93; and the number of customer minutes lost on average in the same year—otherwise known as the 'system average outage duration figure'—was 171 minutes. In other words, each customer was without supply for 171 minutes on average.

**Mr D.S. BAKER:** The question related to the previous five years in order to assess a trend.

**The Hon. J.H.C. Klunder:** We will get that information.

**Mr HAMILTON:** I understand that ETSA has a display centre at Norwood. What facilities are provided to members of the general public at that centre? I understand that there is quite a wealth of information for elderly or disabled people. Unfortunately it seems to me from talking to people in my area that the centre and its services are not well known or seemingly not well publicised. It is very important that people be made aware of measures involving the conservation of electricity. What advice can be given by that centre to persons wanting to purchase various types of electrical equipment, for example, stoves, refrigerators, and so on, and particularly air-conditioners? I am advised that a reverse-cycle air conditioner is cheaper to run than, say, an ordinary fan heater. Perhaps the Minister would like to comment on that centre and what is available there.

**The Hon. J.H.C. Klunder:** The Norwood centre to which the honourable member refers has been a very successful addition to ETSA's capacity to advise people about dealing with electrical appliances, their efficiency, and so on. I will ask Mr Barker to give a more detailed response.

**Mr Barker:** The Norwood centre provides a number of services, including: response to customer account inquiries; a venue for seminars for industrial and commercial customers, when the opportunity is taken to advise on the efficient application of electricity; and advice to residential or domestic customers, particularly on various appliances.

There is quite a wide range of appliances on the floor at the centre for customers to view in order to make an assessment as to their suitability for their particular application. The staff are trained to provide impartial advice on the appliances.

They point out a number of features, including the energy efficiency of each of the appliances so that the customer can then make an informed decision on which appliance best suits his or her needs.

It certainly is the case that reverse-cycle air-conditioners are much more energy efficient than the fan heater to which the honourable member referred.

**Mr HAMILTON:** What advice can be given in relation to the purchase of equipment for disabled people? I understand that some information is available.

**Mr Barker:** From time to time seminars are run at the Norwood centre with particular emphasis on aids for the disabled. ETSA also works closely with the various organisations that provide a service for disabled people. In addition, there is a seniors' program, where ETSA works closely with various senior citizens organisations to provide older members of the community with information on appliances, paying accounts and also about which appliances may be particularly suited to their needs.

**Mr HAMILTON:** I recall ETSA, I think it was last year, putting out a booklet detailing a whole range of items and information relevant to seniors. Perhaps the Minister can say whether that booklet is available for seniors. I could not get enough booklets to distribute to people in my electorate. I hope that the Minister can indicate whether it will be reprinted, because I would like to put my name down for as many as possible.

I refer to the future electricity generating needs of South Australia. Can the Minister provide the Committee with details on the current likely gas and coal reserves and say what other generating power equipment is available in order to satisfy the community at large that we are secure in our generating capacity for the next 10, 20 or 30 years?

**The Hon. J.H.C. Klunder:** I understand that the seniors' booklets are still available. So, if the honourable member approaches ETSA I am sure it will make a proper number available to him.

With regard to gas reserves, the honourable member touches on something that has been of considerable concern to the State Government over a number of years in the sense that our gas reserves at some stage were down to about 18 months or two years guaranteed future supply. Of course, that was an intolerable position, both from the point of view that there was the possibility that in 18 months or two years there might be no gas left, and also, of course, from the perspective that many industries could not possibly set up in South Australia if one of their inputs was gas and they were not assured of a reasonable reserve and a number of years guaranteed supply.

As the honourable member is probably aware, over the past few years the Government has been successful in negotiating a rolling 10-year guarantee of supply, which is based largely on some 65 petajoules coming from the South Australian part of the Cooper Basin and a top up of, I think, 35 petajoules coming from the South West Queensland part of the basin. As well as that, of course, we are currently looking at supplies over and above that from the Northern Territory, from the Amadeus Basin and also from the latest off-shore discovery in the Otway Basin in Victoria. So, we are now in the fortunate position of having a considerable forward reserve—as I said, a 10-year rolling reserve—and the capacity therefore to encourage people to come to South Australia and utilise gas supplies, knowing that they will have a minimum of 10 years warning that there may be a problem with gas supplies.



**Mr HAMILTON:** I mentioned coal reserves.

**The Hon. J.H.C. Klunder:** South Australia has vast coal reserves, but most of them are of a quality that is not as high as the coal reserves in the eastern States. However, there is a phenomenal quantity of coal, and very high quality coal is available beneath the Cooper Basin, but it is at a depth which makes it uneconomical to extract using any of the normal methods.

From South Australia's point of view, currently we are using Leigh Creek coal, which does need extra treatment. The boilers and burners in our coal-fired power stations are changed somewhat from the standard in order to accommodate the problems that we have. That is one of the reasons why South Australia has been putting in a lot of research effort—and ETSA has been putting a lot of money into the research effort—with respect to fluidised bed combustion, a technology which enables the use of very poor quality coals.

Research is also occurring in other parts of the world, notably in the USA and Germany, because they had similar problems to ours. There is an Osborne test facility to test coals using the fluidised bed technology. So, the short answer to the honourable member's question is that we have vast reserves of coal. However, the coal is mainly of a quality that requires specialised treatment.

**Mr HAMILTON:** What has been the outcome of the Bowman/Lochiel investigation where a pit was dug and a certain quantity of coal was taken overseas and tested for burning? I understand that European technology was being looked at in conjunction with mining that deposit. Was consideration given to building a power generating unit on that site?

**The Hon. J.H.C. Klunder:** The short answer is that the quality of the other coals, such as the Lochiel and Bowman deposits referred to by the honourable member, is such that it is not worthwhile changing over from the Leigh Creek coal. When and if Leigh Creek runs out, and if we are still using coal at that stage for the generation of power—and we are now talking some considerable time in the future, probably 30 or more years—it is likely that another source of coal in South Australia would be tapped, but I rather suspect that fuel cells will have taken over by then. If we cannot get another fuel, it is possible that the coal will be reduced to gas, which will be used for the fuel cells. However, that is all still very much in the future, and it will be some considerable time before we need worry about that.

**Mr D.S. BAKER:** The Sydney electricity tariff schedule has an institutional tariff for hospitals, schools, colleges and, I guess, the police, citizens youth clubs, etc. We have charitable institutions in our South Australian schedule. Does that include youth clubs, nursing homes, local sports clubs and senior citizens clubs?

**The Hon. J.H.C. Klunder:** There are two parts to this question. I will deal with the first and ask Mr Barker to comment on the second. If there is a special tariff for hospitals, schools, police stations and things of that nature, in a sense that is transfer pricing. Consequently, you do not get a clear indication of the cost of running those organisations. I will ask Mr Barker to comment on the charity tariff.

**Mr Barker:** The question of those institutions that will be eligible for the charitable institutions tariff is still under investigation. It has yet to be considered by the ETSA board and the Government. I expect that information will be available within the next two months.

**Mr D.S. BAKER:** It is in the level of charges, but they are not available for consumers at this stage, so we do not have it in South Australia; is that correct?

**The Hon. J.H.C. Klunder:** I will ask Mr Barker to comment.

**Mr Barker:** A charitable institutions tariff now exists, and it appears on the tariff schedule. It applies from 1 July 1993. Once the rules are set in respect of which charities are eligible to take up this tariff, those institutions will have their bills backdated to take account of the lower amount which applied from 1 July this year.

**Mr D.S. BAKER:** As a supplementary question, when will that be?

**The Hon. J.H.C. Klunder:** There is an expectation, since that has to be finalised—it has to go to the board before it comes to me—that it will be in a couple of months.

**Mr D.S. BAKER:** I refer to page 90 of the Auditor-General's Report and the subsidies to off-grid suppliers. What was the total of each subsidy provided; what audit process is in place to monitor those subsidies; and has the Auditor-General had any input into that audit process?

**The Hon. J.H.C. Klunder:** The adjusted subsidy payment for 1991-92 is \$3.95 million, and for 1992-93 it was of the order of \$4.45 million. The projected cost at the current rate is about \$6.8 million (in 1993 dollars) by the year 2004, so there is a considerable increase in the subsidy for off-grid consumers. Some of the figures are quite huge on an individual basis. From memory, I think it is Glendambo where the subsidy per customer is about \$9 000 per year, which clearly is something that needs to be looked at.

As to the second part of the honourable member's question, which dealt with the way in which it is audited and the way in which it is looked at, I ask Mr Barker to comment.

**Mr Barker:** A number of ETSA people have very close contact with these remote off-grid undertakings. These people operate from our Port Augusta office, and from time to time they visit these remote undertakings to review their operating performance and also to discuss with the operators their current and projected financial performance. So, ETSA conducts a very close review of the costs of these remote undertakings.

**Mr D.S. BAKER:** Are those subsidies audited?

**Mr Barker:** ETSA makes the recommendations to the Treasurer. In fact, the subsidy is paid by the Treasurer and not by ETSA. The normal practice is for ETSA to review the proposals from these remote undertakings and to make recommendations to the Under-Treasurer as to the reasonableness of the proposals they put forward.

**Mr D.S. BAKER:** I refer to contributions to electricity supply for Aboriginal communities, and this relates to my last question. Could we have details of not only the total subsidy but the individual amounts paid? What audit process does that go through and how is it monitored? Further, does the Auditor-General have any input into that auditing process or does he approve of the payment of those subsidies in both cases?

**Mr Barker:** The arrangements for the Aboriginal communities are similar to those for the remote undertakings in that ETSA officers review proposals from the undertakings to assess whether or not the proposals are reasonable. In this case the subsidies are paid by ETSA out of the ETSA accounts and therefore would be audited as part of the normal auditing of ETSA accounts by the Auditor-General.

**Mr FERGUSON:** What were ETSA's electricity sales for the 1992-93 financial year and what effect, if any, is the current economic climate having on electricity sales?

**The Hon. J.H.C. Klunder:** The sale of electricity in 1992-93 increased by 3.9 per cent over the previous financial year. To break that down a little, residential sales increased by 5.9 per cent, reflecting severe weather conditions which prevailed in the winter of 1992; the general purpose sales increased by 3.8 per cent; and industrial sales increased by 5.5 per cent.

Large industrial customers and commercial sales are expected to exhibit some growth in 1993-94 due to the current levelling out of the recession, and residential sales are expected to be on par with overall sales of 1992-93 due to the assumption that weather conditions will return more to the standard that prevails in general.

**Mr FERGUSON:** Are any asset disposals planned in the near future? I notice that technology seems to have reduced the amount of land that ETSA needs, at least in my own electorate. Are there any plans to sell off any of those assets and, if so, does that money go directly to ETSA?

**The Hon. J.H.C. Klunder:** We have to take on notice the quantum of asset sales that the member has requested, but I understand that the proceeds from asset sales goes into the profit and loss statement.

**Mr FERGUSON:** How does ETSA forecast its electricity demand?

**The Hon. J.H.C. Klunder:** ETSA's long-term demand forecasts are based on what is called an econometric analysis supplemented by end-use information and trends. That is wonderful shorthand, but it needs to be somewhat more explicated. The econometric analysis involves the identification for each sector of significant economic variables, such as price, income and economic growth that affect electricity sales. Historical data is then used to establish the historical statistical relationship between electricity sales and these variables, which are then called independent variables. Mathematicians will know what that means.

The forecast of future movement in these variables is applied to this historical relationship in order to quantitatively predict future sales growth. When I talked about end-use information, I was referring specifically to data from the residential appliance ownership, and efficiency trends are also used among the historical data to determine the statistical significance of those dependent variables. Those types of analyses are further supplemented where appropriate by specific projections of major loads such as E&WS water pumping and some major industrial loads, such as Olympic Dam, based on information obtained directly from the customers.

For instance, it would be fairly easy for E&WS to indicate that, when it has good rains, it will rely a great deal less on pumping water from the Murray. These techniques permit a range of outcomes to be predicted based on different economic growth assumptions and allow the ability to include the expected result of different demand-side management initiatives. Since all of these are dependent on variables, the capacity for accurately predicting what the future load growth will be is somewhat limited.

**Mr D.S. BAKER:** I note from the Auditor-General's Report that in 1992-93 ETSA contributed nearly \$95 million to SAFA, which was a so-called return on capital. What is the budgeted contribution this year?

**The Hon. J.H.C. Klunder:** The honourable member is correct: \$95 million was made available to SAFA. That was

part of the \$153.7 million contributed by ETSA to the Government for the 1992-93 financial year. At the same time as ETSA has been able significantly to reduce tariffs and to retire significant debt, it has also been able to increase its contribution to Government. Those are indications of a healthy organisation which has been doing what it should be doing according to the report, as the honourable member has pointed out, to reduce its numbers and to increase its efficiencies.

The figure of \$95 million was discussed towards the end of the financial year by ETSA, the Treasurer, SAFA and me. That discussion will take place at the end of each financial year so that the actual figure is not usually set until there is a clear indication of the profitability of the organisation.

**Mr D.S. BAKER:** I assume from the Minister's response that the ETSA budget does not contain a contribution to SAFA for this year and that there is nothing in the SAFA budget to indicate that it will receive a contribution this year?

**The Hon. J.H.C. Klunder:** Clearly, I am not the Treasurer, so I have no intention of dealing with the SAFA budget—and I am sure that the honourable member is disappointed to hear that. However, in the ETSA budget, which the board has considered, there is an expected net operating surplus prior to additional Government contributions, which is the SAFA distribution, and the board has not set a figure for a contribution to SAFA because that figure will depend on the profitability of the organisation.

**Mr D.S. BAKER:** As we are now nearing the end of the first quarter of the financial year, surely the Minister's officers could give an estimate of what they think the contribution to the Government might be?

**The Hon. J.H.C. Klunder:** My officers are in a position to give me an indication of what they think the situation will be regarding profitability for the first quarter, but they cannot give an indication of the profitability for the year because that will depend largely on factors such as weather and other matters that are not quite as unpredictable as the weather but often close to it. The decision which the board arrives at must indicate at any given time the budgeted profitability for the year, but it would not make any comment about the SAFA contribution for that year until we are close to the end of the financial year and are in a position to know what the actual profitability is likely to be.

**Mr D.S. BAKER:** On which day of which month last year was the amount of \$95 million allocated to SAFA?

**The Hon. J.H.C. Klunder:** I will have to take that question on notice. A lot of discussion took place. The decision is a matter for agreement between the Treasurer, the board and me: each of us had some input into that. However, I will take that question on notice and provide an answer for the honourable member.

**Mr D.S. BAKER:** It is a fairly big cheque. I would have thought that the Minister might have remembered signing it. I am sure that I would and members on the other side would remember.

**The Hon. J.H.C. Klunder:** I do not sign those cheques. The dividend was paid on 30 June, and that is the standard situation, but those cheques are not signed by me.

**Mr HOLLOWAY:** I refer to page 37 of the Capital Works Program and to a project in my electorate—the Panorama/Tonsley 66kV line rebuild. What is the reason for this project and what will take place?

**Mr Barker:** I do not have the specific details with me, but in general the reason for the project would be to provide extra capacity in that area due to low growth.

**Mr HOLLOWAY:** What progress has ETSA made with respect to its undertaking to erect 1 400 kilometres of insulated conductor in bushfire risk areas over the five years to February 1993?

**The Hon. J.H.C. Klunder:** I think the actual undertaking was for 1 441 kilometres. I have often wondered about the precise significance of specifying to the nearest kilometre. As it turns out, that was somewhat irrelevant because the figure was exceeded. The honourable member is correct. In 1987, ETSA decided to reconstruct a significant length of existing bare overhead power lines in high bushfire risk areas with what was called aerial bundled cable (ABC) or covered conductor (CC). In February 1988, a commitment was made to the then Minister of Mines and Energy (Hon. Ron Payne) to reconstruct with ABC or CC 1 441 kilometres of bare overhead mains in high bushfire risk areas of the State over five years. That target was based on ETSA's estimate at that time of the amount of reconstruction work that was needed to bring the fire risk of the distribution network down to an acceptable level in high bushfire risk areas.

In 1991, a new system called insulated unscreened conductor (IUC) was added to the range of insulated conductor types available and was included in the plan. Special task forces have been used in high fire threat and environmentally sensitive areas to ensure that fire start risks are minimal and vegetation clearance costs are reduced. By the end of June this year, 1 525 kilometres had been erected using those three systems.

The priorities for reconstruction of ETSA's distribution feeders in bushfire risk areas have been determined with the assistance of a mathematical model developed by ETSA in conjunction with the CSIRO. That model was explained to and discussed with a number of groups including the South Australian Bushfire Prevention Advisory Committee. Additional reconstruction work is proceeding to further reduce the fire threat from ETSA's power supply assets in bushfire risk areas and to improve the reliability of electricity supply.

**Mr HOLLOWAY:** Have there been any changes in technology or procedures over the past five years that have affected the way in which this program is being carried out?

**The Hon. J.H.C. Klunder:** The major change in technology during that time was the introduction of the insulated unscreened conductor. That has proved to be quite successful at this point of time.

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

**Mr HOLLOWAY:** Will the Minister give a comparison of ETSA's recently announced 2.25 per cent tariff reduction with those in other States?

**The Hon. J.H.C. Klunder:** Members will be aware that the average reduction on 1 July across all tariffs was 2.25 per cent. However, broken down into the subgroups, into a number of percentages, there were reductions of 4 to 5.5 per cent for very large industrial customers with maximum demands in excess of 10 megawatts; 2 to 8 per cent for small to medium business customers with maximum demands of less than 1 megawatt; 5 per cent for general purpose, industrial and farm off-peak; and a relaxation in the criteria for eligibility, that is, the extension of the minimum off-peak consumption requirement from 30 000 down to 15 000 kilowatt hours per quarter for general purpose off-peak rates to further assist small business. There was a 1.5 per cent increase in domestic rates and a reduction of about 40 per

cent in tariffs for registered charitable bodies to bring them into line with domestic rates, the first half of that to apply from 1 July 1993 and the second half from 1 July 1994. However, the figure overall for South Australia was a reduction of 2.25 per cent.

The interstate tariff movements from July 1993 in other States are as follows: the State Electricity Commission of Victoria increased its tariffs by 1.2 per cent, compared with our reduction of 2.25 per cent; the Sydney Electricity Board, 1.5 per cent; the State Electricity Commission of Western Australia, 2 per cent; Queensland increased, .7 per cent from March 1993; and the Hydro-electric Commission of Tasmania, 1.7 per cent from August 1993. Of course, that led to the fact that the NUS now describes Adelaide as potentially the second cheapest city in Australia for electricity for industrial customers.

The member for Victoria earlier asked a question about the outages in minutes per customer for South Australia over the past five years, and we indicated to him that the figure for this year was 171 minutes per customer per year. Last year, 1991-92, it was 106; 1990-91, 263; 1989-90, 253; and 1988-89, 147 minutes per year per customer. I compare those levels with those of the State Electricity Commission of Victoria. We do not have the figure for 1992-93, but in 1991-92 we had 106 and Victoria had 438; in 1990-91, we had 263 and it had 490; in 1988-89, we had 253 and it had 510; and for 1988-89, we 147 and it had 470. So that gives a fair indication of where we stand with regard to our nearest competitor.

**Mr D.S. BAKER:** Will the Minister provide the estimated budgeted surplus for ETSA this financial year?

**The Hon. J.H.C. Klunder:** The net operating surplus prior to additional Government contribution is \$113.1 million. It is probably reasonable to assist the honourable member by saying that the surplus before Government contributions is expected to be \$171.8 million, budgeted.

**Mr D.S. BAKER:** I raise a matter of a quite serious nature. In a previous question, I asked the Minister about the budgeted SAFA surplus that would come from ETSA to be paid to SAFA. After consultation with his officers, the Minister's reply was that that was not ascertained until late in the year. I asked when that was and he said around 30 June—I even asked whether he had signed the cheque. In that consultation with his officers, I believe they have sought to mislead this Committee. It was in the budget estimate papers which were presented to this House 12 months ago: the forecast was \$95 million payment from ETSA to SAFA. That question was asked by me in the Estimates Committee on 17 September last year. I again ask the Minister: why has he and his officers attempted to mislead this Committee? Will he reveal what the budget payment from ETSA to SAFA is in this financial year?

**The Hon. J.H.C. Klunder:** If it was, in fact, \$95 million, as the honourable member indicated, and that was predicted at the beginning of the 1992-93 financial year, all I can say is that it was a very lucky guess, because I know that the figure moved considerably from that at various times. I am not all that keen on predicting a figure which will depend on profitability, because we cannot predict the profitability as too many external factors are involved. If that was done last year and it turned out to be absolutely dead-on, that is more by guess than by God.

**Mr D.S. BAKER:** You have predicted the profitability. You have already given the figures of \$171 million and a net

of \$113 million. Is the Minister prepared to tell this Committee what is the estimated payment from ETSA to SAFA in the next financial year?

**The Hon. J.H.C. Klunder:** I have already indicated to the honourable member that that may well be a budget which indicates that it is anticipated that there will be a certain profitability. However, the actual result is likely to vary from that. The indication of the actual amount that will be passed to SAFA by way of an additional contribution is something that is far better done at the end than at the beginning of the financial year. However, the honourable member will no doubt be able to look back over profitability and transfer payment figures and payments to SAFA in the past and be able to pick a range of percentages, therefore being able to have a probability of a certain range of figures.

But, as I said, the figures will depend on the profitability at the end. I understand it is normal in most businesses for dividends to be declared only after profit is determined.

**Mr D.S. BAKER:** A figure has been provided in the past. No doubt it must be in ETSA's budget, because it has estimated a surplus. How can this Committee ascertain that figure, and why is the Minister hiding it from this Committee?

*Mr Ferguson interjecting:*

**The CHAIRMAN:** Order!

**Mr D.S. BAKER:** He is hiding it; of course he is hiding it, and you should know better. There is a conspiracy here with the Minister and his officers to hide this from the Committee.

**The CHAIRMAN:** Order! It is now necessary that I apply the Standing Orders a little more strictly than I have been. It is not clear to me whether the member for Victoria is making a statement, whether he is addressing the question through me to the Minister or to me as the Chairman of the Committee in relation to procedure. It is necessary for the member for Victoria to continue to hold the call and clarify where he is going.

**Mr D.S. BAKER:** In past budget papers the estimated budgeted payment to SAFA from ETSA has appeared. It has been subject to questions—in fact, by me during Estimates Committees last year. The Minister has stated to this Committee that it happened later in the year and, in fact, misled the Committee on that occasion, because it happened at the start of the budget period. Is the Minister prepared to give that budget figure to this Committee or is he not?

**The CHAIRMAN:** Just before I ask the Minister to respond, I should point out that the Chair has no control, within the Standing Orders, over the way in which questions are asked and the way in which they are answered. I apply the Standing Orders, but members would be well aware of the comments that the Speaker has made from time to time about the limitations that he has in front of him at Question Time in relation to those two matters. Exactly the same thing applies on this occasion. The Minister.

**The Hon. J.H.C. Klunder:** Regardless of what may have been said last year about a particular number, the actual outcome of the budget for the last financial year was looked at in order to determine what a reasonable figure would be for ETSA to pay to SAFA, and that discussion took place over the last few months of the last financial year, around that time of 30 June when the payment was actually made. The honourable member is completely wrong to say that I or anybody else made that decision on 30 June; all I can say is that the payment was made on 30 June.

If the honourable member wants ETSA to apply business practice, then it is perfectly reasonable for a business organisation to make a prediction, a budget, of undistributed profit or profit before distribution. For him to say that at the beginning of that year a business undertaking ought to declare a dividend before it knows its end of year result, what its actual profitability is, is something that does not happen in the rest of the commercial world and it should not happen here. It is appropriate that we look at the end of the year trading of the Electricity Trust and then for discussions to take place on what a proper dividend to Government will be. If the honourable member believes that other organisations outside of Government should declare a dividend before they know the profitability at the end of year's trading, I suggest he try to tell that to the organisations outside of Government.

