

## CHAPTER ELEVEN

### CONCLUSION AND RECOMMENDATIONS

11.1 In his submission to this Committee, the Commonwealth Chief Scientist observed that the opinions expressed on the new reactor diverge markedly on both the risks and opportunities it presents for Australians.<sup>1</sup> Evidence presented to this Committee reflects the wide range of views held by sections of the Australian community. Scientists and engineers, recent post graduates and those with years of research experience; nuclear medicine physicians from scientific and medical associations as well as a number of small and medium-sized enterprises have endorsed the new reactor. They focus on the benefits that nuclear technology brings to the Australian community. With equal conviction, conservation groups, the Sutherland Shire Council, experts in various fields and a number of concerned Australians from all walks of life across the country have denounced the proposal to build a new reactor. They question the claims promoting the benefits of a nuclear research reactor, raise concerns about the environmental and health impacts of the reactor, raise concerns about the impact and management of nuclear waste, and some dismiss outright the need for Australia to have such a facility. They regard it as an unnecessary and misguided use of resources that poses serious health and safety problems for the Australian people.

11.2 In this final chapter, the Committee gathers up the main themes that emerged during the inquiry. The Committee found that issues were often dealt with in isolation or selectively with little hope of reconciling these conflicting views. Those opposing the new reactor were reluctant to acknowledge that any benefits could derive from the facility; those promoting the new reactor fell silent on the problems generated by such a facility.

#### **The need for a new reactor**

11.3 Whilst the Committee has heard evidence that there are benefits to be gained from a new reactor, the Committee finds that no conclusive or compelling case has been established to support the proposed new reactor and that the proposed new reactor should not proceed.

11.4 It is the view of the Committee that before a new reactor is ever constructed in Australia, a case must be established for the need for one. This should be done through an independent inquiry which allows for full public consultation and debate.

11.5 The Committee found that the justification for the new research reactor solely on national interest grounds is not strong where national interest is defined on purely 'security' and non-proliferation grounds. The argument for the new research reactor

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1 Dr Robin Batterham, Chief Scientist, Submission no. 135.

on national interest grounds is more convincing when all areas of nuclear technology are considered, including its role in the region as an educational, research and training centre. The Committee believes, however, that this reason alone is not sufficient to justify the new research reactor. If the reactor is to go ahead, then the main considerations in establishing the need for a reactor must be its place as a research tool providing a neutron source for Australian researchers and products for industry, the health care system and the potential impacts on the environment.

11.6 The Committee also notes that the decision to build a new research reactor was taken without a comprehensive review of the priorities for scientific research funding in Australia. Such a review would have given the Government and the Australian people a better understanding of where investment in scientific research would be most productive. It is disappointed that the decision about the new reactor was made without broad consultation with the scientific community.

11.7 In its opinion, an open public debate about research priorities would have been a means of both informing the community about science in Australia and allowing interested people to participate actively in examining the question of whether Australia does need a new reactor. It would also have provided a better opportunity to assess more closely the alternatives to a nuclear reactor.

11.8 Similarly, such a review would have allowed medical practitioners and researchers to build up a comprehensive picture of Australia's future health needs, alternative technologies and the most beneficial areas of research. With this information, Government would have been better placed to make an informed judgement on setting priorities in funding research into Australian medical science.

11.9 The Committee believes that the decision to build a new reactor was taken without a detailed investigation of Australia's present and future scientific and medical needs. If Australia is to take a strategic and focused approach to research and development in Australia, it must take full account of all the options available.

11.10 The current Government has continued to pursue its decision, taken in September 1997, to build a new reactor at Lucas Heights without a full appreciation of Australia's broader scientific and medical needs and without a clear understanding of how best to develop the country's research and development base. It continues with its plan to build a new reactor without proper regard to the findings and recommendations of previous inquiries particularly the McKinnon Review in 1993 and the Senate Economics References Committee report in 1999.