**Mr D.S. BAKER:** I quote from last year's budget papers:

The single most important revenue item within the category of recoveries is the distributed surplus of SAFA which increased from \$270 million in 1990-91 to \$400 million in 1991-92; for 1992-93, the return from SAFA is estimated at \$410 million, a small increase on the previous year. This estimate includes a forecast \$95 million payment from ETSA to SAFA in 1992-93 as an additional return on the State's equity in ETSA (the actual amount will, of course, depend on ETSA's outcome and requirements for the year). That equity is reflected, *inter alia*, in the non-repayable capital contribution in ETSA held by SAFA on behalf of the Government.

It was in the budget papers brought down 12 months ago. Is the Minister refusing to supply that to the Committee?

**The Hon. J.H.C. Klunder:** The honourable member, for reasons of his own, is determined to try to put this in a particular framework. I have not looked behind me and I do not know whether or not there are television cameras pointing at us, but I rather suspect that there are television cameras here at the moment, because the honourable member has told them to come in as he will be making a bit of a stunt out of this. The honourable member is saying he wants organisations to declare dividends before they know their profitability.

*Mr D.S. Baker interjecting:*

**The Hon. J.H.C. Klunder:** And the answer to the honourable member's interjection that it has been done in the past is that that does not necessarily make it the best way of dealing with it. For the honourable member to be interjecting and making snide comments in the hope of being picked up by television is a little above and beyond what should be happening in this Committee, which is here to seek information and for me to indicate what the situation is.

The fact that we may in the past have indicated what a dividend ought to be before profitability has determined is not, in my opinion, the proper way to go about it. Consequently, I am saying that I am changing the rules—if the honourable member wants to hear that—and I am changing them to the same situation that exists in organisations like BHP, WMC and everybody else outside of Government. They determine their profitability first and then the board of the organisation, outside of Government, makes a decision as to what the dividend payment ought to be. Here, because the organisation is owned by Government, it is a three-way thing between the Treasurer, the Minister and the board of the organisation, but it is proper and reasonable that we ought to know what the profit is before we decide what kind of dividend ought to be paid.

The honourable member is making an awful lot of fuss about something which he knows deep down is the proper and responsible way to go.

**Membership:**

Mr Quirke substituted for Mr Ferguson.

**The CHAIRMAN:** The member for Albert Park.

**Mr HAMILTON:** Before I ask my question, can I just say that on this side of the Chamber we are fed up to the back teeth with the stunts being pulled by the Opposition and it is about time they woke up to themselves.

**The CHAIRMAN:** Order! Please ask your question.

**Mr HAMILTON:** I notice that we have been given perhaps in some respects less than a fair go in relation to the outrageous statements made by Opposition members.

**The CHAIRMAN:** Order!

**Mr HAMILTON:** My question relates to buy-back co-generation. I am particularly angry about the line of questioning and the suggestions that have been made about ETSA itself. I do not believe that we on this side should be sitting here copping this diatribe which is unfair on those people in ETSA.

**The CHAIRMAN:** Order! The member for Albert Park will ask his question.

**Mr HAMILTON:** Does ETSA have a policy on co-generation and the buying of power from small independent co-generators?

**The Hon. J.H.C. Klunder:** Yes, we do. We encourage energy efficient co-generation wherever it is the best economic alternative approach for business. ETSA is prepared to buy power from any small independent co-generator provided that ETSA's requirement for interconnection between ETSA and that generator has been satisfied. The rates which apply to purchases from independent co-generators vary from 2¢ per kilowatt hour for energy purchased during the off-peak period to more than 8¢ per kilowatt hour during peak periods for reliable supplies purchased for long-term (that is, 10 years at least) contractual arrangements. A trial scheme commenced on 25 September 1992 for small co-generators which sets buy-back rates and back-up of capital contribution arrangements for eligible installations.

Installations that are eligible are up to a maximum of five megawatts for both sales and backup categories. The trial is limited to the first contracted 30 megawatts in each category, which is yet to be achieved, and it will conclude when the 30 megawatts is taken up. The new buy-back rates are structured on-peak and off-peak rates, with the maximum rate applying to contracted firm supply to ETSA during peak periods. The buy-back rates are: for contracted firm supply in the peak from 7 a.m. to 9 p.m. on work days, 8.18¢ per kilowatt hour; off-peak, which is the rest of the time, 2.01¢ per kilowatt hour; and, for non-firm supply in the peak of 7 a.m. to 9 p.m. on work days, 2.81¢; and off-peak, which is the rest of the time, 2.01¢. In addition, a 10 per cent premium will be added to buy-back rates for co-generators using renewable fuels such as landfill gas.

**Mr HAMILTON:** Can the Minister give details of the number of employees in ETSA as at 30 June 1991, 30 June 1992 and 30 June 1993?

**The Hon. J.H.C. Klunder:** At 30 June 1991, ETSA had a total of 586 permanent employees and 104 casual or contract equivalents, giving a total 5 290 full-time equivalent employees. This was subdivided into a salaried officer category comprising 2 410 employees and a wages employee category comprising 2 700 employees. At 30 June 1993, ETSA had 4 223 permanent employees and 146 casual or contract equivalent employees, giving a total 4 369 full-time equivalent employees.

**Mr HAMILTON:** I refer to coal and over-burden fires at Leigh Creek. Will the Minister provide the Committee with

information regarding control and effects of the coal and shale fires at Leigh Creek?

**The Hon. J.H.C. Klunder:** By way of background, I can indicate that coal and over-burden fires do occur in limited areas at the Leigh Creek coalfield, as indeed they do in all coalfields of that type all around the world where shale and over-burdens have to be removed. In a sense, they are as natural a consequence of coal mining as piles of lawn clippings catching fire from time to time.

ETSA has made efforts over a considerable period—since 1982, in fact—to minimise the problem with the frequency and severity of the fires. Indeed, it has been quite successful in reducing the frequency of fires over that time. The methods used include smothering with top soil material, battering down slopes, and compacting the materials with dozers. As part of the continuous improvement, a large research project has been carried out on site to determine the causes of the fires and their subsequent control and/or elimination. This is being done in collaboration with ETSA experts and external consultants.

Work has been under way since 1987 to determine the constituents of over-burden fires at Leigh Creek, and external expertise has been used there also. External investigations were carried out by an officer of the Occupational Health and Radiation Branch of the South Australian Health Commission at ETSA's request in 1989. These tests included measurements carried out for the benzene-soluble fraction, which is a measure of toxic or organic materials with long-term health effects and respirable dusts. This was done in various locations; for example, in the breathing zone of a bulldozer operator who was dozing out a fire; in the location where a hauler driver would be when transporting coal; in the Leigh Creek South township area; and in the coalfield office environment.

The results obtained in all of these tests were well within occupational exposure standards, and the maximum reading for the benzene-soluble fraction was one-tenth of the occupational exposure standard for the dozer operator, with the levels in the township being below the detection limit of the method. Additional exposure monitoring has been carried out by ETSA using external accredited laboratories for analysis, and this monitoring has also shown low exposures.

Even though the monitoring to date has shown very low exposure for employees, personnel working close to burning coal or over-burden have been provided with protective equipment, including canister masks. ETSA is now providing self-contained breathing apparatus for bulldozer operators working in and around fires. In addition, work has been carried out to determine more accurately the constituents of the fumes. To date the information is that the levels of the more toxic components are lower than expected, and all this information has, of course, been freely available to Leigh Creek employees.

During April, May and August 1989, at ETSA's request, the South Australian Department of Environment and Planning, as it was at the time, monitored the sulphur dioxide levels in the Leigh Creek town area as well as at the mine site. The readings for the township averaged at or below one-tenth of the department's guideline levels for residential areas around industry of about .02 parts per million. The readings for the mine were one quarter of the same guideline level for residential areas around industry and one four-hundredth of the occupational exposure standard of two parts per million.

As a worst case, the monitor was also placed within 10 metres of an over-burden fire for two weeks. Even in this

extreme case, the sulphur dioxide averaged one-sixtieth of the occupational exposure standard.

**Mr D.S. BAKER:** Was the decision not to release the information in the budget figures taken by the Minister or was it a Cabinet decision?

**The Hon. J.H.C. Klunder:** On the appropriate page of the board document dealing with the operating statements—where the income, expenditure and so on are shown—reference is made to ‘net operating surplus prior to additional Government contributions and transfers to reserves, \$113.3 million; special dividend (to be determined)’—and there is no entry.

**Mr D.S. BAKER:** I assume from that that it was a decision of the board.

**The Hon. J.H.C. Klunder:** I did not make a decision consciously to suppress this information, because it is not information that ought to be available prior to the announcement of the result of the year’s trading. As I have said time and time again, and I guess I will have to repeat it: there is no point in declaring a dividend before you know what your profitability is. That seems to be in line with industry and commercial practice. I am surprised that the honourable member, who is always arguing that State Government enterprises ought to behave more commercially, is in fact arguing that this ought not to be the situation. He is going completely against what he has put forward on other occasions as the appropriate way to go.

**Mr D.S. BAKER:** On page 90 of the Auditor-General’s Report there is a figure of \$157 million last year for capital expenditure. What was the budgeted figure for capital expenditure last year, and could the Minister provide details of the budget items not carried out last financial year and the amount that they represent?

**The Hon. J.H.C. Klunder:** That is one of those things that is best provided on notice.

**Mr D.S. BAKER:** I notice, on page 250 of the Auditor-General’s Report for the previous year, a revenue breakdown into residential, general purpose, industrial pumping for major pipelines, bulk supply and public lighting. However, that is omitted from this year’s Auditor-General’s Report. Could the Minister provide the figures not included in this year’s annual report, and I do not mind if that is done on notice?

**The Hon. J.H.C. Klunder:** I am obviously not in a position to comment on why the Auditor-General decides to put in or leave out material. Therefore, I make no comment on that. I see no reason why we should not provide that information to the honourable member on notice.

**Mr QUIRKE:** The electricity industry in Australia is said to be heavily burdened by debt and associated interest costs. This has put substantial pressure on electricity tariffs and borrowing allocations for other worthwhile projects. What is the position for ETSA in South Australia?

**The Hon. J.H.C. Klunder:** It is pleasing to be able to report that ETSA is the acknowledged leader in the Australian electricity industry in the field of prudent corporate financial management practices. Australian Rating, the credit rating agency, stated in its February 1991 report on ETSA that, compared with its peers, ETSA had the lowest unit financing costs. Furthermore, ETSA has by far the lowest debt burden after due adjustment for the different sizes of the authorities. ETSA’s ratio of net debt to gross income is currently about 1.1:1, and that compares more than favourably with other authorities who have ratios of up to 3.5:1.

Correspondingly, ETSA’s net financing charges now represent a modest 11.4 per cent of total operating costs compared with up to 52 per cent or more for some other authorities. Since 1985, ETSA’s net indebtedness has decreased from \$991 million to \$980 million, which is a decrease in nominal indebtedness of \$11 million, but in real terms it represents a decline of about 38 per cent. During the period 1984-85 to 1988-89, ETSA’s financing charges showed a constant declining trend with charges for the period being \$113 million, \$111 million, \$109 million, \$103 million and \$96 million.

However, due to an overall higher level of interest rates in Australia during 1989-90 and various other factors, financing charges rose to \$111 million. This \$15 million increase resulted from increased financing charges, foreign exchange variations and higher interest rates. In 1990-91 financing charges fell slightly to \$110 million; in 1991-92 financing charges significantly fell to \$90.5 million; and in 1992-93 there was a further significant decrease in financing charges to \$80.1 million. This resulted from lower levels of net indebtedness throughout the year as well as further falls in interest rates. The decline in ETSA’s real debt since 1985 has meant that not only is the debt burden on future electricity consumers constrained but also that ETSA has made no demands on State borrowing allocations in recent years.

**Mr QUIRKE:** Can the Minister justify the \$153.7 million contribution by ETSA to the Government for 1992-93, and what effect has this had on ETSA’s customers?

**The Hon. J.H.C. Klunder:** That is an interesting question. It is a fairly complex situation. In 1992-93 the average price of electricity sold by ETSA was 10.4¢ per kilowatt hour. While that was a nominal increase of .4 per cent on the previous year’s price, it represented a 2.3 per cent decrease in the price of electricity in real terms. The situation with regard to the contribution that the honourable member refers to is that in 1992-93 ETSA reported an operating surplus after allowing for voluntary separation packages of \$193.5 million and paid \$153.7 million in Government contributions. The breakdown is as follows: a 5 per cent charge on revenue from the sales of electricity of \$43.793 million; a charge by SAFA on the \$110 million capital contribution based on CPSIR of \$12.788 million; a contribution for the provision of services to remote Aboriginal communities of \$2.075 million; and an additional charge by SAFA of \$95 million. The total is \$153.656.

The Government, like any other business enterprise, is entitled to expect a return on its investment. That return can be in the form of either capital gains or dividend payment. To ensure the long-term financial viability of a business, a prudent business manager would not pay out, nor a business owner require, more dividends than the business can afford. The question really is whether the ETSA contribution to Government during 1992-93 is financially prudent. I will tender some evidence to the Committee which suggests that it is. ETSA’s net funds from operations amounted to \$340 million. These funds were sufficient to fund capital expenditure of \$157 million and reduce debt by \$66 million, in addition to Government contributions. As a result, ETSA has continued its trend of real reductions in its net indebtedness. I have already indicated that in answer to a previous question, so we have here a situation where ETSA’s indebtedness is considerably less, as I have already said.

Perhaps another way of putting it is that ETSA’s indebtedness has dropped from 18¢ per kilowatt hour sold to 11.7¢ per kilowatt hour sold, which is a very considerable reduc-

tion. ETSA's net position continues to be an area of considerable competitive advantage in the electricity industry. With its retained earnings in 1992-93 of \$40 million, ETSA has been able to introduce significant tariff reform whilst substantially lowering the average price. Through the tariff reforms, ETSA can now better position itself for the eventual introduction of interstate competition in the supply of energy.

We have a situation where there has been a decrease in ETSA tariffs. There has been a retirement of debt. There have been significant retained earnings, and an increased amount of money has been paid to the owners of the enterprise, the Government. All that indicates that ETSA is a very well run organisation, right from management to all the people working at the so-called coalface. It is a credit to the work done by the people of the Electricity Trust of South Australia.

**Mr QUIRKE:** What is the outcome of ETSA's new submarine cable to Kangaroo Island?

**The Hon. J.H.C. Klunder:** On 3 February 1992, the ETSA board approved an amount of \$4 657 000 for the installation of a new 33 000 volt submarine cable between the mainland of South Australia and Kangaroo Island. The contract for the manufacture and installation of the new cable was awarded to an Australian manufacturer, MM Cables, in competition with international firms. It is the first 33 000 volt cable that has been made in Australia. The cable is designed for a 40 year life, with a total capacity of 10 MVA, which is sufficient to supply future developments on Kangaroo Island.

The work of joining the 20 lengths and laying the completed 14-kilometre length was done by Kilpatrick Green Constructions, which is the main contractor to MM Cables. Its previous experience with this type of work is unique in Australia, and its subsidiaries TA Mellen laid the original Kangaroo Island cable. The cable was laid as planned on 13 January 1993. Practical completion took place on 16 April, which was two weeks before the agreed date. The circuit was energised on 2 May 1993. The interesting thing is that not only was it completed early but it was also completed below budget, because the approved amount was \$4.657 million and the final cost of the project was \$3.85 million.

**Mr D.S. BAKER:** I am glad that members opposite have asked some questions on the Leigh Creek shale oil fires. Can the Minister assure the Committee that ETSA is not breaching any part of the mining legislation at Leigh Creek?

**Mr Morgan:** Discussions recently occurred between the work force and the management at Leigh Creek concerning claims of non-compliance with mining regulations and occupational health and safety regulations. Those claims were investigated and found to be incorrect.

**Mr D.S. BAKER:** So the letter to the Minister from the Leigh Creek Trades and Labor Council dated 16 August has been investigated?

**The Hon. J.H.C. Klunder:** There has been a number of claims by both individuals and the Trades and Labor Council at Leigh Creek. It is part of my normal practice that every issue in respect of occupational health and safety that is raised is looked at carefully.

**Mr D.S. BAKER:** A chest X-ray program at Leigh Creek recently tested 410 employees. What are the results of that program?

**The Hon. J.H.C. Klunder:** I understand that on each occasion when measures of this nature have been undertaken the overall results have been made available. I say overall because it is unreasonable for the individual names of people to be made available with the information. The results are made available to the people at Leigh Creek, and I see no

reason why they should not be made available to this Committee.

**Mr D.S. BAKER:** On 23 August an environmental review was conducted at Leigh Creek. Will the results of the review and that document be released to this Committee?

**The Hon. J.H.C. Klunder:** I understand that it is not normal practice to release that sort of information, but nor was it intended to undertake such an environmental review and to make sure that nobody got hold of the information. I think it is appropriate that the information from that environmental review first go to the board. If the board agrees, I can see no reason why it should not be released to this Committee. I doubt that that information can be made available within the deadline that was set earlier and we might have to make it available outside of that deadline.

**Mr HOLLOWAY:** Has there been any change in ETSA's occupational health and safety performance over the past 12 months?

**The Hon. J.H.C. Klunder:** ETSA has continued to pursue its internal mission of being a leader in the occupational health and safety area. The most significant improvements were made through management commitment and employee involvement, backed by sound planning and support services as appropriate. Health and safety improvements during the year have been demonstrated by the achievement of a level 2 in the WorkCover prevention performance audit carried out in late 1992. A level 2 indicates that ETSA has plans, procedures and policies in place to act as a platform for further necessary improvement.

The improvement during the year has been demonstrated by the fact that lost time injuries were less severe, with accident severity declining by 33 per cent. That has resulted in a consequent reduction of one third in the total hours lost per million hours worked, which is the performance index. Many business units have performed exceptionally well during the year, including the Torrens Island Power Station, technical services, Country East and Augusta Power Stations. Indeed, Augusta Power Stations probably deserve a special mention in the sense that they experienced an 82 per cent decrease in days lost per million manhours worked. Most operational business units in ETSA improved their overall performance during the year. That does not detract from the fact that, as always, in occupational health and safety it is possible to do better, and the organisation will continue to try to do better.

**Mr HOLLOWAY:** In the Capital Works Program I note that one of the new works under 'corporate services' is a solid oxide fuel cell, with \$350 000 proposed expenditure for the current year and at a total cost of \$1.4 million. What are the details of that project, where is that work being carried out and by whom?

**The Hon. J.H.C. Klunder:** The information regarding the amount of money that interests the honourable member for the solid oxide fuel cell does not appear to be available at the moment, so we will have to get that for him on notice. It is certainly a reasonable area for ETSA to be involved with. Most of the other electricity agencies, certainly those on the east coast and ourselves, in this joint situation with ceramic fuel cells ought to keep an eye on this development, and indeed assist in the development because, if there is ever anything that has shown promise of becoming a leader over the next few years, I think solid oxide fuel cells would have to be it. I have just been told that ETSA's contribution is \$300 000, which is a relatively small sum to have a seat at the table of the development of the solid oxide fuel cell.

**Mr HOLLOWAY:** I note from the Auditor-General's Report under the heading 'Pensioner concessions' that \$9.4 million was paid to the trust from the Consolidated Account for electricity concessions to eligible customers who received pensions and other social security benefits during the previous year. What amount is due to be paid this year? This concession is gratefully accepted by many pensioners in my electorate. Given the recent changes by the Commonwealth Government to eligibility requirements, how many customers are likely to receive this concession during the next 12 months?

**The Hon. J.H.C. Klunder:** I will have to let that question go through to the keeper, because ETSA does not pay the concession: it is paid by Government. Consequently, ETSA does not have the information that the honourable member requires.

**Additional Departmental Adviser:**

Mr. J. Eastham, General Manager, Pipelines Authority of South Australia.

**The Hon. P.B. ARNOLD:** What are the overall criteria and general policy of the Pipelines Authority of South Australia in relation to decisions to extend the network into country areas?

**The Hon. J.H.C. Klunder:** Does the honourable member ask that question in general terms or with the extension of the pipeline into the Riverland in mind?

**The Hon. P.B. ARNOLD:** Yes.

**The Hon. J.H.C. Klunder:** The honourable member indicates that he is concerned with the extension of the pipeline into the Riverland. The South Australian Gas Company, not PASA, is extending the pipeline into the Riverland, and PASA is building the pipeline. So, we have an interesting situation, on which the honourable member might well reflect, of a private organisation listed on the Stock Exchange having looked around for people to construct a pipeline and deciding that a South Australian owned State authority, PASA, is the most appropriate organisation to do this work. That in itself is a bit of a pat on the back for the organisation of PASA, its skills and its reputation in the business community.

**The Hon. P.B. ARNOLD:** The Minister's reply partly answers my question but it does not get to the crux of what I am alluding to. What is the Government's involvement in the form of incentives to convince the South Australian Gas Company, even though the Pipelines Authority is the constructing organisational body in this case? That is logical because PASA is the expert in this area, but undoubtedly the Government has influence in where the gas in this State goes, because that will affect the potential for and extent of development in that part of the State.

**Mr Eastham:** The initiative to pipe gas into the Riverland was very much that of PASA. We worked for two years to find a method of constructing a 240 kilometre pipeline cheaply enough so that gas could be piped into the Riverland area and so that the Gas Company could make a reasonable return on the gas that we subsequently sold to it. As an organisation, we have a corporate objective of trying to establish at least one major extension into the country each year. We are at present working towards that.

As the honourable member is probably aware, we have extended into the South-East with the Katnook development providing gas to Mount Gambier and the Kimberly-Clark factory. We are also looking at a number of other country

areas. When we extended to Whyalla, again, that was a PASA initiative, and it was done on the premise that we would get 1.5 petajoules of load. We have already reached 5 or 6 petajoules and are substantiating the thrust that is very much driven from a public sector point of view in the interests of the State and country areas, in particular.

**The Hon. P.B. ARNOLD:** I think many people are having difficulty understanding or appreciating who takes the initiative in the first place, whether it be the Government, PASA or the Gas Company—they each play a different role. Of course, the Government should be interested in development and State revenue to be gained from such development. I am having difficulty working out precisely from where the initiative emanated and what the decision was based on.

**The Hon. J.H.C. Klunder:** Mr Eastham's response to the last question indicated that PASA as an organisation is always on the lookout in areas where there appears to be a marginal feasibility of extending the gas pipeline network throughout the State to try to find ways to turn it from a marginal into a profitable exercise. As indicated in the case of the extension of the pipeline to the Riverland, much research and work was done to ensure that the cost of the pipeline would be sufficiently low to make it worthwhile for private enterprise to follow up and make a profit. However, the eventual result must be that the private sector organisation (SAGASCO) needs to be sure that, when it puts its money on the line, it will get a return—of course, that is reasonable for it to expect. In these cases, the Government, through PASA, tries to assist wherever possible in order to do some of the up-front work and to look at the particular problems of a given location to see whether costs can be reduced. Mr Eastham may wish to add to that.

**Mr Eastham:** We have about \$400 million worth of assets, and the more throughput we can get through those assets, the more cheaply we can operate them. As an organisation we have a driving need to make our assets work as hard as they can. If we increase the throughput, ultimately the cost of supplying gas to both ETSA and SAGASCO will reduce in the long term, and that is one of our driving motives.

**The Hon. P.B. ARNOLD:** The Minister referred to the extension of the pipeline to the Riverland, and it has been decided that there will not be a spur line to Loxton. It is one of those chicken and egg situations: which comes first, the actual development or the pipeline, in as much as the development will not occur without the natural gas being available? At the moment, from the assessment that is being carried out by the Pipelines Authority and the Gas Company, it is not economically feasible to put a spur line to Loxton. But, by the same token, if the Government saw fit to provide some incentives for additional industry to be developed in Loxton, it could be a proposition for the Gas Company and the Pipelines Authority to have a spur line going to Loxton. To what extent is the Government involved with the authority and the Gas Company looking at the potential incentives the Government might be able to provide to generate another new industry, perhaps in Loxton? It would then be a viable proposition for all concerned.

Undoubtedly, the Government has an interest in developing whatever industries it can, particularly in the country areas. Notwithstanding the very small population of the rural areas, they are still generating 50 per cent of the State's export earnings. Even though only about 27 per cent of the population lives outside the greater metropolitan area, 50 per cent of the State's export earnings still come from that 27 per



cent. With Government incentives, the extension of that line to Loxton could well be a proposition.

**The Hon. J.H.C. Klunder:** The honourable member is absolutely correct: if the Government were to say to the South Australian Gas Company, 'We'll build that extra pipeline' or, 'We'll pay you the difference in money between making it non-viable and viable', the South Australian Gas Company would be perfectly happy to go ahead and do so. I also point out to the honourable member that a certain amount of work has already been done by PASA in ensuring that the line going into the Riverland in the first place is at a cost that private enterprise can afford. I also point out to him that, on occasions where the Government has made subsidies available and they have turned not to be successful, it has been very severely criticised by the Opposition. So, to a certain extent, the fact that the Government is not willing to make available lavish subsidies at the drop of a hat is partly the fault of the Opposition itself in gleefully seizing on every opportunity that it can to yell at the Government for not having made a wise investment.

However, PASA has done a lot of work, spent much money and put in a lot of time and effort to ensure that there will be a pipeline into the Riverland. I take the honourable member's point, because it has been shown in places such as Whyalla that, once initiative has been taken and the pipeline is put in place, demand usually exceeds what was expected. I have no doubt that SAGASCO has taken those sorts of figures—suitably discounted, perhaps—into its calculation in deciding whether or not to extend spurs to Loxton and Renmark. It has made a decision that they are not economically viable. Since PASA, having already done its work in ensuring that a pipeline would go into the Riverland in the first place, is now merely acting as the builder. The person who holds the purse strings and who has made the decision as to whether or not this is likely to be viable, even with a possibility of increased demand, is the person who calls the tune. I would hate the honourable member to go away with the thought that the Government is not doing anything: the Government has already done a considerable amount towards ensuring that that first stage of the pipeline is going into the Riverland, and the honourable member would no doubt agree with me that that will make it a lot easier for subsequent legs to go to various towns in the Riverland than if the original pipeline that will be constructed was not there in the first place.

**Mr HAMILTON:** The distribution by PASA to consolidated revenue was \$1.073 million in 1989-90, \$2 million in 1990-91, \$5 million in 1991-92 and \$10 million in 1992-93; the provision for 1993-94 is \$11 million. What has enabled these increased payments to be made? What has been the impact upon gas prices in South Australia?

**The Hon. J.H.C. Klunder:** Again, it is one of these success stories where it has been possible for an organisation to make an increased contribution to consolidated revenue, to decrease its costs and to pay off some of its debt. PASA, like ETSA, has been very successful in the past few years. PASA, for instance, has continued to reduce its work force numbers and its costs by natural attrition, by streamlining costs, by reducing capital expenditure and by increasing productivity through a major internal restructuring. Last year, PASA kept its costs increases below CPI, returned 7 per cent of its debt at \$3 million and contributed \$10 million to consolidated revenue. At the same time, it limited the increase in its overall average transportation charges for gas to customers to just below the CPI increase. This financial

year, PASA has targeted a distribution of \$11 million but still intends to keep its costs below CPI increases and still intends to continue to reduce debt.

**Mr HAMILTON:** What is the current position regarding four contracted gas suppliers? What action has been taken by PASA to improve the situation?

**The Hon. J.H.C. Klunder:** The Pipelines Authority, of course, has currently two main contracted sources of gas: the South Australian sector of the Cooper Basin and the south-west Queensland sector of the basin. The contract for the supply from the South Australian Cooper Basin principally covers an annual entitlement of 95 petajoules in 1993 but reducing to 65 petajoules of gas from 1 January 1994 to 1 June 2003, this being a rolling 10 year contract. From 1 January 1994, PASA will commence purchasing gas under its south-west Queensland gas supply contract, and that will offset the reduction in supply from the South Australian part of the Cooper Basin. PASA has commenced discussions with Cooper Basin producers in South Australia and Queensland aimed at extending the current 10 year forward cover to up to 20 years. Of course, if we are able to extend our forward cover, our rolling contract, to 20 years, that will give almost absolute certainty of supply to any producers and people who come here to set up a business which has gas as an input.

Again, I remind members that this is an incredibly different story from that of a few years ago when the forward supply guarantee was at one stage as low as about 18 months to two years. We have come a long way since then to merely having a 10-year rolling contract; to be contemplating going to a 20-year rolling contract is basically moving up from an old wreck to a Rolls Royce, and that has been done in a very few years indeed. In addition, of course, PASA is still actively pursuing additional supply above the 95 petajoule nominal-base demand. Potential supply sources for this additional demand include the Amadeus Basin in the Northern Territory, as I have indicated in answer to an earlier question, and the recent new discovery just off-shore from Port Campbell in Victoria in the Otway Basin, and that is also something I indicated earlier.

**Mr HAMILTON:** In previous years there has been a contribution by PASA to the Office of Energy Planning, but as I observe there is no provision in 1993-94. Can the Minister explain the reasons why there has been this change and say what savings have been achieved as a result?

**The Hon. J.H.C. Klunder:** PASA previously made a contribution to the Office of Energy Planning (now the Office of Energy) because under the coordination of the Natural Gas Supply Steering Committee the Office of Energy, in conjunction with PASA, had been carrying out natural gas negotiation functions.

The people in the Office of Energy who were dealing with this in conjunction with the PASA people have now been transferred to PASA, so that all of the capacity for the Natural Gas Supply Steering Committee work is now within PASA and, consequently, there is no longer a requirement for PASA to pay a sum of money to the Office of Energy for the services of those people. The estimated resultant ceilings in 1993-94 are estimated to be of the order of \$100 000.

**The Hon. P.B. ARNOLD:** I refer to page 205 of the Auditor-General's Report under 'Non-current liabilities—long term borrowings', where it indicates a figure of nearly \$40 million. I take it that they are the borrowings which enabled the Pipelines Authority to construct the pipeline from the fields to Adelaide?

**Mr Eastham:** It is an historical value. That is a 25-year-old value, and it is a written down value. It has been largely depreciated from the original cost, which was about \$110 million or \$120 million.

**The Hon. P.B. ARNOLD:** We have a situation where the Government authority is borrowing from SAFA to bring the gas to metropolitan Adelaide, but the gas, having arrived in metropolitan Adelaide, is then subject to a commercial decision of the gas company as to whether or not it will be distributed beyond the metropolitan area. So, we really have two separate criteria: one is supplying gas to the metropolitan area, and the other is whether or not it is a viable commercial consideration to supply it.

So, on the one hand, you have the authority, which is a Government instrumentality, delivering the gas to the metropolitan area, but then it is up to the Gas Company as to whether it is distributed beyond that point.

**The Hon. J.H.C. Klunder:** We need basically to come back to the philosophy behind the reasons for the Pipelines Authority's existence. We have in Australia, and probably this applies in many other parts of the world as well, some very close linkages between the people who discover gas and bring it to the surface and the people who distribute gas. In this State it was decided that there should be a break in that process and that the State ought to own the gas at some stage or another, so that the people who brought the gas up and the people who distributed the gas could not be part of the same conglomerate and virtually have a monopoly over the situation. The Pipelines Authority in fact breaks that nexus. The Pipelines Authority does indeed bring gas to the City of Adelaide and various other parts of this State, such as Whyalla, and it sells that gas not only, of course, to SAGASCO but also to ETSA for the generation of electricity. I call on Mr Eastham to answer the remainder of the question.

**Mr Eastham:** The pipeline comes from Moomba to the metropolitan area and, yes, the major load is in the metropolitan area—more than 50 per cent goes to the Torrens Island power station, with perhaps 40 per cent of the remainder going to the Gas Company in the metropolitan area. But there are some significant take-offs as the line comes down from the field, particularly at the Port Pirie take-off, to Port Pirie and Whyalla, and then the Angaston take-off which goes to Angaston to supply the cement works there; and it is from that take-off that we will be extending the line up into the Riverland. So, there is the full length of the pipeline where we can quite easily T-off with laterals along the line if it is viable to do so.

**The Hon. P.B. ARNOLD:** I am not particularly interested in whether it is going to the Riverland or any other part of South Australia. It is a matter of the whole of South Australia having potential for production, in either manufacturing or primary industry, and the produce being converted, value added, in the interests of South Australia. Whether that is in the Riverland, Eyre Peninsula or anywhere else does not matter, as long as it is getting equal consideration and the gas is being supplied on terms and conditions comparable to those applying in the metropolitan area. So, if that is the case I am quite happy.

But what made me look at this initially was that I recognised that this year you have a surplus of some \$12.3 million, \$10 million of which will go into consolidated account and \$3 million towards repayments on long-term borrowings. That \$10 million having been paid to consolidated revenue, are additional works undertaken by the Pipelines Authority then funded by additional borrowings from SAFA; and, if that

is the case, in the interests of development and progress in this State, surely it would be better to fund capital works from surpluses within the authority rather than go back to SAFA for more, having handed over \$10 million to consolidated revenue?

**The Hon. J.H.C. Klunder:** The honourable member's reference to the equality of consideration is an interesting one: clearly that is best achieved and most openly achieved for everybody by the extension to a further group or a further location if it is profitable, because that is the clearest indication that everybody is being treated equally. It is interesting, because I detect a difference between the honourable member's philosophy and that of some other members of his Party, in that the honourable member is saying that Government should be subsidising in order to extend because there may be future profit in it. A number of his colleagues are much more interested in ensuring that these things are done on a strictly commercial basis and they want the Government to be out of subsidising situations.

So, there is clearly a difference of opinion, even within the honourable member's own Party, that needs to be resolved in these situations. I guess that as a Government we are having a bit of both. In this instance, a lot of work was done and money spent on trying to ensure that it was a profitable situation for private enterprise to take up the challenge to extend the pipeline, and if the work had been done by a private company I think we would have probably had fewer questions on this aspect of it than if it had been done by what turned out to be the best agency possible for constructing the pipeline, which is PASA. Again, I will ask Mr Eastman to comment.

**Mr Eastham:** It must be some seven or eight years since ETSA has actually borrowed money from SAFA. We have adopted a policy of trying to fund extensions and capital works from internally generated funds. In the past two or three years, we have been pursuing a very strong policy of reducing our debt and our managed costs and making the assets we have actually return something comparable with the returns on similar assets in the private sector. A \$10 million dividend on the funds employed is still relatively modest in private sector terms; although by public sector terms it is getting very good.

We also have a policy of trying to reduce our debt to zero in the next few years; debt is expensive. However, if there is a worthwhile expansion—for instance, if we finished up having to build a major pipeline to Victoria or the Northern Territory—we are immediately into the \$200 million to \$300 million area of capital expenditure. Clearly, under those circumstances, we would have to be looking for appropriate borrowings at the best rates and with the best financial package that we can possibly get. However, for the smaller lateral extensions we are able to fund from internal funds.

**The Hon. P.B. ARNOLD:** Obviously the Minister did not listen to what I said; that is, that I believe that the Pipelines Authority is the logical organisation to build the pipeline. It is not a matter of questioning the performance of the Pipelines Authority. All I am interested in is getting the gas throughout South Australia where it can be most effectively used and having it generate income, and particularly export income, for South Australia.

**The Hon. J.H.C. Klunder:** I am happy to agree with the honourable member on both counts.

**Mr HOLLOWAY:** Can the Minister say what the trend in employment has been in recent years within the Pipelines Authority?

**The Hon. J.H.C. Klunder:** At the end of 1992-93 PASA had 172 full-time equivalent employees on its payroll, and that was a fairly progressive reduction from 192 employees in 1988-89. During 1992-93, there was a reduction of 2.6 full-time equivalents. However, that was offset by the transfer of 2.6 full-time equivalent officers from the Office of Energy Planning, to which I referred a little earlier. Of course, that was done with subsequent significant savings to PASA. However, I think we are reaching the point of diminishing returns, and I expect that projected employee numbers for this financial year will be only marginally below the level as at 30 June this year.

**Mr HOLLOWAY:** What is the current position concerning the supply of gas in the South-East, and can the Minister say whether there will be sufficient gas to supply forecast increases in demand?

**The Hon. J.H.C. Klunder:** SAGASCO Holdings announced in early August that as a result of a decision by Kimberly-Clark Australia Pty Ltd to convert a boiler to burn natural gas from the Katnook gas field there would be an increase of about 45 per cent in demand in 1994 to approximately 1.8 petajoules. As members would know, Kimberly-Clark Australia, which was formerly Apcel Pty Ltd, operates paper mills at Millicent and Tantanoola and produces a wide range of tissue products.

Gas is purchased from Katnook by PASA and sold under contract to the SA Gas Company. Sales commenced in 1991 and are forecast this year to be of the order of 1.4 petajoules. PASA is presently negotiating with the Katnook producers on the supply of this additional quantity and it is anticipated that sufficient gas will be available. As I indicated, the actual level of demand is likely to be of the order of 1.8 petajoules, but there is some degree of uncertainty about that figure.

**Mr HOLLOWAY:** Page 209 of the Auditor-General's Report states:

Gas sales increased by \$9.9 million (\$25.6 million increase [in the previous year]) to \$214.9 million (\$205 million [in the previous year]) due mainly to an increase in the units of gas sold to the Electricity Trust of South Australia and the SA Gas Company.

What was the gross margin earned on the sales of the discounted gas?

**The Hon. J.H.C. Klunder:** The majority of the extra \$9.9 million increase in gas sales was due to discounted gas. However, the gross margin to PASA from these increased gas sales is estimated to be less than \$150 000. In fact, the best way of putting it is that pretty well all the value of the gas is passed on.

#### **Additional Departmental Advisers:**

Mr A.N. Killmier, Deputy Chief Executive.

Mr P.G. Cooper, General Manager, Headworks and Country.

Mr P. Manoel, General Manager, Metropolitan.

Mr C. Cock, Director, Operations and Support.

Mr M. Leggett, Operating Accountant.

Ms Claire Bossley, Director, Human Resources.

Mr G. Wood, Acting Group Manager, Scientific Services.

Mr P. Prodanovski, Financial Controller.

Mr R. Mander, Capital Accountant.

Mr T. Parker, Adviser.

Mr B. Grimm, Manager, Information Technology.

**The CHAIRMAN:** Does the Minister have an opening statement?

**The Hon. J.H.C. Klunder:** Yes, Mr Chairman. In 1992-93 the E&WS again achieved a zero draw on the Consolidated Account, despite a decrease in water sales of some \$25 million arising from the prolonged unseasonal conditions that prevailed throughout most of the year. The year was the wettest on record and resulted in water consumption falling to its lowest level since 1971-72. This fall in revenue resulted in the E&WS not being able to make a budgeted debt repayment to Treasury of \$17.9 million.

During the year the department strengthened its position in reducing costs to industry through an ambitious change program, which has resulted in work force rationalisation and increased productivity arising from innovations in technology and management and the adoption of a commercial focus. The budget for 1993-94 provides for an operating surplus of \$30.9 million and a contribution by the E&WS to Consolidated Account on the basis of debt repayment of \$22.4 million. The E&WS also plans to repay \$4.9 million to SAFA to extinguish part of the commercial loans acquired from SAFA to finance voluntary separation packages.

The financial plan for the E&WS is challenging and will place it in a strong position to meet the potential needs of the merger with ETSA to form the Southern Power and Water Authority. It is vital that the department continues to improve its performance to achieve world's best practice in its operations to enable industry to take advantage of low cost services. The total capital works program for 1993-94 is \$90.74 million, which includes \$9.5 million for environmental enhancement projects. The E&WS will continue to accelerate protection of inland water resources and the marine environment through the environmental enhancement program funded by the levy on sewerage rates.

The highlights for the 1993-94 capital works program include \$6 million for a December completion of the Glenelg and Port Adelaide sludge main to enable landbased disposal of sludge from the works at Glenelg and Port Adelaide. The total expenditure for this project on completion will be \$11 million, some \$2 million under budget. Also included is \$1.4 million for the Hahndorf Sewage Treatment Works upgrade to increase capacity and to reduce nitrogen and phosphorous levels; \$3.1 million for the Port Lincoln Sewage Treatment Works; \$3.4 million for the continuation of the Myponga water filtration project; \$10.6 million for the continuation of the program to rehabilitate metropolitan sewage treatment works; \$2.4 million for the ongoing construction of water and sewerage infrastructure in the Seaford development south of Adelaide; and \$4.6 million for the continuation of infrastructure rehabilitation works in the Riverland irrigation areas.

This is a very brief outline of the major activities of the E&WS for this financial year. The details are provided in the budget papers. I believe that the E&WS program is responsible and will provide for effective management of the State's water resources and improvement of the public water supply, sewerage and irrigation services, and at the same time provide a continuing high level of service to its customers.

**The Hon. D.C. WOTTON:** As the Minister would be aware, there is significant concern in the metropolitan area about the number of burst water mains—that is, the state of our infrastructure. According to the performance indicators in the Program Estimates, the number of priority 1 bursts is estimated to increase in the metropolitan area from 1.4 per 1 000 customers to 2.5 per 1 000 customers, which is a 78 per cent increase. We also find that the number of chokes in the sewers and connections in the metropolitan area is also

estimated to increase from 44 per 1 000 customers in 1992-93 to 50 or above in 1993-94. The situation will be even worse in country regions, where they are estimating an increase from 25 chokes in sewers and connections per 1 000 customers in 1992-93 to 50 per 1 000 customers in 1993-94, which is double the number.

If we look at recurrent expenditure for metropolitan water, we see that only 80 per cent of the proposed receipts will be spent on recurrent expenditure. As far as metropolitan sewerage is concerned, only 54 per cent of the proposed receipts will be spent on recurrent expenditure. In regard to existing infrastructure of the depreciation for metropolitan water, only 58 per cent at the most is being reinvested, and it will be even less if the proposed new works are taken into account. If we look at the country water supply, only 26 per cent is being reinvested. This means that the infrastructure is running down while the maintenance expenditure is being reduced. With that in mind, I refer to an article headed 'Threat to Water Supplies' in the *Advertiser* of 9 August as follows:

South Australia's water supply is under threat because of a lack of funds to repair or replace worn out and ageing equipment.

That information came from a leaked Government document. A regional manager and other Engineering and Water Supply employees have expressed their alarm, according to the paper, and condemnation of the situation, which they say could have drastic consequences. The article continues:

We are rapidly heading down a path where assets will fail causing huge problems. Water supply could be cut or drastically reduced to areas such as metropolitan Adelaide, the Iron Triangle towns or other country towns.

The article also states:

The committee—

an in-house consultative E&WS committee in the Murray-Mallee—

which comprises management and employee's representatives, passed a motion expressing alarm at the shortsighted approach to the consequences arising from asset deterioration brought about by the failure to provide adequate capital funds and work force rather than breakdown maintenance.

If we refer to the Financial Paper No. 2, program 1, metropolitan water supply under salaries, wages, related payments, goods and services, operating and maintenance expenses, minor equipment and sundries, we see an estimate for 1992-93 of \$17 997 000. The estimate for 1993-94 is \$6 439 000. If we look at program 3, metropolitan sewerage, we find that under operating and maintenance expenses, minor equipment and sundries, the estimate for 1992-93 was \$16 995 000. For 1993-94 the estimate has reduced to \$7 452 000. The proposed expenditure for 1993-94 is \$45 575 000 less than the 1992-93 actual, or a reduction of 11.86 per cent. With regard to the capital situation, if we take the difference between the 1992-93 proposed and actual, some \$6 390 000 was not spent.

The proposed \$90 805 000 for 1993-94 is in real terms, allowing for inflation, little above the same as actual for 1992-93. I was interested to receive a response from the Minister to a question that I asked about the number of burst mains, and in that reply the Minister said:

With such a large infrastructure it is impossible to eliminate all risks associated with such systems. The department's policy regarding damage resulting from floodings and burst or leaking pipes is based on Crown Solicitor opinion and legal precedent in relation to such events. The department will deny liability unless it can be shown that the Minister, his servants or his agents had been

negligent. If the department is found to be negligent in the performance of its duty and damages result, the department would pay reasonable compensation.

I would suggest that openly indicating that more bursts are anticipated, coupled with lower expenditure, raises the question of negligence and liability. What has caused the E&WS to estimate a significant increase of 78 per cent in the number of priority 1 bursts in 1993-94? How does it define priority 1? How does it reconcile the situation with the 1993-94 objectives whereby the E&WS will continue to improve water quality and service to customers, which is set out on page 339 of the Program Estimates? Have staff been reduced to such an extent that maintenance and services have been downgraded and the department could be held to be negligent in respect of both the number of bursts and the time taken to restore services?

**The Hon. J.H.C. Klunder:** The honourable member is using figures very badly. In 1989-90 there were 2.1 bursts per 1 000 customers; in 1991-92 there were 1.9 bursts per 1 000 customers; and in 1992-93 the figure dropped to 1.4 bursts per 1 000 customers. Those are actual figures. They are on the way down—not on the way up. Clearly, because he cannot read a 'less than' sign, the honourable member is trying to indicate that the expectation of the E&WS is that there will be 2.5 bursts per 1 000 customers in 1993-94. That is just total rubbish. That little sign in front of the 2.5 means 'less than'. It is therefore a target—it is not an actual figure. It is a target below which the E&WS wants to come in. For him to argue that the E&WS expects 2.5 bursts per 1 000 customers is just arrant nonsense.

If the television cameras are pointing at us right now, it is worth saying again that the honourable member is pulling a stunt that will have every year 9 student in this State howling with laughter—that a person in a position of such responsibility in the Parliament is capable of misreading figures that badly.

**The Hon. D.C. WOTTON:** Do I take it then that the Minister will not provide answers to the questions that I have asked? The Minister can huff and puff as much as he likes, but anybody who reads the budget papers will see quite clearly that what I have said is accurate, and what the Minister is saying is inaccurate. I again ask the Minister to answer the questions that I put to him.

**The Hon. J.H.C. Klunder:** I honestly cannot help the honourable member if he persists in reading 'less than 2.5', which is therefore a target figure to come in below, as an actual figure of 2.5. If the honourable member does not know what it means, nothing I say will assist him. As I said, every year 9 student who has learnt about inequalities in this State would howl with laughter. I am sure they would not believe that a member of Parliament could be so unaware of the situation.

*Mr D.S. Baker interjecting:*

**The Hon. J.H.C. Klunder:** For the edification of the member for Victoria, I used to teach mathematics to students in years 9, 10, 11 and 12, so I am totally staggered that the honourable member is not capable of first, understanding that the number of bursts per thousand customers has declined significantly over the past few years and, secondly, that less than 2.5 means that that is a target that we try to come in under.

**The Hon. D.C. WOTTON:** I refer the Committee and all those year 9 students who might read this to page 339, which gives the number of priority 1 bursts per 1 000 customers. In

1989-90 the figure was 2.1, in 1990-91 the figure was 1.9, in 1992-93 the figure was 1.4 and the estimated figure for 1993-94 is 2.5. How was the figure of 2.5 arrived at?

**The Hon. J.H.C. Klunder:** I give up trying to educate the honourable member and ask Mr Killmier to add something to this debate.