### **Recommendation**

**The Committee notes that the Government has failed to establish a conclusive or compelling case for the new reactor, and recommends that before the Government proceeds any further it undertake an independent public review into the need for a new nuclear reactor.**

## **Recommendation**

**The Committee recommends that before the Government proceeds any further with the proposed reactor, it undertake a thorough and comprehensive public review of funding for both medical and scientific research in Australia with a view to assessing priorities including the role, if any, a research reactor would have in contributing to Australia's scientific, medical and industrial interests.**

11.11 The decision to build or not to build a new research reactor rests with the Government of the day. If the Government changes, however, the incoming Government could validly reserve the right to determine its own research funding priorities. A new Government would also be in a better position than this Committee to evaluate the arguments for and against a new reactor because it would have the benefit of free and unfettered access to all of the relevant information and the benefit of an independent public inquiry.

### **The tendering process and the contract**

11.12 The replacement research reactor project is a complex undertaking involving expensive design and leading technologies. Information provided to the Committee by the Government was limited and frustrated by claims of commercial in confidence.

11.13 The Committee has concerns about the tender process and particularly about the evaluation of the competing tenders. In part the Committee's uncertainty stems from the lack of information made available to it. At times, the Committee was given assurances by ANSTO about aspects of the tendering process but did not have access to the necessary information or documentation to make an informed assessment. Questions about such matters as the site visits, the tenderers' specifications, and the importance given in the evaluation of tenderers to proven experience and to modelling remain unanswered.

11.14 The same situation exists for the contract. The Committee has had only limited access to it and finds this situation unsatisfactory. It does not believe that making documents, such as the Request for Tender and the Principal's Project Requirements, public would result in an unreasonable disclosure of information with commercial value. Indeed, the Committee remains unconvinced that disclosure of such material would prejudice ANSTO's commercial interests, since ANSTO is the sole operator of a research reactor in Australia. The Committee found ANSTO's explanation for withholding this information to be feeble. The onus of proof was on ANSTO to establish that the release of this material would harm its commercial interests—it failed to do so.

11.15 As noted in chapter 7, the Committee has received advice from ANSTO on particular provisions in the contract dealing with the termination of the contract. The Committee stresses, however, that this information was provided in the form of selected extracts or explanations of provisions. The Committee has not seen these important provisions in the full context of the actual contract document. It has particular concerns about undisclosed provisions concerning the termination of the

contract with INVAP. The project still requires a number of approvals, most significantly the design and construction licences from ARPANSA. There is concern that the present Government may have entered into a contract which seeks to bind future Governments to build the reactor despite not having obtained the necessary approvals. The continuing secrecy over the terms of the contract, and in particular the termination provisions appear completely unjustified. The nature of the termination arrangements has nothing to do with INVAP commercial secrets and everything to do with the political convenience of the Government.

### **Recommendation**

**The Committee strongly recommends that there should be full disclosure of the termination provisions of the contract signed with INVAP so the Parliament and the Australian people will know what obligations have been entered into.**

11.16 The Committee cannot give its unqualified approval of the tendering process or the contract. It certainly would like to have had full and unfettered access to documents it believed necessary for it to fulfil its responsibility to scrutinise the tendering process and the contract. In light of the Committee's dissatisfaction with ANSTO's refusal to provide certain documents, it believes that an independent review, based on unimpeded access to the tendering documents and the contract, should be undertaken of the tendering process and the contract.

### **Request to Auditor General for consideration**

**The Committee requests that the Australian National Audit Office consider examining the tender and contract documents for the new reactor at Lucas Heights with a view to determining:**

- **whether further investigation of the tendering process and the contract is warranted;**
- **whether, during the tendering process, ANSTO ensured that there was adequate and appropriate independent verification and validation of the tenderers claims;**
- **whether the cost estimate of \$286.4 million for the replacement research reactor project is based on sound reasons and whether it is still accurate;**
- **whether any contract provisions have been inappropriately claimed to be confidential and if so, on what grounds; and**
- **whether the documents sought by the Committee and the Senate should now be made public.**

**The Committee further believes that the Minister should be censured for his refusal to comply with an order of the Senate to table various documents relating to the tendering process and the contract.**

11.8 Whilst the Committee's primary recommendation is that the project should not proceed as currently planned, it recognises that the current Government and ANSTO are going ahead with the construction of the proposed reactor. There are contractual arrangements in place that have set down a time framework and price schedule for the project. As noted in chapter 7, payment will be paid progressively and only for satisfactory performance measured against specifically defined parameters. It is one thing, however, to have each milestone ticked off as construction progresses but as noted by people such as Professor White from the Academy of Science, the integration of these various elements will be the real performance test. The Committee takes note of these concerns.