**Mr Killmier:** There are two ways of providing figures on bursts. In the Program Estimates we have provided the figures per 1 000 customers. That is a useful figure to show the trends when you are comparing within your own organisation. Another way of doing it is the method that has been used by the water industry across Australia. I have a document produced by ARMCANZ, which is the water forum for the Agriculture and Resource Management Council of Australia. It makes a comparison of water main breaks in the metropolitan area per 100 kilometres, and the comparison is across all the water authorities of Australia. The latest available figures are for the year 1991-92 and relate to actual water main breaks per 100 kilometres for each of the major authorities. In Sydney there were 35 water breaks per 100 kilometres; in Melbourne there were 29; in Western Australia there were 53; in Adelaide there were 19; in Brisbane there were 41; and in Hunter there were 43. So, Adelaide was considerably below the next lowest figure, which was Melbourne, and there are reasons for that. Much of the water system in the metropolitan area was re-laid in the 1950s and 1960s, and whilst we are aware that there have been a number of significant bursts in recent times the fact remains that, by any comparison, the number of bursts in South Australia is actually declining. The figures for priority 1 bursts are as follows: in 1990-91 there were 789; in 1991-92 there were 800; and in 1992-93 there were 612. So the number of bursts last financial year was less than previous years. However, that does not get away from the fact that several bursts were significant. Naturally, we regret any bursts, but it is a fact of life that any water authority anywhere in the world will have burst water mains.

**Mr HAMILTON:** How is sludge from the Glenelg and Port Adelaide Sewage Treatment Works to be managed? As the Minister would be well aware, his predecessor promised adequate management of the sludge from both those plants. I am aware, as are my constituents, that Frederick Road is being ripped up through the suburbs of Seaton and Royal Park in my electorate so that this pipeline can be put down. The Government and the previous Minister promised that that work would be completed by November or December this year.

It is of equal importance that that sludge not be sent out to sea, as has happened in the past, where, many people allege, it denudes seagrasses, causing further problems along the dunal areas of the electorate of Albert Park. I raise this matter because it is of critical importance to not only the people in my electorate but the people who live in Glenelg and other parts of the western suburbs of Adelaide.

**The Hon. J.H.C. Klunder:** The honourable member is quite right if he has noticed activity on the pipeline from Port Adelaide and Glenelg to Bolivar. The pipeline has now been constructed, and it is my understanding that the pumping equipment has been installed and the pipeline is being tested for leakage. Under this project, 37 kilometres of pipeline has been laid and testing and pigging (that is, passing a plastic scourer down the pipeline to prove there are no obstructions) is currently in process or has just been finished. The work will be completed well under budget by the end of this year.

Regarding what will happen to the sludge at Bolivar once it has dried, clearly as far as possible we are trying to see whether we can utilise it in ways other than as land fill or just dumping. There are a number of interesting options. Hallett Brick is now marketing a brick that utilises between 5 and 10 per cent of sewage sludge. The rehabilitation of abandoned mine sites is a possibility, and an investigation is under way at the moment to see whether sludge can be used as capping material for the Brukunga mine site, and a consultancy will be initiated on that matter soon.

There is an agricultural reuse capacity for sludge. Pivot Fertilisers currently utilise the majority of sludge from Bolivar and Christies Beach in a range of fertiliser products. Following a recent advertisement by the E&WS, a number of organisations have registered their interest in reusing sewage sludge for fertiliser, soil conditioner, soil replacement and compost. With part funding from the E&WS, a University of Adelaide PhD student is conducting research into the use of sewage sludge as a micronutrient carrier for the trace element deficient sandy soils of South Australia. The E&WS in conjunction with the Department of Environment and Land Management is involved in trialing the use of sewage sludge in various mixtures for the revegetation of degraded Crown land on the LeFevre Peninsula. So, quite a number of things are being done to see whether we can use something that previously we were pumping into the sea.

**Mr HAMILTON:** Will the Minister be more precise regarding the anticipated completion date? He said that it would be towards the end of this year, but will it be in November or December, and can he also be precise about the cost of this project?

**The Hon. J.H.C. Klunder:** The cost is expected to be about \$11 million on completion, and that is about \$2 million under budget. The full cessation of sludge discharge into the gulf is expected to be by the end of October. As always happens in these cases, there may be a few weeks either way, but it will certainly be finished before Christmas.

**Mr HAMILTON:** My second question is of importance to not only my electorate but adjacent electorates in the western suburbs. What progress has been made concerning the impact of the disposal of effluent from metropolitan and country wastewater treatment works on fresh and marine water environments? In particular, will the Minister address the problem that exists at the Port River outlet concerning the Port Adelaide Sewage Treatment Works? I do not know how residents of the area, particularly those who reside on the Semaphore Housing Trust estate, have put up with the stench for so long—it is beyond my comprehension. I believe this Government's—or any Government's—addressing of this problem is long overdue. What are the options for remedying that problem, particularly during the summer months? It is bad enough during winter, but in summer the problem is even worse.

**The Hon. J.H.C. Klunder:** Consultancies have been finalised and have produced four reports titled 'Future Operation Strategies for the Bolivar, Port Adelaide, Glenelg and Christies Beach Wastewater Treatment Plants'. These reports provide costs for options of land based disposal of effluent which are then compared with upgrading the plant for nutrient removal and a continuation of the discharge into the marine environment. For the Port Adelaide Wastewater Treatment Plant, a pilot plant has been commissioned to provide design parameters for upgrading the treatment process to reduce nutrients and to continue discharging into the Port River. A submersible mixer has been installed, fixed

to the Jervois Street bridge, to destratify the Port River. A monitoring program will be established to assess the effectiveness of the mixer and the potential benefit of controlling toxic dinoflagellate blooms. For Bolivar, Glenelg and Christies Beach wastewater treatment plants, a consultancy will be let to prepare a mathematical model that will estimate the capacity of the Gulf of St Vincent to assimilate nutrients in the effluent discharges.

A number of things are in hand for various country wastewater treatment plants. For instance, preliminary investigations are being carried out into future operating strategies for the Angaston, Bird-in-Hand, Heathfield, Naracoorte and Millicent wastewater treatment plants. Investigations have been completed for the Myponga and Gumeracha wastewater treatment plants. As these works discharge into water supply catchments, obviously proposals are being prepared for land based disposal of effluent. For the Victor Harbor plant, a consultant has finalised his investigations into land based options versus upgrading for nutrient removal and the continuation of discharge into the Inman River. A community consultation program was carried out to inform the community of the results of the consultant's investigations and registrations of interest were sought from landowners who may be interested in effluent reuse. Proposals are now being prepared for the 100 per cent summer reuse of effluent with discharge to the Inman River during the winter when the flow is sufficient to achieve a three-to-one dilution.

**Mr Cooper:** The Port Adelaide works has an odour treatment process, as the honourable member would be aware; we have demonstrated that to him. When we have finished our pilot plant work at Port Adelaide and decided the additional new processes and everything that has to be done, further odour treatment facilities will be addressed at that time. So that will be part of the upgrade and redesign, which will be a major upgrade—well over the \$10 million category.

**Mr HAMILTON:** The Minister and the officers would be aware that, since I came into Parliament in 1979, I have asked one or two questions about the matter, and the electors of Albert Park have been constant in their desire to see the elimination of the odours at the plant. I have often said that you cannot make a silk purse out of a sow's ear. I would like further, detailed and comprehensive information in relation to what I understood was the proposed pilot plant? When is it likely to commence? When is it likely to be completed? What is the anticipated cost? Is it anticipated that this will reduce the odours by X per cent and, if so, what is that percentage, or will it completely eliminate the odours? I suspect not; nevertheless, I would like as much detailed and comprehensive information as possible so that I can pass it onto my constituents?

**Mr Cooper:** I do not like putting a damp squib on the question, but the pilot plant is not primarily for odour removal: it is to test and analyse the sewage of Port Adelaide so we can get the precise parameters to design the new replacement add-on plant to cope with the future load and to reduce dramatically the nutrients in the effluent. So, the pilot plant is a process pilot plant. It will give us some indication of odours while we are running it. It is a very sophisticated plant, designed by consultants, and it can be wheeled away to other treatment plants to establish the design parameters for those works as well.

The honourable member would be aware that we have been putting chemicals in the rising mains, oxygen and chlorine in particular, for a number of years now, and we

have odour collecting devices at the plant and a deodorising device. Certainly, in the redesign of Port Adelaide, we would be going back to fundamentals also to look at odour design, for argument's sake, covering much wider areas than are covered now and deodorising that gas. So, there would be no doubt that we would have a major odour purge on the redesign of the Port Adelaide treatment works. So, it will not be omitted. I mentioned a figure of more than \$10 million. I just checked the figure, and the broad estimate at this stage is that probably \$23 million would have to be spent at Port Adelaide to bring it up to a top nutrient removal plant.

**Mr HAMILTON:** What is the likely commencement date?

**Mr Cooper:** Our financial program has \$150 000 in 1993-94, \$300 000 in 1994-95—that would be major design and development—and it would start to ramp up in 1995-96 to \$1.6 million, then \$4.5 million, \$5 million and a further \$11 million. So, it is built into our five year plan now.

**The Hon. D.C. WOTTON:** If the Government did not anticipate an increase in the number of bursts, why did it not select a figure of less than \$1.4 million, given that we were told that we are getting better rather than worse—and that was the actual figure of last year—rather than going to a figure of less than \$2.5 million? I also asked a question, which was not answered, with regard to the number of chokes in sewers and connections per 1 000 customers which, we are told, is going from 44 in 1992-93 to fewer than 50 in 1993-94; will the Minister explain that? The other question that I asked, which was not answered, was: will the Minister tell me what is involved—if he believes that I got it wrong (and I do not believe I did)—in the operating and maintenance expenses for minor equipment and sundries for both metropolitan water and metropolitan sewerage which have been halved as an estimate for 1993-94?

**The Hon. J.H.C. Klunder:** The honourable member will continue to not have all his questions answered if he continues asking me half a dozen questions every time he asks a question—particularly when they are related only marginally to each other. With regard to why there is less than 2.5—and I am glad to see that the honourable member does recognise that the inequality sign does have a meaning—clearly a number of factors are operating.

Nobody knows where a pipe will burst or when it will burst. In fact, there have been numerous instances of pipes that have burst after 30 years of life and for the next 30 years after that they have behaved themselves perfectly and have not had another burst. Consequently, to remove a pipe and replace it on the basis that you have some bursts at a 30 or 50-year interval would be terribly uneconomic. So, there is a lack of control to that extent over the number of bursts likely to occur. We know that some pipes are more likely than others to have problems. From memory, there were pipes installed in the 1950s under a Liberal Government—but we will not hold that against them—of inferior Port Kembla metal, if I recall correctly, that are giving us considerably more trouble than we would expect after 40 years.

At the moment we are combating the corrosion in pipelines, which is clearly one of the things that contributes to the number of burst pipelines, by what is called cathodic protection, which is turning some other metal that is very near the pipeline into a sacrificial anode, and that has the effect of totally stopping further corrosion on that line.

I do not like using absolutes, but I remember talking to one of the officers who was involved in the cathodic protection program and trying to get him to admit that cathodic

protection only slowed down corrosion, and he was quite firm about it: I did not know what I was talking about, as proper cathodic protection stops further corrosion and does not slow it down. So, as we protect further pipes we will be reducing the number of bursts. At the same time, of course, as pipes age one would expect an increasing number of bursts and, as Mr Killmier has indicated, we have a considerably younger pipeline system than the eastern States so we are in a far better position than they are. There are a number of factors, some of which are controllable, some of which are not, because clearly earth contraction, faults in pipelines, faults in the laying of pipelines, and so on, are all things that you could check only by digging the pipeline up, and that is not an economic solution to the problem.

So, the figure of less than 2½ was set, but that is not to say that the E&WS will not do everything in its powers to continue reducing the number of bursts per 1 000 customers or per 100 kilometres or however it is measured. However, it is not possible at any given time to indicate that the number of bursts will be less than the previous year, except that one of the factors—the cathodic protection of lines—will give us confidence that it will be less than it would otherwise have been. I will ask Mr Killmier to comment on the sewer chokes.

**Mr Killmier:** The Program Estimates at page 341 refers to the number of chokes per 1 000 customers. The figures quoted in the estimates are 54 in 1989-90, 52 in 1990-91, and 42 in 1991-92—and 42 should be 49: that is an error. I suspect the reason why the figure dropped from 49 to 44 was that 1992-93 was what you might call a relatively wet year and our experience with sewer chokes has been that the incidence of chokes is much higher in drier years than it is in wet years.

**The Hon. D.C. WOTTON:** Can the Minister explain the halving of the operating and maintenance expenses, minor equipment and sundries, referred to in the Estimates of Payments and Receipts at pages 124 and 125, programs 1 and 3, in relation to metropolitan water supply and metropolitan sewerage?

**The Hon. J.H.C. Klunder:** I will ask Mr Phipps to deal with that.

**Mr Phipps:** The 1992-93 figure included abnormal expenses, which is a direct allocation of expenses such as voluntary separation, so that once-off expenditure involved in work force reduction in particular areas was assigned to that particular account. So, it makes the task of comparison between the two years admittedly difficult. Once you deduct the abnormal expenses from 1992-93, the figures come out as approximately a constant expenditure on operations and maintenance.

**Mr D.S. BAKER:** Referring to catastrophe insurance, I want to first of all confirm that E&WS is a self-insurer. We asked some questions of Treasury, and the Hon. Frank Blevins replied in this manner:

I had the pleasure of talking to underwriters in Europe and North America earlier this year and I outlined what we required as insurance cover for catastrophes. I can assure the Committee that our presentations were very well received. In fact, one of the most consistent comments by underwriters was that they could not understand why we bothered at all and why we did not save our money, because the risks in this State are so low, so widespread and so manageable.

During that Committee hearing, Mr Daniels went on to say that we have \$24 billion worth of assets to insure and the catastrophe insurance is \$375 million, which I am told is mainly for earthquake. What percentage of that is considered

to be E&WS catastrophe insurance, and is the E&WS happy that that is adequate for any circumstance?

**The Hon. J.H.C. Klunder:** It would be fairly difficult to separate those figures in the way that the honourable member requires them to be separated out, because if you separated out each component and gave an insurance value to that then for catastrophe insurance you would probably get a sum of the part that was greater than the whole because of the principle in insurance which in fact indicates that, if you have a sufficiently large number of diverse things insured, the total insurance premium will drop below the sum of the parts of the individual pieces, on the basis that it is unlikely that you will have a catastrophe that wipes out every one of a number of diverse items at the same time.

I am prepared to take the question on notice, but I am still not sure that we will be able to give a precise answer. So, I would not want the honourable member to take the fact that I am taking it on notice as an indication that we will be able to provide him with a precise answer.

**Mr D.S. BAKER:** The main reason for my question is that you are part of it and you are quite happy with the amount that is insured.

**The Hon. J.H.C. Klunder:** That is not something that an individual Minister would consider. What happens, of course, is that we get an indemnity for the catastrophes that might happen to us and, in my view, it is up to the Treasurer to ensure that the amount of insurance is appropriate, because if he does not take out a proper amount of cover presumably there will be some risk to the costs in case such a catastrophe happens, but that is a matter for Treasury.

**The Hon. D.C. WOTTON:** Can the Minister provide details to the Committee about the type of monitoring that takes place? One would presume that the department regularly monitors structures such as reservoirs and so on. What form does that monitoring take and how often does it occur? Does the Minister have any particular concerns relating to the soundness of any of the structures, particularly reservoirs in the metropolitan area?

**The Hon. J.H.C. Klunder:** I have not had from the E&WS indications that there is concern with any of the major structures. However, for the detail of the question as to monitoring of reservoirs and other major structures within the E&WS, I will ask Mr Cooper to respond.

**Mr Cooper:** We have a dam safety engineering section in the E&WS Department that undertakes regular inspections of all our dams in South Australia, in both the metropolitan and country areas. Personnel look at the major dams, probably annually. I can provide figures for the honourable member in relation to the precise times. Reports are written of every inspection and these reports are sighted by me, other members and certainly by the people who have to take the preventive measures requested in those reports.

We have sophisticated instruments in some of these dams to measure tilt, variation, drainage under the structures, and leakage through and past the structures. In the past five years we have engaged a leading consultant in Australia on dam safety who has prepared a report reviewing the whole of our dam structures and procedures. We are currently implementing some of the recommendations of that report, one of which is to examine the spillway capacity of some of our dams. We have engaged consultants to start doing that work and to examine floodways downstream. This money is also incorporated into our five-year capital works program. We have a tentative figure of \$35.5 million on that line, with a

possibility of some \$13 million or \$14 million being spent in the first five years.

We also review the Murray-Darling Basin structures under our control, and safety audits are undertaken by the same group. Reports are prepared and we make recommendations to the Murray-Darling Basin Commission for any appropriate works that should be done in that area.

**The Hon. D.C. WOTTON:** Has the Minister or have officers within his department received representations expressing concern about the safety of the Happy Valley reservoir? If so, can the Minister provide that information to the Committee? Can the report prepared by the independent consultant be made available to the Committee?

**The Hon. J.H.C. Klunder:** I am not conscious of and the officers at the table are not aware of any concerns that have been expressed about the Happy Valley reservoir. I think we would need to look at the consultant's report to see whether it could be made available. However, unless there are specific reasons why it should not be made available, I am happy to do so. But, not having the detail of the report here, it might be useful for the officers to look at it first to see whether there is anything that will make its release to the honourable member unreasonable or otherwise.

**The Hon. D.C. WOTTON:** I would have thought that it would be important for the public to know what is in that report. The Minister has to decide whether he will make it available, but I believe it is important for the community to be aware of the contents of the report.

#### Membership:

Mr Ferguson substituted for Mr Quirke.

**Mr HOLLOWAY:** What plans have been put in place to deal with algal blooms in the Murray-Darling Basin should they occur, and what long-term plans are in place to reduce the occurrence of these blooms?

**The Hon. J.H.C. Klunder:** This is a concern. I am not entirely sure whether in South Australia we have an increasing frequency of blooms. However, certainly the size and number of blooms occurring in New South Wales and Victoria appears to be significantly on the increase. I am reminded that blooms have been occurring over the past 100 years or so. They were seen as a natural part of the order of things and consequently people did not take any notice. It may still be that the apparent increase in the number and incidence may be more a function of reporting than of reality, although I guess that, because we are using such a lot of water from the Murray-Darling and thus causing a slow down in the flow, and given the dam and the various locks in operation, one would expect more blooms.

However, there are contingency plans for dealing with the algal blooms in the Murray River in this State. Those plans, which have been prepared by the E&WS Department in conjunction with the Department of Primary Industries and the Health Commission, were developed prior to the 1991-92 summer and have been progressively refined since then. The plans deal, first, with prevention, which includes early warning of impending blooms, measures to try to stop those blooms from developing and measures to try to disperse the blooms once they have occurred.

If a bloom should develop despite this, the plans include a range of measures to advise the community on the nature of the blooms and the impact on recreation, private stock and domestic water supplies. There are also plans to try to reduce the frequency and intensity of blooms. In fact, a concerted effort is under way by all parties involved in the Murray-Darling Basin initiative to develop a strategy for reducing the

frequency and intensity of blooms. A draft strategy was released by the Ministerial Council in July of this year and is now undergoing a period of community consultation. Among other things, the strategy addresses the critical aspect of flow management in the streams and rivers of the basin and the nutrient input into them. Importantly, action taken to reduce nutrient inputs from key sources is already under way, and South Australia is taking a leading role in that.

Treated effluent from the Mannum and Murray sewage treatment works is now disposed to land. Local councils are in the process of upgrading their facilities for the treatment and disposal of septic tank effluent so that they, too, no longer dispose of effluent into the River Murray. Investigation into alternative management of drainage water from the lower Murray dairy pastures is now proceeding. These investigations are a cooperative effort between the E&WS, the Department of Primary Industries and local land holders, and will provide the basis for joint development of appropriate actions.

The reason that we talked particularly about flow management strategies and nutrient inputs is, of course, that it would appear that most of these blooms either do not occur in or are rapidly broken up by turbulent water flow. Consequently, the amount of reserve water that is available to the Murray-Darling system for flushing is important. In addition, the amount of nutrient, particularly phosphorus, is apparently of quite critical importance. The lowering of the point source nutrient into the river is also important. Clearly, it may also be necessary to look at things like phosphorus content of soap powders, and so on, although the latest scientific evidence suggests that the replacements for phosphorus may in themselves have some effect. Therefore, the scientific evidence in this area is not yet completely clear.

**Mr HOLLOWAY:** Will the Minister provide an update concerning the revision of the National Health and Medical Research Council and the Agricultural and Resource Management Council of Australia and New Zealand drinking water guidelines?

**The Hon. J.H.C. Klunder:** The existing drinking water guidelines were published in 1987 and have formed the basis for assessing drinking water quality for both aesthetic and public health viewpoints. The guidelines cover water which is intended primarily for human consumption but which also has other domestic uses, such as bathing, showering and swimming. The guidelines do not cover bottled or packaged water, which is regulated by section 5 of the Food Standard Code. The new guidelines seek to extend the range of water quality characteristics covered by the 1987 guidelines and to provide clear and transparent explanations of how the guideline values were set in the first place.

The guidelines are intended as a user needs specification for good quality drinking water. It is expected that they will be used by the informed general public, the water supply industry and health authorities. The new guidelines will be available as a summary document containing tables of values or characteristics affecting the microbiological, chemical, radiological and physical, such as taste, odour and appearance of drinking water, and a much larger reference document with fact sheets and supporting information for these characteristics. At the moment it is anticipated that the new draft guidelines will be available for public comment for a period of three months commencing in November this year, and final release of the new guidelines is expected sometime early in 1994.



Mr HOLLOWAY: I refer to the Patawalonga Basin. Could the Minister provide the Committee with an update concerning water quality in that area?

**The Hon. J.H.C. Klunder:** The objective is to develop to the stage of detailed design and costing the most appropriate solution for the control of litter and other pollutants entering the Patawalonga by relating interstate pollution control practices and operational experiences to the particular problems of the Patawalonga. Over recent years a number of concept proposals for trash abatement structures have been developed, and trials will provide information necessary for the detailed design of those facilities. The trials and investigations will be wholly funded by the State Government and managed by the E&WS Department.

A project coordinating committee has been set up to steer the work, and it includes representatives of KESAB, the local community and the Glenelg council. The project coordination group has met seven times since December 1992. A tagged litter survey is being undertaken in conjunction with KESAB, and I remember launching that in the South Parklands earlier this year. The survey is to be conducted over a six-month period and will not only serve as an effective community education exercise but the results will also be used to assist in the siting of structures to mitigate pollution. The first trial structure to assist in mitigating pollution was installed on 6 August this year on the confluence of Brownhill and Keswick creeks on land near Adelaide Airport.

The department is presently working on a catchment model which will enable the effects of pollution mitigation structures in selected locations to be assessed prior to construction. This will allow structures and sites to be prioritised. No one or two solutions exist for solving pollution problems from diffused forces in the Patawalonga catchment. Obviously the catchment should be approached from a total management perspective.

It is intended to hold a seminar to which representatives from councils in the Patawalonga catchment will be invited. The aim of the seminar will be to discuss the latest draft of the guidelines for managing stormwater prepared by the joint LGA and Government task group, and to relate these to the Patawalonga catchment with the intention of reaching a consensus on how best to manage the Patawalonga catchment area. From memory, it is somewhere around 200 square kilometres, and it involves a number of councils. Clearly there will need to be a great deal of discussion between different groups to see whether an equitable situation can be reached with respect to all doing the necessary work to improve the quality. Trials and investigations are expected to be completed by mid-1994.

**The Hon. D.C. WOTTON:** I should report to the Minister that I have just been told that there is another burst water main. Water is entering a house in Welkin Street, Windsor Gardens and police are evacuating residents at the present time. However, I return to the subject we were talking about before. Will the Minister provide copies of all reports compiled over the past three years by the dam safety engineering section relative to the Happy Valley reservoir? I think an officer stated that reports were prepared each year. What was the 1993-94 budget allocation for the dam engineering section, and what was the allocation and spending for this section last financial year?

**The Hon. J.H.C. Klunder:** I refer to the honourable member's indication that there has been a burst main. We have over 600 burst water mains a year, which means on average there will be two a day. If we start reporting on each

one, it will start to look like a huge problem. It happens here, interstate and overseas. If the honourable member seriously believes that this is an inappropriate level, I would like to see what solutions he can suggest and what amount of money he would be prepared to allocate towards providing a burst-free water system. The number of bursts that we have is still about half the number in other States. To try to beat up the number of bursts in this State is, I think, a fairly useless exercise. Our infrastructure was heavily upgraded during the 1950s and 1960s, so it is considerably better than that of the other States.

With regard to the Happy Valley reservoir reports, I am happy to look through those to see what we can make available. I am not saying we will not make them available to the honourable member, but I cannot promise that sight unseen information will be provided. With regard to the 1993-94 dam engineering section budget, I am not sure whether my officers have that information with them. I understand that some of that information may be available. I will ask Mr Killmier to comment.

**Mr Killmier:** In our capital works program, we have a number of provisions for a range of matters related to dams. We have a line for dam safety upgrade where specific money is set aside for that purpose. I think we said previously that there is \$200 000 this year, \$651 000 next year, and then it rises to \$2.77 million in 1995-96, \$7 million in 1996-97, and \$5 million in 1997-98. That does not include the recurrent funds that are available for the people working on the inspections. Perhaps we should take that question on notice and provide details of the numbers of people and the range of inspections that they do.

A number of individual projects are listed in the capital works program, and I can mention three or four: the Torrens Gorge weir renovation, \$1 050 000 between this year and next year; the Gumeracha weir rehabilitation, of the order of \$600 000; the Hope Valley aqueduct rehabilitation, about \$5 million; the Barossa reservoir outlet valve upgrade, \$5 million; and a specific allocation for Mt Bold of \$1.2 million. So, quite a lot of work is being done to look after the major water supply reservoir assets.

**The Hon. J.H.C. Klunder:** The mere fact that these things are on a forward budget indicates that they are planned expenditures. They are not rushed jobs when things go wrong, and consequently members can be reasonably sure that the E&WS is engaging on a program of planned maintenance and planned replacement, which is appropriate under the circumstances.

**The Hon. D.C. WOTTON:** I would be happy for the Minister to take this question on notice. How many staff were allocated to that section last year and how many staff are proposed for the coming 12 months?

**The Hon. J.H.C. Klunder:** I am happy to take that on notice.

**Mr D.S. BAKER:** Can the Minister confirm that each year officers of the E&WS department meet with the State Emergency Service to discuss potential catastrophes that may occur in South Australia, and at last year's meeting, at which the heads of other departments were present, the main topic of discussion was the Happy Valley dam breaching under certain circumstances, and in fact the State Emergency Service has put in train quite a few disaster plans should that occur?

**The Hon. J.H.C. Klunder:** I do not have information on that at the moment. I know that the State Emergency Service and indeed the other emergency services train each year on a different theme. It may well be that they took as a theme the

bursting of a dam, and in this case the Happy Valley dam, in order to train people on the kinds of actions that need to be taken when a dam bursts. I know from my time as Minister of Emergency Services that there were a number of Statewide exercises which, in each case, adopted a particular disaster scenario, not because there was an expectation that that disaster was imminent but in order to train the various services including the SES, the Metropolitan Fire Service, the Police Department and the Country Fire Service (as a back-up to the MFS in city situations and the reverse in country situations). These exercises are designed to make the various departments aware that certain actions need to be taken when there are problems. Whether the exercise to which the honourable member refers was any different from that, I do not know. Certainly, if it was different, it was not brought to my attention.

**Mr D.S. BAKER:** The signed document that I have indicates that the matter was put to the committee by E&WS officers as a real and possible scenario, and was discussed at length. Is the Minister still happy with the level of the State's catastrophe insurance should that catastrophe occur?

**The Hon. J.H.C. Klunder:** The term 'real and possible' is merely an indication under these circumstances that people were not training for something that was totally outside the capacity for that to occur. I guess they would also treat the possibility of an atom bomb being dropped on Adelaide as a real and possible situation. I do not think that the honourable member ought to place too much reliance on that particular phrase. We have already dealt with the question of insurance. If the Treasurer is happy that he has negotiated an appropriate amount of catastrophe insurance, that is where the matter rests. From the E&WS point of view, if there were a disaster of sufficient magnitude within the E&WS to go above the amount that the Treasurer has insured for, I have no doubt that it would be of such magnitude and such an absolute disaster situation that the Commonwealth would probably come to the party, and if not the Consolidated Account would have to bear the excess. I have to stress to the honourable member that E&WS matters are by-and-large not such that the size of an Ash Wednesday situation, which has cost over \$100 million, is likely to occur in respect of E&WS installations.

**Mr HAMILTON:** What actions are being taken by the E&WS to reduce the impact of nutrients flowing into the gulf as a consequence of the outpourings from treatment works? By what amount is it proposed to reduce the amount of nutrients flowing into the gulf? What mechanisms or procedures are currently being or will be adopted to reduce these outpourings? What is the cost, or what will be the cost, of such programs? What study has been carried out, if any, to determine the regrowth of seagrasses along Adelaide's western seaboard?

**The Hon. J.H.C. Klunder:** I have already in fairly general terms discussed the question that the honourable member has asked, and we will have to make the costing of those available to him separately, if indeed those costings have been arrived at. One of the things that we could well talk about is the hardwood irrigation forestation trial that is taking place at the Bolivar Sewage Treatment Works as a way of disposing of that material. That is a situation where 14 hectares and about 30 000 trees were established at Bolivar.

**Mr HAMILTON:** I do not think the Minister heard the questions I asked. What actions are being taken to reduce the nutrients that are outpouring into the sea? I know that the woodlot is a very important issue, but what procedures are

proposed to reduce nutrients from the soluble outpourings of the treatment works? How will the amount of nutrients, phosphates and so on that go into the sea be reduced?

The Program Estimates refers to algal blooms, the impact on seagrasses and the like under 'Issues and trends' on page 341. The Chairman as a former Minister has been questioned rigorously in the Parliament about the impact upon the coast and the dunal areas of South Australia. What mechanisms, procedures or equipment are being or will be used to reduce the level of nutrients, and to what extent will it be reduced?

**The Hon. J.H.C. Klunder:** I apologise to the honourable member; I misheard him and responded accordingly. The sludge that was going into the gulf was having a major impact on seagrasses. There is no doubt that waste water that goes into the sea also has an effect on those seagrasses. As I indicated in response to a previous question, a number of things are being balanced in order to decide whether it is better to try to dispose of a lot of waste water on land or to reduce the nutrients in the waste water that goes out to sea and still allow that to happen. As the honourable member is aware, by the end of this year no sludge will be discharged from Adelaide into the gulf; therefore, the effect on seagrasses will be significantly altered. Mr Cooper might be able to provide further detail.

**Mr Cooper:** We have just completed consultancies into the four major sewage treatment works at Bolivar, Port Adelaide, Glenelg and Christies Beach, those consultancies being performed by an Australian body with international links. The consultants looked at both what had to be done to upgrade the treatment works to remove nitrogen and/or phosphorus and also the possibility of utilising effluent on land rather than putting it into the ocean. The next step is that a consultancy is about to be let to undertake an assimilation study of the waters at Bolivar and Glenelg and probably at Christies Beach to help the environmental people to ascertain the safe assimilable level of nitrogen and phosphorus with long-term sustainability of those waters. We can design plants now but we do not yet know the precise levels of nitrogen or phosphorus—nitrogen being the limiting nutrient in seawater discharges. We must wait until this study is completed and the environmental people have assessed the results and given us an indication of the requirements for the design of a plant.

Some broad concept figures for what we would have to do at those four works if we had to remove nitrogen and if we had to remove nitrogen and phosphorus from Port Adelaide are as follows: about \$45 million for Glenelg; \$100 million for Bolivar; \$23 million for Port Adelaide, which I mentioned earlier; and \$32 million for Christies Beach. The decision will still have to be made as to whether it is better or economically comparable to put that effluent onto the land rather than to remove the nitrogen and phosphorus. That decision will have to be made when we work out the costs and find out the nitrogen levels that we will have to work to.

**Mr HAMILTON:** I understand that a consultancy report has been completed; is that correct?

**Mr Cooper:** The initial consultancies have been completed.

**Mr HAMILTON:** When is work likely to commence; when would the department like it to commence?

**The Hon. J.H.C. Klunder:** Clearly, it is more a situation of needing to make a decision as to whether it is better to dispose of the effluent on land or off land, and that will depend on a number of factors that have yet to be fully determined. It is difficult to give an immediate answer, because it depends upon decisions that will carry very large

price tags. Consequently, we must be sure that those decisions are right in the first place.

**Mr HAMILTON:** I am sorry to be so dogged, but I will persist with this matter because I have a commitment to the environment. I think that is pretty well known, particularly to the honourable member opposite who was a shadow Minister—not a very good one, I hasten to add, although I do not want to be too unkind.

*An honourable member interjecting:*

**Mr HAMILTON:** I thought that response was most uncharitable. The Minister said that other factors are to be determined. What are those other factors and how will this process be financed should it go ahead?

**The Hon. J.H.C. Klunder:** It is not unreasonable to say that all members in this Chamber share the member for Albert Park's commitment to a clean environment. It is obvious that, if price tags of this nature arise and if those options are seen as being the best way of going about the process, there will need to be a whole series of community discussions as to how the community will pay for what it sees as a desirable and perhaps even necessary goal. An environmental levy on sewage has been introduced, and that has enabled a number of things to be done more quickly that would otherwise have been done more slowly.

It may well be that instead of discontinuing that levy at the end of the five-year period we may need to look at whether or not a mechanism such as that should be discussed. As the honourable member is aware, very large sums are attached to this issue. Part of the costing may be dealt with by the private provision of public infrastructure in order to accelerate the process. The department has formulated a wish list of the things it would like to do if the supply of money were inexhaustible. As the community determines that these things become necessary, it will also have to determine the way in which they will be funded.

**The Hon. D.C. WOTTON:** I was interested to learn how the allocation of \$0.7 million referred to at page 341 of the Program Estimates was to be expended on the operation of a biological nutrient reduction pilot plant at Port Adelaide. I presume that the reason for the establishment of that plant has now been provided. I would like to take the matter a little further. First, I return to the matter of sludge, because there has been a fair bit of confusion about when that problem will be concluded. I refer to an article in the Messenger Press of Wednesday 22 November 1989 in which the then Minister (Susan Lenehan) indicated that the Government had a commitment to stop all sludge from entering the ocean by 1992. I recognise that is generally accepted that it would be 1993. I am somewhat confused. I note from the Capital Works Program for 1993-94, under 'Glenelg/Port Adelaide Bolivar land disposal sludge main', that completion is due in 1995. Are we talking about something different again?

**Mr Killmier:** The Bolivar sludge main is one in which I have taken a personal interest over the whole of its life, from the time of conception until today. I gave evidence to the Public Works Standing Committee at the time, and I have overseen the construction of the pipeline over the past three years. The article in the Messenger Press at the time that quoted 1992 was a mistake of the Messenger. I distinctly remember it happening. We pointed out the mistake. The original date that was set right from the beginning was November 1993. We have never deviated from that, and that is what will be achieved.

The reason that the program to which the honourable member refers shows 1995 is that at Bolivar we have a

number of sludge lagoons, which we have had for many years. We have just increased the number of sludge lagoons in the past year or so and, in the interests of not spending capital ahead of time, it occurred to the Project Manager that we could make use of the existing capacity of the sludge lagoons at Bolivar and defer the construction of the sludge lagoons that were part of the Glenelg to Port Adelaide project by a year or so. So, we took advantage of that deferral of capital expenditure. That work will be done next year or the year after, and in the interim we will make use of the lagoons that have been recently constructed to increase the capacity of the Bolivar works. So, it is just a matter of juggling capital—getting maximum value from the capital.

As the Minister has previously said, the testing of the pipeline is currently taking place. We are putting effluent through it initially. What are called 'pigs' are put through the pipe, that is, plastic scourers to remove all the rocks and bits and pieces which tend to collect in pipelines and which we do not want to go through pumps, and so on. Once we have the thing totally operative, we will be putting a mixture of effluent and sludge through to the point where eventually we will be able to put proper sludge through, and that will happen definitely prior to Christmas, probably around the end of November.

**The Hon. D.C. WOTTON:** Further to that, I also note—unless it was a mistake also—that on 22 October 1991, the then Minister, Ms Lenehan, said that by 1993 sewerage effluent would not be pumped off-shore. I want to question further the matter of the notice that is required under the Water Resources Act to continue to take out a licence for the discharge of reclaimed water. These advertisements relating to these notices are continuing to appear—one recently for the Bird-in-Hand and Heathfield sewage treatment works and the other for the Victor Harbor sewage treatment works. What stage has been reached in achieving a situation where it is no longer necessary to pump that effluent into waterways? Costing has been provided with regard to the major treatment works along the coast.

As a result of this pilot study that is to be considered regarding the reduction of nutrients, if it is determined that that is not the way to go, that it is better to just stop pumping this effluent into the ocean, the waterways and the gulfs, what cost are we looking at overall? I ask that because a number of suggestions have been made. I refer to an article of May this year in which it was suggested that water clean up would cost \$500 million. I do not know whether that was part of this estimated \$500 million. If the Minister were to say tomorrow that no more effluent would be pumped into the gulf, the ocean or the waterways in South Australia, that it would all be put on land, what cost would we be looking at?

**The Hon. J.H.C. Klunder:** In response to the honourable member's comments earlier about my predecessor having been reported as having said that no effluent will go into the gulf by the end of 1993, I am afraid that was again one of these misreporting situations, where they should have said 'sludge' and clearly were not able to make the distinction between 'sludge' and 'effluent', and used 'effluent' thinking that this was a more meaningful term to their readers. Under the Water Resources Act and regulations it is an offence for a person, company or Government agency to pollute surface or underground waters, unless they are authorised to do so by licence or regulation. Clearly, one can see the change in emphasis there: instead of people being able to pollute virtually as a matter of right, they now need to be licensed to pollute waterways and underground water, and that enables

the Government to maintain a much clearer overview of what is happening. Of course, at that point knowing more about the situation and knowing who has licences to do things, it is far easier, first, to be aware of the damage that is caused and, secondly, to be aware of the cost of fixing it, and things can be regulated much more easily.

Discharges from the following treatment plants are currently licensed under the Water Resources Act: the E&WS-operated sewage treatment works at Hahndorf, Naracoorte, Millicent, Nangwarry and Mount Burr; and council-run septic tank effluent disposal schemes at Lyndoch, Tanunda, Nuriootpa, Mount Pleasant, Birdwood, Meadows, Williamstown and Bordertown. The Murray Bridge and Mannum sewage works do not require licensing as neither works discharge to a water course. All other sewage treatment works and septic tank effluent drainage schemes are currently unlicensed, but it is planned to address the situation in 1993-94. Reports on options for upgrading the following sewage treatment works were completed recently by the E&WS Department: Victor Harbor, Bird-in-Hand, Gumeracha, Myponga, Angaston and Heathfield. Applications for licensing discharges will be advertised and processed shortly by the department. The E&WS Department will be sending out a letter shortly requesting councils to apply for licences to continue discharges from the remaining unlicensed septic tank effluent disposal schemes.

Of course, once the Environmental Protection Authority is in full swing it will assume responsibility for licensing all time shift waste water treatment plants which serve more than 100 people, regardless of where the treatment works are located or how the waste water is ultimately disposed of.

**The Hon. D.C. WOTTON:** I want to talk about water quality and again I refer to page 339 of the Program Estimates. The percentage of samples of filtered water at consumers' taps of acceptable microbiological quality has gone from 97 to 99 per cent. I recognise that in 1989-90 and 1990-91 it was 99 per cent, in 1991-92 it went down to 98 per cent, and in 1992-93 it was 97 per cent. Also, the number of water quality complaints per 1 000 customers went from three last year up to less than five—so I presume we are talking about up to 4.9—for the next 12 months. Can the Minister explain the reasons for that?

**The Hon. J.H.C. Klunder:** The honourable member is correct in his quoting from the record, of course. While the target is shown as 99 per cent (that is a goal to aim for; a level of excellence, if you like), the agreed level of service with the South Australian Health Commission is 95 per cent, and we are of course well above that level. In fact the Program Estimates target figure was 95 per cent three or four years ago and was raised to 99 per cent as a goal to strive towards.

The percentage has fallen slightly, as the honourable member has mentioned, in the last three years, as more distant parts of the metropolitan reticulation system are brought on line with filtered water. Residual disinfection is more difficult to maintain in those areas; and, further, there are still six tanks in the system which require re-roofing to minimise external microbiological re-contamination. Five of those tanks have internally draining roofs. Those six tanks will be re-roofed over the two years 1993-94 and 1994-95 at a cost of approximately \$1 million, thus completing a major re-roofing campaign which has covered 27 tanks in the past 10 years in metropolitan Adelaide and near country areas.

In addition to the re-roofing proposals, a program has been developed to vary the volume of water held in tanks between summer and winter to minimise long water retention times

and therefore to better preserve disinfection residual to combat any re-contamination of those tanks.

Finally, a detailed investigation is planned into the optimum disinfectant to ensure an adequate residual at the extremities of the system, and the two options that obviously come to mind are booster chlorination and the option of chloramination.

**Mr FERGUSON:** Biological nutrient reduction is a very important question in my electorate, of course, because of the disposal in the sea. On page 341 of the Program Estimates—and this was referred to by the member for Heysen—funds totalling \$.7 million have been allocated to operate a biological nutrient reduction pilot plant at Port Adelaide. In answer to the previous question, as I understand that answer, the consultants reported that the total cost of biological nutrient reduction at Port Adelaide would in fact have been \$23 million. So, I assume that the plant to be set up at Port Adelaide is taking only a fraction of the nutrients that go through that plant. Can the Minister confirm that?

**The Hon. J.H.C. Klunder:** I will ask Mr Cooper to comment.

**Mr Cooper:** There is a whole number of compartments and great flexibility of varying the process to find what is the optimum method of removing nitrogen and phosphorous. It is not about removing nitrogen and phosphorous in the mainstream of the plant; it is only a baby, it is very small, but what we will gain from this are the parameters which will allow us to design an effective and efficient nitrogen removal plant in the prototype size. All sewages are different, and Port Adelaide is tricky because it is saltier than most and it has higher sulphides, so we want to develop the parameters so that we really know that when we design the plant we will be able to achieve the levels of the N and P reduction that we are after.

**The Hon. J.H.C. Klunder:** Mr Killmier has something useful to add to the discussion.

**Mr Killmier:** The Port Adelaide sewage treatment plant basically consists of two plants built at different times. A lot of the sewage that flows to those plants is affected by infiltration of ground water and in recent times we have been having discussions—and there are ongoing discussions—with the MFP people to see whether or not we can use some Better Cities money to divide the flow at the plant, to do some work on rehabilitation of sewers to try to keep the ground water out, and then be able to use the better quality of effluent from the part from which we are able to keep the infiltration away as a source of water possibly for industry in the area.

You would probably be aware that Penrice Soda Products, the salt people out that way, are extensive users of ground water, and of course the northern Adelaide Plains ground water situation is deteriorating very rapidly and it would be highly desirable if we could find an alternative source of water for Penrice. So, a lot of very exciting possibilities are being explored at the moment and, whilst it is very early stages, if we can make use of available Commonwealth funding we may be able to come up with some quite innovative solutions for that plant.

The subjects are all different. The disposal of effluent is a different subject altogether from, say, odour control, and of course sludge is another subject, but sludge from Port Adelaide will be solved, I promise, before Christmas and we will be moving on trying to solve the odour problem and the effluent problem.

**Mr FERGUSON:** Can the extracted nutrients be used in any way?

**The Hon. J.H.C. Klunder:** I will ask Mr Cooper again to deal with that.

**Mr Cooper:** Sometimes you use a flocculant, like alum or lime, to precipitate, say, the phosphorous out, and when you do that the sludge is not very amenable for, say, fertiliser use or something like that. If you can remove the phosphorous and the nitrogen by purely biological means (and this is one of the things we try to test at Port Adelaide) the sludge is more like a typical sludge that we produce now.

It would certainly enhance the nutrient level of the sludge and, if the other matters in it are acceptable, it could be used as fertiliser or for other things of that nature, as happens at the Bolivar and Christies treatment works now. The nitrogen generally goes off in the air as gas. So, we are not really enhancing the sludge greatly with nitrogen; it is the phosphorous level in the sludge that would be enhanced.

**Mr FERGUSON:** During a recent visit to New York I was privileged to look at the Long Island land fill. There is a problem in New York with contaminated water—about 2 million litres a year—from the land fill. I assume from what you are saying that some of the sludge and biological nutrient in the biological nutrient reduction pan will be used as land fill, and that raises the question of future contamination of the aquifers through contaminated water from the land fill. Are we having the same problems with contaminated water from land fill in Adelaide that are being experienced in New York, and are we doing any work on that?

**Mr Cooper:** I am not sure of the terminology, but land fill in New York I guess is the domestic and commercial rubbish, which is the responsibility of the Department of Environment and Land Management here; we do not manage land fill in the Engineering and Water Supply Department. However, we are very interested in leachate from the land fill getting into ground water tables below. I think that question would be better addressed by the Department of Environment and Land Management. However, that department is developing and has applied fairly strict rules for the type of land fill and the drainage required underneath it.

I have personal knowledge of the problem in the South-East, where we were very concerned with the land fill adjacent to the Blue Lake. The city council will be relocating that land fill to a new land fill site away from the town in a much more sophisticated set up. The council will have to put in impervious under-drainage systems to collect the leachate, treat it and dispose of it appropriately.

In response to the honourable member's specific question, yes, we are concerned about land fill, particularly in terms of what it is doing to our ground water. In addition, our sludge has been used in a land fill situation reasonably successfully. We have done some reparation work at the Brukung mine, which is an old pyrites mine producing very acid water. We have been laying down digested sludge on top of that and starting to seal off and cap parts of the mine with some success.

**The Hon. D.C. WOTTON:** The Mayor of Noarlunga District Council and members of the Maslin Beach Residents' Association met recently to discuss with the Minister the Government's STED scheme for the Maslin Beach area. At this meeting residents were led to believe by the Minister that if the project overran its \$1.5 million budget the Government would pick up the tab—that is certainly the impression given by those at the meeting.

On 24 August this year, at another informal meeting organised by the Willunga council at the Maslin Beach hall, the story apparently seemed to change. Residents were told

that any overrun of the STED scheme would be picked up by the normal formulae for STED funding; that is, as I understand it, the council and the State Government finding the money. The meeting was told that \$1.5 million had been allocated for the scheme from the Federal Government Better Cities grants and it is believed that this money is held in trust for the Maslin Beach area. Is the \$1.5 million being held in trust for the Maslin Beach STED scheme, and, if so, where is it being held? If there is any cost overrun, who will pay for it—the Government, the council or the residents? What is the starting and anticipated finishing date of the scheme?

**The Hon. J.H.C. Klunder:** I heard the comment that the honourable member has also obviously heard; that I, for some reason or another, promised that the Government would pick up the tab for an overrun. I certainly do not recall saying it and it is so alien to what I would normally say that I am almost certain that there is no way that I would do that. I would not commit the Government to paying anything unless I had carefully checked it out with my officers first, because, after all, they have a budget to administer.

For me to make statements that might make me feel good at the time and then have the tab picked up by my officers is totally alien to my nature. All I can say to the honourable member is that I do not recall having said it and I would be incredibly surprised if it were indicated that I did say it. The normal processes would apply under the circumstances of an overrun but, of course, one would hope that there would not be one.

**The Hon. D.C. WOTTON:** I can only reiterate the information that I have; that is, that all those present at the meeting were left with no doubt that that would happen. If the overall cost of the Maslin STED scheme is less than \$1.5 million, what will happen to the surplus money and can it be used to subsidise the Maslin residents' connections?

**The Hon. J.H.C. Klunder:** That question was also raised and I think that the answer to that is 'No'. However, I will take the question on notice and see whether or not I can provide an answer after some thought.

**The Hon. D.C. WOTTON:** For some time it has been reported that urban stormwater has been overflowing into the reservoir, polluting it with pesticides, etc. This came about apparently as a result of the bypass system to stop stormwater spilling over into the reservoir and its being unable to cope any longer, as it was designed for run-off from the rural areas and not an expanding urban area. Has any action been taken to rectify that problem, which obviously required extra precautions to be taken to stop the contaminated run-off from reaching the reservoir?

**The Hon. J.H.C. Klunder:** I am happy to ask Mr Cooper to deal with that question in a moment. However, the honourable member's having gone back to the Happy Valley situation enables me to give the Committee some information that has just come to hand regarding the State disaster committee situation and the SES training with other people on the assumption that there might be a failure of the Happy Valley embankment.

The discussion of this and the scenario was exercised as part of a normal training exercise for the SES and other groups. There was no analysis, nor was there intended to be one conducted, on the likelihood of the embankment failing. It does not imply any concern for the dam, which the Committee has been told is regularly monitored. Of course, the fact that there is significant housing down stream implies a hazard but not a risk. So, this was in fact dealt with as an

exercise as distinct from a fear that there might be some problem there.

Having dealt with that, I will now ask Mr Cooper to respond to the question asked by the honourable member.

**Mr Cooper:** As a result of extremely heavy rain, there has been an overflow from the cut-off drain that runs around the eastern and southern parts of the Happy Valley reservoir. Some water did spill into the reservoir, but there was no demonstrable effect on the water quality. It was a very extreme flood. Investigations are being undertaken to look into the ponding situation upstream, where extreme flows might be contained in ponding. Money is provided in this year's financial program to investigate the provision of a small spillway on the Happy Valley reservoir to run the water that might spill in back out into the drain along the southern side.

**The Hon. D.C. WOTTON:** I am aware that the department has moved into the Australis Centre. There were all sorts of suggestions at the time as to why that occurred, and I note the comments in the Auditor-General's Report regarding the State Bank's involvement in that building. I am not quite sure whether that is the reason why it was considered appropriate for the E&WS to move. What was the cost to the E&WS of that move? I notice in the estimates that there is an increase in accommodation and service costs. I was told at the time, in answer to a question in the House, that the move was made to ensure that there were appropriate places for the new computer equipment. That is one of the reasons why it was found necessary to make the move from Victoria Square. How much did the move cost, and what is the increase in cost as far as accommodation is concerned? While we are on the subject of computers, page 347 states:

To complete existing contractual obligations, approximately \$10 million will be spent on information technology services, comprising \$6 million for the customer services information system project, and \$4 million for the Tandem computing infrastructure.

I find that an interesting preamble—'to complete existing contractual obligations'. There is no mention of benefits to come out of that. What benefits will be gained? I want to know the costs associated with the move, the costs associated with the completion of that existing contractual obligation as far as the computers are concerned, and any other costs with regard to computing.

**The Hon. J.H.C. Klunder:** There are a considerable number of questions, and the honourable member should not be too surprised if not all of them are answered. I will ask Mr Killmier to respond to at least some of those questions.

**Mr Killmier:** It became necessary to move out of the State Administration Centre because that building had reached a stage where it was not able to be upgraded any more for a whole range of things. There were problems with electrical wiring, and there were problems with the toilets. I got sick and tired of being approached by the union about the smell in the toilets. There were problems with respect to information technology because, when the building was erected, it was not envisaged that hundreds of terminals would be running through it.

We were particularly fortunate in respect of 77 Grenfell Street in that, in today's climate, owners of buildings are virtually obliged to provide a free fit-out for people who are moving. We were able to get of the order of \$7 million worth of free fit-out from the owners of the building, which enabled us to set ourselves up in a modern building to do all the things that are necessary in this day and age. The honourable member mentioned computing, but our computing section

was not in the State Administration Centre at the time—it was in the Reserve Bank, so that really was not an issue. The computing installation is proceeding well. I will ask Hans Salzmann to talk about that in a moment.

On the accommodation side, I do not have the exact annual costs associated with the change in rental. There is a slight increase in rent, but that is to be expected when one goes from a 24-year-old building to a brand new building. You would be a very wishful thinker to think you could get it for the same price. If we can, we will take on notice the accommodation costs and provide them in due course.

**The Hon. J.H.C. Klunder:** Would the honourable member repeat that part of the question with respect to computers? We seem to have lost the context.

**The Hon. D.C. WOTTON:** I referred to page 347 of the estimates and the interesting preamble with respect to 'existing contractual obligations', and I asked what benefits were to be gained from those contractual obligations.

**Mr Salzmann:** The Tandem contract does a number of things: it replaces the total computing infrastructure of the department, including mainframes, local area networks and wide area networks with the involvement of State Systems. Under that contract we replace all our office systems, including the customer service information system, and we replace systems that are some 20 odd years old now, such as our financial system and our human resources system. At the moment we have \$9.5 million left to pay Tandem from the original amount of \$24.7 million.

**Mr HOLLOWAY:** I am sure that most members have received complaints from time to time from consumers who dispute the accuracy of water meters, which sometimes is caused by the failure of the meters and also by customers driving their cars over them and so on. Is the accuracy of all meters checked prior to installation and, if so, who does it? Does the department have any statistics on the reliability of meters after their installation? Where, and by whom, are the meters manufactured? Are any technological improvements in the measurement of water usage expected in the future which might change the situation?

**Mr Manoel:** The meters that we currently use are supplied to us new by Dobbie Dico and are manufactured here in Adelaide. However, we refit them ourselves. They are removed from service when a problem is indicated or after the age of about 10 years, and then they are refurbished. In terms of meter technology, we are gradually increasing the proportion of meters that have a magnetic coupling between the active component of the meter and the dial on top, as they are more reliable than the meter with the gear-chain connection. However, plenty of the old gear-chain meters are still in service.

The meters are sampled from time to time and tests are done. I do not have the details of those tests with me. We generally aim to keep meters within a range of 2 per cent fast to 5 per cent slow. The majority of our meters come within that range, although some meters in the sample groups do not. If meter accuracy is contested by a customer, we do an approximate test in the field and, if that indicates a problem, the meter is removed and a more accurate test is done. We are currently upgrading our field testing equipment whereby a fully certified reliable test can be done in the field without having to remove the meter. All meters are tested before they are put into service. New meters brought in from Dobbie Dico are tested by Dobbie Dico, and it certifies the result to us. We test refurbished meters at Ottoway, where the refitting

of the meters occurs. They are given a comprehensive test before they are put back into service.

**Mr HOLLOWAY:** No doubt the next question will be of some interest to you, Mr Chairman. What progress has occurred in respect of the Seaford residential development water supply and sewage headworks to date?

**The Hon. J.H.C. Klunder:** In accordance with the Seaford Development Physical Infrastructure on Human Resources Indenture Agreement signed on 21 June 1990 the State is providing at no cost to the joint venturers adequate water supply and sewerage services. The Seaford development is staged over a 10-year period from July 1990 and will, when it is fully developed, have a population of the order of 20 000 people. The provision of water supply and sewage headworks for that development was approved by Cabinet in July 1991, and the overall estimated cost is \$9.7 million. Construction of a major trunk sewer was commenced in 1992-93 and will be completed by the end of 1993. A major sewage pumping station is to be constructed over the next 12 months. The provision of headworks is matching the requirements of the joint venturers. In 1992-93 some \$2 million was spent, and \$2.3 million is budgeted for the 1993-94 year. The total expenditure on this project to the end of June 1993 was \$3.5 million.

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

**Mr HOLLOWAY:** I note from page 345 of the Program Estimates under '1992-93 Specific Targets and Objectives' that 'key water resource aspects of the Mount Lofty Ranges management plan were implemented and a supplementary development plan was prepared'. What progress has been made towards improving management within the Mount Lofty Ranges catchment area?

**The Hon. J.H.C. Klunder:** The Mount Lofty Ranges Catchment Management Centre is likely to be established at Oakbank within the next few months. The centre will be designed to provide a local visible community focus for improved land, water and vegetation management in the Mount Lofty Ranges and to improve coordination of project work undertaken by staff in various State and local government agencies. A total of 15 staff from the E&WS, the Department of Primary Industries and the Department of Environment and Land Management will initially be located at the centre.

The Commonwealth Minister for Primary Industries has allocated \$1.835 million for 1992-93 and 1993-94 to me as Minister of Public Infrastructure for a range of land, water and vegetation and water resource management projects in the Mount Lofty Ranges. This funding was allocated through the national land care program and is the Commonwealth's initial contribution towards a three-year Mount Lofty Ranges healthy catchment program. Of the initial Commonwealth funding that has been made available, \$200 000 was allocated towards the upgrading of the Hahndorf Sewage Treatment Works.

Other projects to be funded through this program include the appointment of a coordinator to manage the Mount Lofty Ranges Catchment Centre Management Centre to be staffed through the E&WS, the Department of Primary Industries and the Department of Environment and Land Management. The centre will undertake an integrated catchment management program to achieve sustainable water and land capability. It will also include a greater involvement of local government in land, water and vegetation management, a survey of the status of rivers and riparian zones in the Torrens and

Onkaparinga River catchments, a community survey of barriers to the implementation of best management practices, and the marketing of a promotion program to raise community awareness of land, water and vegetation management issues in the Mount Lofty Ranges.

**The Hon. P.B. ARNOLD:** As the Minister would be aware, I have a great interest in irrigation and rehabilitation, an area that I want to pursue. However, so that the Minister does not get the wrong idea from what I say, I will say from the word go that the rehabilitation is progressing very well compared with earlier efforts in the rehabilitation of the Waikerie irrigation area, for example, which progressed slowly and at great expense. Rehabilitation, particularly in the Cobdogla irrigation area and the Moorook area, is progressing very well indeed.

However, that is not what I want to talk about. I want to talk about the future of irrigators on unrated land. I have discussed this matter with the regional manager at Berri, with the officer-in-charge at Barmera, and by telephone and at a meeting with Mr Cooper. We do not appear to be making a great deal of headway in coming to grips with what the future of irrigators on unrated land will be. This matter is of great concern to me because we have put these people into limbo. They do not know what their future is. Their whole life has revolved around irrigation on what is commonly known as vegetable blocks, and they cannot get on with their life.

A letter of 13 July from Murray Baird, an irrigator at Moorook, sets out reasonably well the position as he sees it from the point of view of irrigators in that area. I remind the Committee that we are talking about not just irrigators at Moorook; there are some 220 irrigators in the Riverland Government irrigation area who fall into this category.

One of the problems is that irrigators on unrated land do not officially receive an allocation of water. Under the old Irrigation Act, I think the wording is something along the lines of, 'Water will be supplied by the Minister if and when available.' For 70 or 80 years that water has always been available, and it has been taken for granted that, when a property is bought and sold, water will be available for that piece of vegetable growing land. As a result of rehabilitation, a decision had to be made regarding vegetable growing land. I acknowledge that, in a number of instances, that land is not used constantly and irrigators do not pay water rates as such: they pay only for the water they actually use from time to time.

Consequently, if it is intended to rehabilitate an area such as that and to spend large sums of money on a pipe system, there must be a guaranteed return on that investment. I think that is best expressed in Mr Baird's letter in which he states:

We irrigators abutting Battams Road in Moorook would like written confirmation of your department's intent in regard to the future of irrigation on our properties. In October 1992 we were verbally informed there was a possibility that the rehabilitation of the Moorook irrigation area would result in the relinquishing of our irrigation allocations. In May of this year, your regional manager, Jeff Parish, informed irrigators at a meeting that water would not be supplied to the 13 properties I am referring to.

We have continually kept in touch with the local E&WS office in an attempt to gain information on the progress of our case, however very little information has been forthcoming. We would appreciate if you would assist us in obtaining a written confirmation of your department's intent, particularly in regard to being compensated for financial disadvantage, as the indecision is causing many of us financial and emotional stress.

That letter was directed to the Chief Executive Officer. A response from the department signed on behalf of the CEO by Mr Cooper and dated 23 August states:

I refer to your letter dated 13 July 1993 expressing the concerns of your group regarding the review of vegetable blocks in the Riverland. The review will affect 220 irrigators who own 286 properties at Loveday, Moorook, Cobdogla, Nookamka and Chaffey. These properties are presently able to purchase pre-paid special irrigations. The review commenced with a land capability study of the properties to identify which properties had the best potential for irrigation based on soil types, drainage hazards and farm size. The results of this study were made available to each individual irrigator affected by the review during interviews at Barmera in June and July 1993.

I am aware that for the Moorook irrigators concerns about the future of irrigation began well before the consultation process. This was as a direct result of pipeline construction activities in your district and has made the period of not knowing the future of irrigation for your properties much longer than for many others.

You will appreciate that the review is a major exercise in the rehabilitation and restructuring process for irrigation. Before making final decisions the Government wish to examine every option available, and this includes several new choices and initiatives proposed by vegetable growers themselves during the consultation process.

Until these options have been examined and the final decision made, I am unable to give you any assurance beyond the possible outcomes explained at your interviews. I am hopeful that the review will be completed in time to enable negotiations on your individual situations to commence by the end of 1993.

The point I am making is that for 12 months or more these irrigators have been in a situation of not knowing their future. Because of that, their properties have virtually been unsaleable.

Everyone's situation changes from time to time, depending on family circumstances, and so forth. Many of those people have come to me wanting to know their future, saying that they want to sell but that their property is just not marketable. I will provide an example of the effect of this. A property on unrated land but with water rated to it might have a market value of \$100 000. The house alone, with the land as a dry block but with a domestic supply of water, might be worth \$60 000. So, there is a reduction in the capital value of that property of 40 per cent. But as things stand, no-one is prepared to buy because they do not know what the future holds. Unfortunately, these people who are left in this position are unable to get on with their life, and they just do not know what their future holds. Where does the Government stand? What will its policy be so that these people can get on with their life?

**The Hon. J.H.C. Klunder:** I can sympathise with the predicament of individuals who find themselves in this situation. I shall go back and put on the record the reasons why the situation in the irrigation areas is as it is. Of course, it was part of the conditions under which the Commonwealth was willing to come in and provide its share for the irrigation rehabilitation that it required the South Australian Government to review land usage in the unrehabilitated irrigation areas, to retire any unsuitable land and to undertake various structural adjustment actions. In response to this requirement, the E&WS has tackled the longstanding problem of land in the whole of the GHIA, which has been supplied with water but where there is no permanent allocation, no commitment for fixed amounts for certain times, and so on. These owners, as the honourable member has said, can use water when available but they pay no irrigation rates, only a charge for the water used.

Many of these growers are on poor land where there has been some vegetable growing, some photo-production, a very minor amount of horticulture, and in some cases no usage at all. This review is a major exercise and has involved interviews with a large number of section owners, appraisal of the

land by agriculture experts, and that sort of thing. Generally, it is true to say that there has been a good reaction from the owners on the proposal either to declare the land to have an official allocation or to declare that the land is not suitable for irrigation and that the water should be withdrawn. Of course, problems have arisen in particular situations to which the honourable member has referred where people would like to sell, and there is an uncertainty hanging over the fate of that property.

There are some 286 sections under consideration in the GHIA occupied by 220 growers. All those properties have been assessed for their viability and 181 growers turned up for interviews and consultations with the E&WS and the Department of Primary Industries officers. Nine of them objected to receiving permanent water allocation and accompanying irrigation rates, and nine objected to losing the ability to continue irrigating the property. The consultation process is seen to be a fair way of tackling the problems, and in the process some important new issues were raised which will have to be resolved before compensation packages can be submitted to the Government for approval.

Some of these issues include: the Government's acting as a water broker, which I understand was a suggestion made by the honourable member himself; the possibility of low usage for woodlotting to improve salinity; the offer of free domestic services to blocks without a house; and the repayment of moneys for forgone irrigation outlets. Currently approval is being sought, from both me and the Minister of Primary Industries, for the final stage of the exercise to be undertaken, that is, estimating the value of items on properties, including redundant irrigation equipment, any permanent plantings, and so on. A plan including proposals for compensation packages will then be presented to the Government, and that may be sometime in November. I understand that the proposal for the final stage is very close to reaching me, if it has not already arrived at my office in the past day or so.

To give any particular person a package before all these factors have been considered and before Cabinet has decided the amount of compensations—if, indeed, Cabinet does that—would generate problems with other growers and could jeopardise the whole program, which currently has strong grower support. E&WS officers tell me that they are aware of a number of growers who would demand instant simultaneous settlement if we took one or two of these people and treated them differently from everybody else on the basis that they are caught in a difficult situation at the moment.

So, while I can express a degree of sympathy for the people who are caught in this fashion, it is a very important step in righting a situation which has existed for many years, and departmental officers are working as quickly as possible to identify all the problems and to have a satisfactory solution to present to Government. I certainly can give an undertaking that, when the approval for the final stage reaches me, I will do my best to process it as quickly as I possibly can.

**The Hon. P.B. Arnold:** I appreciate what the Minister has said, but it is probably very difficult to understand the plight of some of these people whose total life's work and all their assets have been involved in the piece of land and the ability to irrigate it. If that has no future for them, any reasonable person would agree that they have to be compensated out as quickly as possible so they can get on with the rest of their life. I have a great deal of concern about what it is doing to some of these family groups. I appreciate that, when the Government makes a decision, it must be a decision that can be applied across the board.



I have given a great deal of thought to this matter over the past year or two. That water has been supplied to these unrated lands for vegetable growing purposes and pasture for more than 70 or 80 years and availability has never been withheld or withdrawn. The Minister might like to consider my views on a satisfactory or reasonable means of compensation: I believe that unrated irrigation land for vegetables, pasture, etc. on which each irrigation taken is paid for in cash should be rated as a water entitlement determined for each property.

In other words, based on the number of hectares involved, a water allocation will be determined for each property as a rated allocation. This action will have the effect of irrigators on unrated land contributing their 20 per cent share to the cost of rehabilitation, like all other rated growers, which is part of the concern of the Federal Government: (1) the Government, in consultation with unrated irrigators. . . determine any area not to be rehabilitated; (2) any irrigators affected by the system not being rehabilitated will be compensated in the following ways.

So, the decision has already been taken in Moorook, but the people do not know where they go from here. They know they will not get water. What I have said is that any irrigator affected by the system not being rehabilitated should be compensated in the following ways: (a) be able to transfer water entitlement to another approved piece of land within the general irrigation system, so long as the system has the capacity to carry it and not affect any other irrigator; (b) sell the entitlement privately, so that they are compensated that way and they get back to what would have been the capital value prior to the water being taken away; and (c), the other alternative, that the department purchase that entitlement at commercial rates and establish a water bank from which irrigators or potential irrigators can purchase additional water.

The market value of irrigation water is approximately 40¢ a kilolitre. The department could purchase at, say, 35¢ and sell for 40¢, thus covering administration costs and providing a valuable water bank for the irrigation industry. If it was done that way it would provide a valuable service, rather than irrigators each selling their little entitlement privately. It would cost them 5¢ a kilolitre to sell privately through a land agent or some other person. If it was taken to a water bank it would enable other irrigators who wished to purchase a significant quantity of water to go to the department and buy it from that bank. It would be a means of providing a very real service and of reorganising and rationalising Government irrigation areas without costing the department anything, but it would be in a position to administer that at no real cost. Those points might be worth considering in the Minister's overall determination and policy that ultimately he has to come up with to sort out the future for these people.

#### Membership:

Mr Quirke substituted for Mr Ferguson.

**The Hon. J.H.C. Klunder:** There is, of course, a degree of concern for the people who are caught in this position, and the honourable member would appreciate that all other members of this Committee would feel for people who get caught in a situation where there is a change after a long period of a particular system being in place. I also appreciate his putting forward the solution that he believes is an appropriate one, but he in turn will appreciate, I am sure, that I am not in a position to give a response to that.

*The Hon. P.B. Arnold interjecting:*

**The Hon. J.H.C. Klunder:** The honourable member has agreed and I am pleased to hear it. I will obviously need to consider the proposals that my officers have placed before me, and of course eventually it will be Cabinet that will have to make a decision as to what it considers to be in the best interests of the people of this State. I am sure that in all of that an element of sympathy for the people who are caught in this situation will not be lacking.

**The Hon. P.B. Arnold:** Back in the early 1970s, when the rehabilitation of Government irrigation areas commenced, I can well remember the Hon. Des Corcoran saying, when announcing the rehabilitation program, that he could assure members of the House that the irrigators in the Government irrigation areas of South Australia, as a result of the rehabilitation, would not be financially disadvantaged in any way. That is all I am seeking here: that this matter be resolved as quickly as possible, but that these people not be financially disadvantaged as a result of the rehabilitation program that is going on.

**The Hon. J.H.C. Klunder:** Was there a question in that or was it just a statement by the honourable member?

**The Hon. P.B. Arnold:** It was more a statement just going back to the beginning of rehabilitation 20 years ago.

**The Hon. J.H.C. Klunder:** It is that rehabilitation which is still costing the E&WS \$6 million a year in interest on the money that it spent at that time. So, there is an ongoing subsidy, if you like, to growers even from that earlier rehabilitation, and we look like we may at this stage be heading for an intergenerational subsidy in terms of the current situation.

**The Hon. P.B. Arnold:** The irrigators in Government irrigation areas cannot be held responsible for the decisions of the Government of the day and the manner in which it decided to go about rehabilitation. As I said at the outset, the manner in which the Government is going about rehabilitation in the Cobdogla irrigation area at the moment is far more efficient than the manner in which it did 20 years ago when the cost of pipe laying and the manner in which it was performed was very expensive indeed. I was involved with the E&WS Department from 1979 to 1982 during the rehabilitation of the Berri irrigation area, when it was being done by Government officers within the department, and part way through that program we introduced a contractor into the program and the pipe-laying rate of the department's own team went up by some 95 per cent because of the competition that was provided by the contractor working alongside. That was not my figure; the then Director of the E&WS, Mr Lewis, put out that figure of 95 per cent increase in productivity as a result of that action.

So, it cannot be suggested that the growers were in any way responsible for that \$6 million interest payment, because it was a decision of the Government of the day to carry out the program. As was the case with the Renmark Irrigation Trust, whose area was the first to be rehabilitated in South Australia, had it all be done by contract from day 1, the rehabilitation of Government irrigation in South Australia would have been completed with the money that has already been spent.

**The Hon. J.H.C. Klunder:** Obviously, I have no figures with which to contest the honourable member's claim that the efficiency of construction at that time was not particularly good, and I suspect that in talking about this he and I are going through the stately steps of a minuet that has been played many times before.

However, I am pleased to hear that the honourable member did not agree that the cost of that earlier rehabilitation would have been zero if it had been done efficiently. We are therefore not talking about whether or not there is a cost to Government of carrying the interest cost of that rehabilitation: we are arguing about the quantum of that interest cost.

**Mr HAMILTON:** What assurances can the Minister give to me and to the people of South Australia in terms of water quality in the future? The reason I ask is that it has been put to me that people are concerned about the water that flows into reservoirs in South Australia and, indeed, into catchments such as the Blue Lake at Mount Gambier, which services that city. Can the Minister assure my constituents and the people of South Australia that every precaution is taken to ensure that motor vehicles or trucks that carry toxic substances cannot pollute such reservoirs or, for example, the Blue Lake? What restrictions are there surrounding such reservoirs and what plans have been determined to ensure that, in the event of a major toxic spill, such waterways or reservoirs will not be polluted to the detriment, in particular, of metropolitan areas of South Australia?

**The Hon. J.H.C. Klunder:** It seems to me that the honourable member's question has two parts, one possibly involving the general protection of our reservoirs, and the other dealing with ensuring that, in the case of the transport of toxic substances, none could get into the reservoirs if an accident occurred.

The basic premise that one has to accept is that the Adelaide Hills are different from almost any other catchment area of a major city in Australia in that the Hills are developed; they are not reserves for the purpose of water catchment. Consequently, we have to take a great deal more care that the kind of uses that could put polluting substances in the reservoirs are limited in the catchment areas, and I am referring to things like piggeries. We also need to be far more careful in our treatment and protection of the water once it gets into the reservoirs.

In relation to toxic substances getting into the water supply from, say, a truck or other means, in the case of the Blue Lake I can give the honourable member some assurance. It is my understanding that trucks carrying toxic substances cannot go into certain areas around the Blue Lake. The council dump was in an area where it was possible for material to leach into the lake. An agreement has been reached with council that that dump be shifted to minimise the possibility of contamination.

With regard to the other reserves, I suspect there may well be a minor capacity for some problems. As the honourable member has raised the issue, I think that it is something we would want to look at to ensure that particular substances are not carried in trucks or large containers in areas where an accident could in fact pollute a reservoir. Of course, the honourable member is no doubt aware that we could do without any one of our reservoirs if there were such an accident: we could just not take water from that reservoir. We could supply the metropolitan area through an interlocking system of mains from other reservoirs. However, I agree with the honourable member: an ounce of prevention is a lot better than a tonne of cure after such an accident. I will ask my officers to look at that.

**Mr HAMILTON:** I am somewhat surprised that I have not detected from the Minister's response some plan to address this particular problem. The Minister may have said that, but I did not hear him. I would suspect that there would be a plan for the emergency services in cooperation with

E&WS but, as I understand it, the Minister has not said that there is a particular plan. I would certainly be most interested to ascertain whether or not that is so, because this is a specific question asked of me by a person who has a keen interest in this area. It certainly is not an issue that ever exercised my mind in the past, but having had the matter drawn to my attention I believe it is so important that I should bring it to the attention of the Committee, as I have done, and seek a response from the Minister.

**The Hon. J.H.C. Klunder:** As to the details the honourable member is seeking, I will ask Mr Cooper to respond.

**Mr Cooper:** There are contingency plans that we would swing into action with other services. However, we do have officers who are on roster available 24 hours a day to attend to toxic spills, either in catchment areas or even on the edge of a reservoir and in any area that could get entry to stormwater or into the sewers. Those people liaise with the various emergency services and are called in from time to time when toxic spills occur.

There is a handbook prepared by the Government on things like toxic spills, setting down the procedures involving the fire brigade and the police being in charge, and so on. We also have contingency plans in the E&WS which have been developed for our various water supplies and which can cope with incidents like toxic algal outbreaks or other things like toxic spills into the water. On those occasions we have a whole range of emergency actions to take depending on the severity of the spill, where it is and how we will supply safe water by varying our system; or, if it is a major event, by alternative means of tankering, etc.

**Mr HAMILTON:** I am reassured by that statement and I certainly feel that if any other questions arise about this situation my constituent will ensure that I raise them in the appropriate way. What is the current position concerning the licensing of waste water disposal to inland waters? The Minister would be well aware of my concerns about the West Lakes waterway, into which there are something like 26 drains emptying. The Minister would also be well aware that in France last year the West Lakes development achieved a worldwide award as the best development.

I am prompted to ask this question as a result of the proposed recycling plant at Royal Park. I understand that my initial concern—that the water would drain from the plant into an open drain and hence into the waterway—is not factually correct. However, I understand that the water will be drained elsewhere. Perhaps the Minister can confirm that. Has the E&WS Department looked at what happens in the ACT? In South Australia we have concrete drains and the water just flows into the sea or wherever, whereas in the ACT they have reed beds that filter out the nutrients. Has the Minister's department considered that approach in an effort to reduce the pollutants that go into the West Lakes waterway?

**The Hon. J.H.C. Klunder:** There is an expectation by many people that the E&WS is somehow or other responsible for the disposal of stormwater. That is not the case. Stormwater disposal is a local council matter. One of the problems with this is that a council says that, once stormwater is out of its boundaries, it can ignore the matter, and the next council has to deal with it. The next council is very unhappy about getting that stormwater from the upstream council, and so on. For that reason, in 1992 the State Government set up a joint State and local government task group to address this issue. It is currently finalising its report, which addresses various options for urban stormwater management.

The problem is not so much that the councils and the State Government will be unable to agree on a method of dealing with stormwater; where they will come to some disagreement or parting of the ways is in terms of who pays for it. It is my view at the moment that, while the State Government ought to be involved in order to get councils to talk about this, I would not like to see the department contribute a large portion of the expenditure on this. However, in terms of the kind of work that will be necessary to facilitate the process to bring people together and assist with the research, it is appropriate that we spend some money.

As to the outcome of that situation, we will have to wait until the joint task group finalises its report. I understand that the report will eventually go to Cabinet's Natural Resources and Infrastructure Committee, and no doubt it will be forwarded on from there. Clearly there are other players—such as the Department of Environment and Natural Resources—who will have a legitimate input into the process at some stage. I ask Mr Killmier to add to that.

**Mr Killmier:** Notwithstanding that the E&WS Department does not have a statutory responsibility for stormwater, we have assisted wherever we can in recent times to try to address some of the problems that have been identified. Probably the best example of that is the Onkaparinga estuary where, with the assistance of some environmental enhancement funds and help from the local council and the Commonwealth, a very exciting outcome has been achieved. A number of wetlands have been created, and they filter the water prior to its going into the estuary. So, instead of the water just draining in, it goes through a number of wetlands. It is well worth seeing, if you have not seen it.

A similar approach has been adopted with the Torrens River Linear Park. In the Highbury area, at the top end of the Torrens River Linear Park, wetlands have been created so that the stormwater is not simply dumped into the Torrens. The stormwater passes through the wetlands, which helps to reduce the turbidity and eliminate the heavy metals and other things. That is a success story. Of course, we have an interest in other areas, and we have done work up at Woodside with the District Council of Onkaparinga, because we do not want water to go directly into the catchment and so on. There are probably several other areas that I could think of, if I put my mind to it.

We have provided an officer from our Water Resources Branch to participate in a program with the CSIRO, which has a long-term program of trying to achieve the sorts of things that the honourable member is talking about. Our officer works with the CSIRO on ways and means. Members are probably aware of the cooperative arrangement between the developer, the Government and the council in respect of Andrews Farm along the lines of what the honourable member is proposing. So, there are numerous examples of cooperation between State Government departments, local government and any other players to try to move forward in a successful and environmentally friendly way. Once the EPA is formed, there will be an extra mechanism, if you like, to facilitate these sorts of things, because we will have an ally, in the form of the EPA, who can work with us in making things happen.

**Mr HAMILTON:** That information is very pertinent, perhaps more so for the younger generation in the long term than those of us who are older. Having seen what has taken place in Wyalong in New South Wales and in the ACT, I can appreciate what proper planning can do to ensure that a lot of those nutrients are filtered out of the water. What prosecu-

tions has the E&WS launched over the past 12 months in relation to people manipulating water meters? I understand that there has been a practice in the past of people turning water meters around. I am advised that this does take place. There have been allegations that in some cases water meters have been replaced unlawfully. Can the Minister advise me whether that is factually correct, or is it just a furphy?

**The Hon. J.H.C. Klunder:** We do not have that information available at the moment, so we will take it on notice. I understand that Mr Killmier is able to at least give anecdotal evidence of one case that apparently sticks in his mind.

**Mr Killmier:** We have an arrangement with the Commissioner of Police in respect of meter readers who come across a meter that is clearly not the right meter for the property—in other words, the owner has swapped meters. In that situation the police will attend and observe. They usually have a look around and locate the departmental meter under a bag in the shed, which is rather incriminating.

Recently, departmental officers at Whyalla came across a property with the wrong meter on it and attempted to involve the police. Unfortunately the local police felt that, because it was a small country town, they really did not want to know about it, so they declined to participate in the exercise. The departmental meter indicated that very little water had been used, yet an examination of the property indicated that huge quantities of water had been used. Interestingly enough, at some stage the meter reader returned to the property and found that the owner had been a bit slow and had left the other meter out, which enabled the meter reader to read it. It was found that the meter had been stolen 8 years previously, and it had a huge reading on it. We worked out straight away how much water he had used over the 8 years, and we billed him for it.

Not to be outdone, the owner appealed to the Ombudsman. He said, 'How dare this Government department pick on me and send me a bill for all this water. After all, all I did was swap meters around from time to time, so why should I be picked on?' We pointed out to the Ombudsman that it was not quite the done thing to have one meter in the shed and one meter out the front. I am not sure of the outcome—I do not know who is winning at the moment. We took the matter up with the Police Department, and we have had an assurance from the Police Department about future actions. It was as a result of my personal representations to Commissioner Hunt some 10 years ago that the rules were changed. So, the police at Whyalla have been quietly asked to attend when next there is a problem like this.

**The Hon. D.C. WOTTON:** In going through the financial papers and indeed the estimates, the interest that is being paid out by an instrumentality such as E&WS on borrowings is of particular concern. I note, for example, in program 1 'metropolitan water supply' that 30 per cent of the total cost is going out on interest on borrowings; country water supply, 31 per cent of the total cost; country sewerage, something like 46 per cent of the total cost; and so it goes on. What rate is E&WS currently paying to SAFA, and I presume that is the organisation to which the interest is paid? Has the Minister made any representation through Cabinet to determine whether instrumentalities such as the E&WS can obtain funding from sources other than SAFA?

I ask that question quite seriously. One has only to look at the rate that local government is being charged through the indicative maximum interest rates for council borrowings and through commercial rural loans for rural finance and development. I presume the interest is being paid at 12 per cent. If

that interest rate was halved, the total cost for metropolitan sewerage would fall by about 16 per cent from \$72 million to \$60 million. It is of concern, and I would like to know whether the Minister has made any representations on that matter. I know what the answer is going to be, but—

**The Hon. J.H.C. Klunder:** If one builds infrastructure of the size of the E&WS, clearly money needs to be borrowed, and that will attract interest costs. That interest will remain reasonably high when there are people in this Parliament who object vigorously to E&WS repaying any money off the capital. The honourable member may notice that I am looking at him because he has, over some considerable time, made the strongest representations that E&WS should not repay capital, thereby guaranteeing that the interest payments will remain high.

*The Hon. D.C. Wotton interjecting:*

**The Hon. J.H.C. Klunder:** I am just indicating to the honourable member that there is more than one reason why interest payments remain high. The E&WS, as is the case with most other Government departments, is paying the common public sector interest rate on borrowings, which for 1992-93 was 11.75 per cent; and I understand they are estimated to be 10.75 per cent for the coming year. The honourable member is perfectly able to argue that it might be possible to borrow money on the outside under certain conditions where the interest rate is perhaps somewhat lower, but the honourable member did not argue that at the time when interest rates were rising and the common public sector interest rates were lagging behind. The honourable member is no doubt thinking to himself, 'Things are different when they are not the same', so I presume he would argue that his Government, if it were ever fortunate enough to get into office, would charge the existing interest rate.

*The Hon. D.C. Wotton interjecting:*

**The Hon. J.H.C. Klunder:** The honourable member says, 'Don't hold your breath'. I will not hold my breath until such time as a Liberal Government gets in. One has the capacity to do it according to a number of different systems. The system that is in use here has been around for a long time, and what one loses on the swings one gains on the roundabouts. Consequently, I do not believe it is appropriate for people to say that they should be paying less interest at a time when it suits them and less interest at another time as well because the costs—and the honourable member clearly has not understood this point—to Government overall are the same regardless of transfer payments within Government as to whether or not there is one interest rate or another. The overall Government budget does not change as a result of the internal transfer of payments.

**The Hon. D.C. WOTTON:** If you were running a business you would be looking for the best rate, and I cannot see the difference.

**The Hon. J.H.C. Klunder:** The honourable member is right. If he were running a business, he would never have got the common public sector interest rate at a time when interest rates were rising. He is saying that he believes an organisation ought to be subsidised when interest rates are on the way up and when they are on the way down, and somehow or other that has no effect on the overall—

*The Hon. D.C. Wotton interjecting:*

**The Hon. J.H.C. Klunder:** The honourable member clearly has not understood the subsidy nature of the situation. The eventual result is that, regardless of transfer payments for interest within Government, it does not make a difference to the overall budget figures for the Government as a whole.

**The Hon. D.C. WOTTON:** There is obviously a reason for all this, but I am rather intrigued with the difference between the actual and the estimates for the previous year. If we look at country sewerage, for example, the difference between the 1992-93 estimate and the actual is 47 per cent, as is the case with country water, metropolitan sewerage, country sewerage, irrigation services and so on. What is so peculiar about the magical figure of 47 per cent?

**The Hon. J.H.C. Klunder:** The honourable member has found the very same thing that everybody else has discovered when they first looked at these figures—there are odd differences, which in some instances are quite remarkable. I refer, for instance, to the figure for the Murray-Darling Basin Commission's activities; there are some astonishing oddities in terms of the number of people utilised while the amount did not change. In other places, particularly in the management support services area, there is a major difference between the proposed and actual figures for 1992-93. The situation is resolved by a footnote, which I think appears on page 337; it is indicated that there has been a change in the accounting treatment for the department during 1992-93. Indeed, there have been some changes due to the fact that voluntary separation packages and abnormal items were included in the management and support services situation whereas, if they had been excluded, there would have been far greater equality or reasonable flow in the amounts.

*The Hon. D.C. Wotton interjecting:*

**The Hon. J.H.C. Klunder:** I did not look at it in terms of its being a percentage, but it may well be that across the board there was such a provision. Perhaps I can ask someone who is more at home with these figures to give an indication. Where does the honourable member get the 47 per cent from?

**The Hon. D.C. WOTTON:** As I have pointed out, if we look through all the programs, we see that the difference between the estimate and the actual figures for 1992-93 in country sewerage, country water, metropolitan sewerage, metropolitan water and irrigation is approximately 47 per cent in each case.

**The Hon. J.H.C. Klunder:** The easiest thing to do in order to provide an example of what happens when you extract the voluntary separation packages and the abnormal items is to provide the honourable member with the break-up of a particular set of figures. For instance, on page 334, the proposed figure for metropolitan water supply is \$14-4.893 million and the actual figure is \$140.638 million. If we were to deduct from that figure the voluntary separation packages of \$4.962 million and an abnormal item of \$6.526 million, the remaining figure would be \$12-9.151 million. As the honourable member can see, the proposed figure for 1993-94 of \$125.654 million is much more in line with that. I think it is reasonable to indicate that the voluntary separation packages were add-ons into the actual result.

On page 333 under 'Recurrent Expenditure', we see an amount of \$384.375 million. That figure contains \$35-3.3 million of actual recurrent expenditure and \$31 million of VSPs and abnormal items. I will now break down that figure for the honourable member to give him some idea. The abnormal items are one-off items related to VSP payments of \$13.4 million, property damage payments of \$1.1 million and accounting adjustments relating to the introduction of full commercial accounting, which has occurred for the first time this year, of \$16.6 million. That amount of \$16.6 million breaks down into the major adjustment being the recognition

of interest liability of \$9.2 million rather than interest payments together with the recognition of annual leave entitlements to all employees of \$6.1 million in accordance with accepted commercial practice.

So, we have an interest liability recognition of \$9.2 million and an annual leave entitlement for employees of \$6.1 million which, under the old cash accounting process, were not included but under the present commercial accounting process they must be included, and are, in fact, one-offs. So, the recurrent expenditure has been loaded by \$31 million because of those abnormals and VSPs. As far as I can tell, that shows up mainly in the management and support services item in each of the subheadings.

**The Hon. D.C. WOTTON:** I am no further advanced. It is easier to look at this in the Estimates of Payments and Receipts. There is a 47 per cent difference between the estimate and the actual figure in all those programs for operating maintenance expenses, minor equipment and sundries. I will read *Hansard*, but it may be necessary to come back again, because I am no further advanced. It seems a bit strange to me.

**The Hon. J.H.C. Klunder:** The essence of it is that a change in accounting procedures from cash accounting to what is basically commercial or accrual accounting has necessitated taking into account the recurrent expenditure items that were previously not recognised: that is, the amount of \$16.6 million and a further \$13.4 million which relates to VSP payments. That is why the overall expenditure is considerably higher than it actually is, because the \$384 million of actual recurrent expenditure for 1992-93 is made up of recurrent expenditure of \$353 million plus \$31 million of abnormal items that are comprised mainly of VSPs and the other items to which I have already referred. I do not think we can make it any clearer for the honourable member merely by repeating it or by saying it in a different fashion.

**Mr HOLLOWAY:** This afternoon Mr Cooper mentioned the Brukunga mine and the fact that treated sludge had been used at that mine. Will the Minister provide more information about the rehabilitation of the Brukunga mine and the future prospects for improving quality in that area?

**The Hon. J.H.C. Klunder:** On 23 August 1976 the South Australian Government released and discharged Nairne Pyrites Pty Ltd from future responsibilities with respect to the final rehabilitation of the Brukunga pyrites mine. I recall from my days as Minister of Mines and Energy that that was the end of a long and involved story. The reduction or treatment of the leachate is necessary to maintain the Dawsley Creek and the Bremer River in a condition suitable for agricultural use. As I think Mr Cooper explained earlier, the exposure of pyrites to air and water produces a liquid runoff with high acidity: that is a function of old pyrites mines. In 1986, Cabinet approval was gained to continue leachate treatment and to rehabilitate the tailings dam (by capping and revegetation) over a four year period. Further approval was gained in 1990 to continue with the tailings dam rehabilitation works. In May 1991, a four year forecast for mine site rehabilitation trials was approved.

From those few words, one can see that there is a fairly complex and lengthy process which has got us to the present situation. The rehabilitation of the tailings dam is now almost complete. About 85 per cent of the dam area has been capped, with the remaining area bounded to contain the sludge waste by-product from the acid neutralisation process. Approximately 6 000 Australian native trees have been successfully

planted on the capped surface, and further planting of trees will be necessary to complete the rehabilitation of the tailings dam.

Improvements to be the acid water catchment adjacent to the northern mullock heap were made. Initial trials for the rehabilitation of the mine commenced during 1991-92. For instance, approximately 2 500 tonnes of sewage sludge from Bolivar was deposited on the main beach, contained in an earthen embankment. The sludge filled dam had been saturated with water and observation piezometers were installed obliquely beneath the trial area to monitor water quality. Two horizontal bores were drilled into the vertical rock face adjacent to the sludge trial on the main bench to lower the water table and to relieve the piezometric pressure. Additional sewage sludge has been deposited on the main bench and over the slopes of the southern mullock heap.

In 1992-93 a number of other works were undertaken. These included the drilling of vertical bores to observe ground water movement above the mine site and the installation of stream engaging stations to monitor water balance on the mine site area. A consultant was employed to assist with rehabilitation strategies. As members may be aware, there has been considerable publicity recently regarding concerns by a number of residents in the Brukunga township regarding the presence of crystals found beneath houses and an apparent belief that that phenomenon may be attributed to the operation of the treatment plant on the tailings dam above the town. I understand that the crystalline deposits are actually naturally occurring and consist of sulphates of magnesium, aluminium and iron. The activities of the E&WS Department involving acid water collection from the mine site and tailings dam and the neutralisation process prior to discharging to Dawsley Creek cannot be attributed to the occurrence of crystals within the township.

An article published in the Mount Barker *Courier* of 10 February this year referred to a claim that the acid treatment plant is leaching dangerous levels of acid water into Dawsley Creek. Acid water collection from the mine site and the toe of the tailings dam at pH2.5 is neutralised at the treatment plant and discharged to the Dawsley Creek at approximately pH9, so that clearly is not the case. In the event of a malfunction, the plant closes down and the pH of the clarified liquor falls as low as 5.5. It is believed that the independent tests referred to in the *Courier* were sampled from an outfall channel used only to accommodate high flows during periods of heavy rain. The stagnant water samples at pH2.3 was local ground water, which is indicative of the particular area adjacent to the unused drain.

*The Hon. D.C. Wotton interjecting:*

**The Hon. J.H.C. Klunder:** The member for Heysen is full bottle on pH measurements, because I remember answering questions on notice, one on acidity and one on pH; I was able to give exactly the same answer to both questions, because acidity and pH, of course, are very closely related. pH level is actually a measure of the acidity of water. I have forgotten what it is. It is indexed to the power 10 of the number of hydrogen ions present in a certain amount.

An article in the *Advertiser* of 15 February 1993 referred to a soil testing program involving the CSIRO, the Health Commission, the Engineering and Water Supply Department and the Department of Mines and Energy. Soil sampling will be carried out by the South Australian Housing Trust and analysed by AMDEL. This was agreed to at a meeting on 4 February 1993, at which the South Australian Housing Trust, the Health Commission, the Department of Mines and energy

and the E&WS were represented. On 18 February, the department hosted a guided tour of the site and explained the operation of the plant to approximately 35 Brukunga residents to assist in dispelling community concerns.

**Mr HOLLOWAY:** I noted some years ago that the Dawsley Creek flowing from the Brukunga Mine was heavily discoloured. It was on the old road to Melbourne and passers-by would notice the pollution. Is there still visual pollution of that creek?

**The Hon. J.H.C. Klunder:** I must admit that on the occasions when I have been to the Brukunga site—and I have been there on a number of occasions, once for mines and energy matters and on several occasions because the CFS has its training centre there—there was some discolouration, but I do not have the capacity to compare that with the discolouration that the honourable member saw because, clearly, I did not see it at those times. At that stage, which is now some three years or so years ago, there was a concern that the balance of things was still not right, and discolouration was part of the problem.

**Mr Cooper:** The treatment of the liquors that we pump to the plant is well under control. The pH is always in excellent shape, but the natural leaching into the creek will go on for a long time, and that mixes with the treated water that we put in. So there will be times when there will be colour due to iron precipitation and that sort of thing. It is a phenomenally big problem, and it will involve many years and a lot of money. It will be finally cured only when we cap all the mullock heaps and the benches of the mine so that water does not get through and percolate, when air gets in and there is virtually the formation of sulphuric acid. That will gradually tail over in time, but it will take a long time to correct fully.

**Mr HOLLOWAY:** In the Estimates of Payments (page 127) reference is made to metropolitan drainage and the south-western suburbs drainage funds. I note there was no expenditure last year but there is a similar allocation for this year. What is that expenditure for? Why was it not spent last year?

**The Hon. J.H.C. Klunder:** As there is some difficulty getting that information, I will take that question on notice.

**Mr HOLLOWAY:** My final question is about the upper South-East dryland salinity and flood management plan, which is referred to on page 345 of the Program Estimates. Can the Minister indicate what stage that plan has reached?

**The Hon. J.H.C. Klunder:** There is a problem there, of course, as everybody is aware. There is a 'do nothing' scenario for the dryland salinity and flooding problems of the upper South-East, and this is estimated to result in the ultimate degradation of 170 000 hectares of agricultural land; the long-term loss of 400 000 dry sheep equivalent carrying capacity; the long-term loss of \$5.3 million per annum in gross margin to land holders; the loss of about 100 jobs mostly in the rural/animal/community services sectors; and degradation of various wetlands and conservation parks through salinisation and lack of adequate water management.

I have been there several times to look at the situation, both in my capacity as Minister of Mines and Energy at that stage, because of the responsibility Mines and Energy had for ground water and drilling, and in my present capacity. The management plan and the draft EIS have been completed after 18 months of detailed investigation, assessment and review and the document incorporating the plan and the EIS has been endorsed by the Natural Resources Council. The document, which was released yesterday, outlines the

problems currently affecting the land holders and proposes a number of options for the future management of the complex and contentious issues of dryland salinity and surface water flooding in the upper South-East.

The major components of the management plan are flooding and wetland management, major coordinated drainage schemes, agricultural production and on-farm measures, and revegetation forming a balanced proposal integrating environmental protection and agricultural productivity enhancement. Detailed economic analyses were undertaken on 28 different drainage schemes with a variation on standards and outlets. The preferred management plan involves a \$35 million drainage scheme with extensive on-farm pasture and renovation with salt land agronomy. Drainage outlets are proposed to the Coorong at Salt Creek, to the ocean at Henry Creek and to the existing Blackford Drain. The impacts on the Coorong and the ocean are not at this stage expected to be severe.

The management plan also proposes revegetation and wetland management programs which are integrated into the total plan. A strategic economic overview of the project has indicated cost sharing by beneficiaries of the capital drainage costs as 25 per cent, and 37.5 per cent and 37.5 per cent by local, State and Commonwealth Governments respectively. This is a major issue and, as far as I am aware, the Commonwealth has given no indication of its willingness to participate, and indeed the State Government also has not yet considered its options.

The standard of drainage and therefore the cost is another issue. Deep or ground water drainage, involving an expenditure of \$35 million, should control raising saline ground water but will produce large amounts of drainage water, and shallow or surface water drainage, which will cost \$22 million, provides less protection but of course also has lower volumes to discharge.

Overall, the preferred schemes involve ground water drains to provide security for pasture renovation and for protection against further land degradation. The on-farm pasture renovation involving salt land agronomy by land holders is expected to deliver the expected economic returns. These on-farm measures, costing up to \$18 million over 10 years, may be difficult to finance for some of the land holders in the current economic climate. So, in that sense the land holders would face those costs and the local group, whether the local council or land holders or whoever, would also be expected to bear a cost; and then of course, I guess, the benefits are there as well.

The environmental impacts of the discharges to the Coorong, the ocean and unavoidable drainage routes through several conservation parks will, of course, also be contentious and will need to be dealt with in the processing of the EIS.

**The Hon. D.C. WOTTON:** I have been informed that two E&WS employees working at Bolivar have been selected to go through a quit smoking course at a cost of \$300 each. This is a pilot scheme, it is alleged, which may be extended to other smokers within the E&WS. Are E&WS employees stationed elsewhere having the same course made available; what is the projected cost of the pilot scheme, which I understand is being paid for by taxpayers; and what will be the projected cost of the pilot scheme if it is found to be successful? I guess the other question is: how many smokers are employed by E&WS?

**The Hon. J.H.C. Klunder:** I must admit, I know nothing of this scheme.

**Mr Killmier:** I cannot talk specifically about the two people at Bolivar—I would have to look into that—but the issue of smoking is one that has been exercising the minds of many organisations around the world for some years, together with the question of what you ban and what you do not ban. We have had a policy for some years now of people not smoking within Government buildings or departmental premises, and that of course has now been extended to buses, aircraft and whatever, but it is common to see people standing outside Government buildings, or even private buildings for that matter, smoking a cigarette at morning tea time or whenever.

More recently we introduced a policy of no smoking during office hours. When introducing such a policy you get the argument, 'Well, it doesn't really matter when you are out in the field because you are in the fresh air', etc., and of course there are other angles to that. There is a legal consideration that the employer who condones smoking on the job can be legally sued, if you like, under occupational health and safety arrangements for not making it a policy that the employee should not smoke on the job.

So, on the advice of the Crown Solicitor we have introduced a policy that basically says we discourage employees from smoking. Bearing in mind that we have employees with up to 40 years service, that is a difficulty for them, so we have indicated that if an employee wants to get assistance—medical assistance, for example—we will facilitate that. I do not know what has happened at Bolivar, I will take the question on notice, but we all know that every agency is making huge payments for a whole range of occupational health and safety issues.

We have to provide equipment, uniforms, clothing, hearing protection devices, and so on. We will make the necessary inquiries, but it is probable that some of the people at Bolivar are long-term smokers and that arrangements have been struck whereby the department will pay some costs towards their becoming non-smokers. We make no apology for that, because in the end, from an occupational health and safety point of view it is probably a cheaper way to go.

**The Hon. D.C. WOTTON:** When will work on the Swan Reach filtration plant commence and be completed so that people in the Barossa and parts of the Mid-North can have clean water?

**The Hon. J.H.C. Klunder:** The construction of the water filtration plant serving the Barossa Valley, the Mid North and Yorke Peninsula is scheduled to start in 1995-96. As a result, some towns in the Mid North and on Yorke Peninsula will receive a mix of filtered water together with the local unfiltered catchment water. As the honourable member has indicated, the plant will be at Swan Reach to filter River Murray water delivered via the Swan Reach/Stockwell pipeline and the Warren trunk main. The estimated cost is some \$20 million. As the honourable member would be well aware, the proposed location was decided after an indication of support from local members of Parliament and councils that were affected by the change from the originally proposed site at Stockwell.

Pilot plant studies to determine processing requirements have been completed. It is aimed to incorporate taste and odour removal and to include algal toxin removal should a proven system become available at acceptable cost. Given, of course, that in the past 20 years the State Government has spent approximately \$220 million on the provision of filtered water to the people of South Australia, for instance, through the five metropolitan plants—Happy Valley, Hope Valley,

Barossa, Anstey Hill and Little Para, and Morgan in the Iron Triangle—then this would bring the total amount spent on water filtration to \$240 million.

**The Hon. D.C. WOTTON:** What proportion of recurrent expenditure for metropolitan water is allocated to filtration? I would appreciate the figures for each of the past five years and the estimate for 1993-94. What capital investment has been made for each of the past five years and what is the estimate for 1993-94? What percentage of the metropolitan area is now on filtered water? I would be happy to have that question on notice.

The matter of whether a differential rate or charge should be imposed for those who receive better quality water than others has been tossed around for a very long time. Will the Minister tell the Committee where he stands on this subject? Does he see that it would be appropriate for people who receive better quality water than others to pay more for that water?

**The Hon. J.H.C. Klunder:** The situation that the honourable member proposes is very far from a user-pays option, which is that one pays for the water one receives at the cost incurred in delivering it. Of course, the State Government has never accepted that proposition to any degree, because the city water, sewerage supplies and works make a very considerable profit, almost all of which goes into subsidising the country supply of water and the country sewerage schemes where they exist. The current situation seems to have served particularly the country people of South Australia very well, and I would be loath to interfere with it.

**The Hon. D.C. WOTTON:** A workshop of the recent Murray-Darling Association National Conference highlighted as the main issues salinity, water allocation, environmental flows, pollutants, blue-green algae, education, communication, and so on. These issues were seen to affect the entire basin with incremental changes along the river. Of these, the priorities were seen to be water allocation, national standards and the single authority, consistent management research and strategies. Does the Minister believe that a national body, such as the Murray-Darling Basin Commission, should be given overall authority for all water in the basin, and that the resources to implement the necessary strategies to maintain and improve water quality should be provided as a matter of urgency? While there are other important issues, the conference saw that as significant.

**The Hon. J.H.C. Klunder:** The short answer is that the commission is currently working on policy options in this general area for consideration by a future meeting of the Ministerial Council.

**Mr HAMILTON:** Following the changes in recent years in respect of pricing, how do Adelaide's prices for residential water and sewerage services compare with those of Melbourne and Sydney?

**The Hon. J.H.C. Klunder:** I believe that Mr Phipps has some information on that matter.

**Mr Phipps:** It is quite difficult to compare prices between capital cities—for instance, Adelaide, Melbourne and Sydney—because of the substantial property value component in the residential pricing systems in both Sydney and Melbourne, and there is not such a pricing component in Adelaide. However, when we look at what we would call typical properties in similar areas of Adelaide and Sydney, we see that between consumption of, say, 100 kilolitres and then over the average of, say, 270 kilolitres up to about 400 kilolitres, which would cover by far the majority of users, Adelaide's prices are cheaper.

If we then compare Adelaide and Melbourne, the same situation arises. For the use of between, say, 100 kilolitres and around 400 kilolitres, which again covers the majority of users, Adelaide is cheaper than Melbourne in all areas. When we look at the sum of water and sewerage charges, comparing Adelaide with Melbourne and Sydney, irrespective of the water consumption, Adelaide is cheaper in all areas. Those comparisons are based on 1993-94 prices.

**Mr HAMILTON:** The Minister, as a former Chairman of the Public Accounts Committee, would vividly recall the exercise on asset replacement. I can recall the Minister's discussing with other members of the committee the manner in which sewerage and water pipes may be repaired rather than taken out of the ground. Rather than elaborating on it, what progress has been made in this area, and what cost savings are envisaged should such a proposal be put in train?

**The Hon. J.H.C. Klunder:** I am happy to give some initial comments on this, but there may be other people here who might want to add to it. Certainly when the Public Accounts Committee did its asset replacement work in the mid to late 1980s, it made an assumption in stating the likely value of asset replacement over the following 25 years, and clearly the committee had no other option. It did not consider the possible effect of technological improvement on the basis that it was impossible to foresee what technological improvements might be made in the future. Therefore the committee ignored that factor in the replacement quantities that it put forward for the various assets of organisations such as the E&WS.

Clearly, as the honourable member has indicated, there have been some significant improvements in technology for lining the large sewerage pipes, for instance, for cathodic protection of mild steel water pipes. For the detail of that and how they have affected the asset replacement requirements of the E&WS, I think there are people who are more competent than I to comment. Mr Cooper has indicated that he can add to this discussion.

**Mr Cooper:** I would like to say a little bit more about the assets of the E&WS and what we have done in recent years. Pipelines comprise about 75 per cent of our asset stock, and we have put a lot of effort into analysing the life of different pipe materials in different situations in the ground throughout South Australia, and we have come up with reasonably confident predictions of the broad life of the different types of pipes. That has been factored into a financial analysis so that we know when we will have to put large sums of money into pipe replacement. Those moneys have been built into our forward financial plans. Fortunately, the big moneys will not be needed for probably 15 to 30 years, if we get the 80 to 100-year life on average out of our pipes, and that appears probable.

Despite having bursts, which seem to get an inordinate amount of publicity, we have cast iron pipes, which are over 100 years old and which are still going strong. We have many pipes that are 60, 70 and 80 years old. We have sewers which are well over 100 years old and which are giving us good life. We have put a lot of work into this. We have applied statistics to it, so we are reasonably confident that we will not have a large financial bogey hanging over our head. We have been looking at other techniques, of relining major sewers in busy roads and that sort of thing, especially when they are very deep. We have done that successfully in two or three projects. Our renovation of the sewer that runs under the Glenelg Golf Course a year or so ago was the biggest project in Australia. Other major trunk sewers will be treated in the same way in

the coming years. We certainly do not have the situation that Melbourne has of major brick sewers collapsing and causing traumatic overflows into Port Phillip Bay.

North Terrace was another spectacular success in the lining of a sewer pipe, which meant the traffic interruption was minimised greatly rather than having to dig up the road. In the water supply system we have played around with the technique of expanding pipes *in situ* with a vibrating mole, which shatters the pipe and drags another pipe through, and we have proved that we can do that successfully. However, that is still fairly expensive and traditional re-laying is probably more effective. So we have kept in touch with the leading technology available around the world.

We employ a lady engineer, who has just spent 12 months in Europe and who won a prize for her work in relation to the rehabilitation of pipe systems. She spent time in Italy and in England at one of the large consulting firms, and she has just returned to the E&WS in the past month or so, and that is a further addition to our expertise in that area.

**Mr HAMILTON:** I tend to agree with the comment that it is a pity that an inordinate amount of publicity has been given to the pipe bursts. Whilst they have a very real impact on the people concerned, and I feel great sympathy for them, not enough attention has been given to the situation that currently applies and the amount of work that has been done in relining those pipes.

As the Minister would be aware, I have a particularly keen interest in the Linear Park. What further works are being carried out during 1993-94, not only in terms of the extension of Linear Park but also the maintenance and protection of it? I notice from time to time in using that magnificent walkway after heavy stormwater there is a considerable amount of erosion, and some of the pathways are closed off to the public. What are the responsibilities of local councils in respect of the maintenance and upkeep of Linear Park? I suspect there is an agreement between the E&WS and local government in that area.

**The Hon. J.H.C. Klunder:** I share the honourable member's enjoyment of Linear Park; it is a good thing for the people who live anywhere near it. However, my comments are tinged with a bit of irony, because the only incomplete section of Linear Park is in my electorate. I look forward to the completion of it so that my constituents can have the same enjoyment of Linear Park as do the constituents of the District of Albert Park at the moment.

The establishment of a management plan for the completed part of the scheme and the repair of flood damage caused in late 1992 are issues that need to be looked at. The completed scheme will provide protection for the urban area of Adelaide from floods in the River Torrens up to a one in 200 year mitigated event as well as linking the Adelaide Hills to the sea with a recreation area comprising natural and recreated parks.

Construction commenced in January 1982. To date, 23 kilometres has been completed and a further section in the Athelstone-Highbury area—the section in my electorate—is nearing completion. A further 4 kilometre section in the eastern suburbs still needs to be done. An amount of \$300 000 has been earmarked for the 1993-94 financial year. This will enable completion of the current works and the preparation of a management plan, but it will not allow for the start of construction of the new works in the remaining 4 kilometre section. Any additional funding may well have to be directed towards repairs rather than new works.



A draft management plan is being compiled following a seminar held in April 1993 with the 13 riparian councils, and the interim draft will be discussed by the River Torrens Commission later this year. As the honourable member is aware, a certain amount of damage was caused by the floods in the latter half of 1992, and the issue of how the cost of repair is to be shared is still relatively contentious. The two sections of the path network that were washed out have been repaired, and the E&WS has provided a further \$200 000 for the most urgent repairs to be done during the coming summer.

**The Hon. D.C. WOTTON:** If I remember correctly, last year \$600 000 was made available for the Adelaide Hills sewerage program. This year the amount is \$445 000. Unfortunately, I do not have the information that I wanted to have with me this evening to substantiate the suggestion that it was intended that much more than that would be expended last year and in the next financial year. While recognising that the Capital Works Program suggests that completion is ongoing, will the Minister say when it is anticipated that the Adelaide Hills will be completely seweraged; and, in particular, will the Minister provide information as to what percentage of the watershed catchment, particularly in the built-up areas, is not seweraged?

**The Hon. J.H.C. Klunder:** I certainly will have to take the latter part of the honourable member's question on notice. The sewerage of the Adelaide Hills has been a Government objective, and the works program is continuing as part of the Government's environmental enhancement policy. Clearly, rather than allowing, for instance, septic tank effluent to discharge into catchment areas and thereby increasing the nutrient load to some of the main reservoirs in the Hills, the Government proposes to sewer developed areas in the Adelaide Hills, producing a high quality effluent suitable for either reuse or discharge. I understand that work will continue in the priority area of Stirling south-west and Piccadilly, and the total estimated cost of the scheme is some \$22.5 million, with funds from the environmental levy contributing some \$6 million to the scheme.

**The Hon. D.C. WOTTON:** I was informed at an earlier stage that it was anticipated that \$1 million would be spent last year, and I am sure that I have a copy of the release which was put out by the former Minister and which suggested that there would be an expenditure of \$1 million last year and \$2 million this year.

**The Hon. J.H.C. Klunder:** The understanding the honourable member has with regard to last year is substantially correct. I understand that \$915 000 was spent. The figure for this year is \$445 000, with \$555 000 for 1994-95 and then back up to \$957 000 in 1995-96, and for the following two years.

**The Hon. D.C. WOTTON:** I refer to structures on the Murray River, and I recognise that this is a matter for which the Murray-Darling has some responsibility. Many of structures, for example the barrages, the locks etc., are getting old. If I am correct, lock 1 at Blanchetown was constructed in 1922, and that means that it is 70-plus years old, with the newest lock in South Australia being Murtho lock 6, built in 1930, now over 60 years old. The barrage at the mouth of the river system which prevents the salt water from entering the lakes was completed in 1940. What plans are in place or being prepared for the development of a long-term financial strategy to fund the replacement of any of the South Australian structures? Do we need to replace structures as they currently are? Do we need to replace some of these at

all? How will they be funded.

**The Hon. J.H.C. Klunder:** My understanding is that most of the things to which many honourable member has referred are a Murray-Darling Basin Commission responsibility and, of course, the Murray-Darling Basin Commission has its order of priorities for replacement of assets in terms of the need for those assets to be replaced in the same way as other organisations do. I think that several of the structures to which the honourable member has referred, even though they are fairly old, are still in very good condition. On the other hand I can, from personal observation for instance, indicate that the gates on the Tauwicheere barrage, which can be raised up to allow water through, are starting to rust rather badly, and they will obviously need to be replaced at some stage in the future. Mr Cooper is far more an expert on these matters than I am, so I will ask him to comment.

**Mr Cooper:** I happen also to be a deputy commissioner of the Murray-Darling Basin Commission. In that capacity, I am a member of an operations and maintenance working group that has been addressing the assets of the Murray-Darling Basin in the three States. The structures generally are in fairly good condition. Torrumbarry weir in Victoria has had a major foundation problem due to excessive flow underneath the structure. Investigations are under way to look at the replacement of that structure. This operations and maintenance working group is preparing a list of major rehabilitations that will have to be undertaken in the coming 10 years.

They have engaged consultants to put all the assets on an asset register to bring them up to the current replacement cost and to put estimated remaining lives on them, and the majority of that information will be obtained from the three States that operate and maintain those structures. As I said, the condition of the structures is by and large fairly good. A lot of money has been put into the Hume Dam, the Dartmouth Dam and the river structures in New South Wales, Victoria and the ones that we are responsible for in South Australia.

Over the past 10 or 15 years a massive amount of money has been put into things like replacing the wooden stoplogs with pre-stressed concrete, replacing lock cranes, replacing wooden lock gates with steel gates, major renovations of the Hume Dam, etc. The commission is now looking at the condition of the out of sight parts of the structures, the big cut-off walls under the structures, the condition of the piles that they are sitting on and the condition of the concrete which the honourable member referred to as being of considerable age. All those things will be checked.

Safety audits are done every year on all the structures, and all that is being formalised in this asset register and asset program. So, the structures of the River Murray are receiving a lot of attention, and they are certainly high on the agenda when the commission considers the financial allocations.

**The Hon. D.C. WOTTON:** Can the Minister indicate how the Government proposes to influence future water allocation down the River Murray to the advantage of South Australia, including dilution flows? To what extent is the Government committed to the algal management strategy (again, a Murray-Darling Basin Commission initiative, currently released for public comment); and what form of support will be given? I ask that question particularly recognising that South Australia is a fair way down the track in relation to receiving attention under this timetable.

I note that the timetable for development and implementation of the catchment plans suggests for South Australia that

we are two or three years out from confirming current nutrient loads, three years out from local strategy, four to five years out from the catchment plan and eight years out from the actual implementation plan.

**The Hon. J.H.C. Klunder:** The issue of water flows in South Australia, which is the first part of the question, has been addressed by South Australia in past years to the point where I think we have a reasonable entitlement to water in the Murray and, although I cannot remember exactly how much water we actually use, I think it is of the order of 30-odd per cent out of the entitlement that South Australia gets. So there is a reasonable capacity for environmental flow in South Australia.

The other part of the question relates to algal management. As I indicated earlier, the twin necessities there are the capacity to have turbulent flow, which will be largely controlled in times of low water flows through the Murray by the capacity of some of the upstream storage dams to release water to get that turbulent flow to disperse the blooms; and, secondly, the existence of nutrients, particularly phosphorous and nitrogen, in the water. Clearly, South Australia has led the way by insisting that in South Australia there are no sewage discharges into the River Murray system.

So we have in fact been able to say to the upstream States that we have put our house in order and it is time they did so also. With regard to reducing the frequency and intensity of blooms, there is a concerted effort under way by all parties involved in the Murray-Darling Basin initiative to develop a strategy to reduce the frequency and intensity. As I said earlier, a draft strategy was released by the Ministerial Council in July this year and is now undergoing a period of community consultation. We have led Australia in this regard and if the other States followed our example we would have a much healthier river system than we have at the moment.

**Mr HOLLOWAY:** What is the progress of the Aldinga sewerage scheme?

**The Hon. J.H.C. Klunder:** There is a limited sewerage scheme that was approved in 1990 at an estimated cost of \$5.4 million. That was designed to serve 600 lots, or 25 per cent of the total area. There are another 2 100 blocks outside the approved limited scheme. Some of the owners of these properties may have an expectation that they will be serviced by a sewage or effluent disposal scheme at some time in the future. Owners of properties outside the limited scheme are, however, being advised that there are no plans to service their properties with sewers in the current five-year capital works program. Owners intending to build new homes on vacant blocks outside the scheme are being advised accordingly. Better Cities funding of \$1 million was available from the Commonwealth Government in 1992-93 to accelerate the construction of the limited scheme, and that enabled the completion of the first of the four stages of the scheme and commencement of the second stage.

**The Hon. D.C. WOTTON:** Water will be a limiting factor to State development unless regional planning properly integrates natural resources, and that includes the integration of water management planning with economic planning. What commitment does the Government have to this and what mechanisms will be used to achieve it?

**The Hon. J.H.C. Klunder:** I will provide the information.

**The Hon. D.C. WOTTON:** Does the Government have any intention to offer the management of any of the Government reservoirs to private enterprise and, if so, which ones and under what conditions?

**The Hon. J.H.C. Klunder:** We have no plans to do that.

**The Hon. D.C. WOTTON:** The Murray-Darling Fresh Water Research Centre is an instrumentality of which I am very supportive. It is recognised that the assistance of local, State and Federal Governments will be necessary to put the case for long-term core funding of the centre. What, if any, support is being provided for this centre by the South Australian Government?

**The Hon. J.H.C. Klunder:** Our funding for that centre is through the Murray-Darling Basin Commission, which is the way it ought to be.

**Mr HOLLOWAY:** Will the Minister outline the progress concerning work force restructuring and the use of voluntary separation packages in the E&WS?

**The Hon. J.H.C. Klunder:** The objective was to have a total work force of 3 000 by November 1992, representing an overall reduction of 836 from 1 July 1991. The target figure of 3 000 was to be achieved through the use of Government voluntary and targeted separation package schemes, redeployment and a small amount of natural attrition. All reductions are consistent with approved work force plans, and full consultation has taken place with the unions and the employees. The target figure of 3 000 by November 1992 was not quite achieved. As at 30 June 1993, the department had a total work force of 3 085, representing a reduction of 751 employees.

Since 1 July 1993, the work force has been further reduced by 41 employees, who have taken targeted separation packages. The work force now stands at 3 044. Work will continue on the redeployment of people in surplus positions who do not wish to take a TSP and on the resolution of outstanding worker's compensation cases linked to the TSP process.

**Mr HOLLOWAY:** While there was a lot of discussion earlier about burst water mains and sewer chokes, I am not sure that the Minister actually gave the figures for the level of funding for replacement and rehabilitation works. I will be happy if the Minister takes it on notice.

**The Hon. J.H.C. Klunder:** In view of the time, I will take that on notice.

**The Hon. D.C. WOTTON:** On page 336 of the Program Estimates, reference is made to flood mitigation and warning and recurrent expenditures. I note that \$110 000, I presume, was proposed for 1992-93, and \$110 000 has been proposed for 1993-94, but the actual for 1992-93 was nil. Recognising the significant flooding, particularly through the Hills and other parts of the State, why was that the case?

**The Hon. J.H.C. Klunder:** I will ask Mr Phipps to comment on that.

**Mr Phipps:** There were sufficient funds in the deposit account of the metropolitan drainage fund for the ongoing projects that were planned, committed and being implemented at that time. There was no need to draw on those funds from the E&WS.

**The Hon. D.C. WOTTON:** I am not quite sure what that answer was about. I was talking about flood mitigation and warnings under the programs and subprogram titles. I am aware that the allotted time is nigh. It might be more appropriate for the Minister to reconsider that question.

**The Hon. J.H.C. Klunder:** Because the honourable member believes that the question has not been handled properly, we are happy to take it on notice and have another look at it.

**The CHAIRMAN:** I point out that we have had 118 questions and 35 supplementary questions. I declare the

examination of the vote completed.

**ADJOURNMENT**

At 10 p.m. the Committee adjourned until Thursday 23 September at 11 a.m.