11.9 If the Government insists on proceeding with the new reactor project then the Committee makes a number of recommendations to ensure that the project is properly and effectively managed; that the concerns of Sutherland Shire Council and other relevant groups are properly considered; that the licensing procedures of ARPANSA are more transparent, subject to proper scrutiny and include public consultation; and finally that the issues of waste disposal are resolved.

### **Recommendation**

**To provide assurance that the research reactor's design is under appropriate management and that the technical specifications and objectives are being met, the Committee recommends that ANSTO engage an independent expert third party to review and evaluate, periodically throughout the life of the project, the contractor's performance as measured against the specified requirements. It further recommends that such reports be made public.**

### **Recommendation**

**The Committee also recommends that the Minister for Industry, Science and Resources report immediately to Parliament, and thereafter on a three monthly basis, the progress made on the design, construction and eventual operation of the new reactor at Lucas Heights. This report is to include:**

- **a full explanation of the work completed against the agreed time schedule and all payments made;**
- **an account of any delays or anticipated disruptions to the project and an explanation for such hold-ups;**
- **a statement on the strategies in place to monitor and ensure that the contractor is meeting performance specifications including the findings of independent consultants engaged to assess the contractor's performance measured against required specifications; and**
- **the proposed work and payment schedule for the following six months.**

## **Accountability to Parliament**

11.17 The Committee is particularly concerned about ANSTO's accountability to Parliament. As noted in Chapter 7, the Committee is concerned about the broad undertakings about confidentiality ANSTO gave to the tenderers and its subsequent refusal to provide tender and contract documents to the Committee. The Committee considers that, in giving these undertakings, ANSTO may have breached Parliamentary Privilege.

### **Recommendation**

**The Committee recommends that ANSTO take immediate action to ensure that before it enters into any formal or legally binding undertaking, agreement or contract that all parties to that arrangement are made fully aware of ANSTO's obligation to be accountable to Parliament.**

### **Recommendation**

**The Committee further recommends that any future contract entered into by ANSTO, include provisions that require contractors to keep and provide sufficient information to allow for proper Parliamentary scrutiny of the contract and its management.**

## **Safety, public health and public consultation**

11.18 The Committee takes the view that, if the replacement research reactor project is to proceed, measures must be taken to ensure the success of this major project and at the same time ensure the welfare and safety of the Australian people. With this objective in mind the Committee makes a number of recommendations.

11.19 The Committee notes, in particular, that the provisions for public consultation in the *ARPANS Act* are vague. It would like to see the requirement for public consultation strengthened and made explicit in legislation and the process clearly defined.

### **Recommendation**

**The Committee recommends that, if the new research reactor project is to go ahead, the Government put in place a number of mechanisms to ensure that full and thorough public scrutiny of the proposal takes place during the licensing process. This is to ensure, to the greatest extent practicable, that the construction and operation of the proposed reactor would not adversely affect the health of the community or damage the environment. At a minimum, these mechanisms must include:**

- **publication of all submissions made to ARPANSA during the licensing process;**

- **publication of ARPANSA's responses to concerns raised in these submissions, detailing in what way those concerns have affected the CEO's decision;**
- **release of the full details of the design and the construction contract except for those items which are determined as truly commercial-in-confidence.**

11.20 The Committee is of the opinion that the licence applications for the new reactor should be subject to a similar process of judicial public hearings as occurs in the United States. This will ensure world's best practice and allow for greater public involvement.

### **Recommendation**

**Given that there are doubts about privilege and the powers of such an inquiry to obtain documents because the *ARPANS Act* is silent on these issues, the Committee recommends that the Government appoint a panel including the CEO of ARPANSA under other legislative powers to conduct the inquiry.**

### **Recommendation**

**The Committee further recommends that, in the longer term, the Government undertake a public review of the kinds of public consultation process required in other jurisdictions and in relation to other proposals with public health and environmental implications. The object of such a review should be to determine best practice and to amend the *ARPANS Act* accordingly.**

### **Safety—Radioactive Waste**

11.21 The Committee is very concerned about the growing opposition overseas to the transportation and reprocessing of radioactive waste, especially toward countries, such as Australia, which rely on others to reprocess or condition their waste material for ultimate storage.

11.22 Given that it has not seen ANSTO's contract with COGEMA and in view of the ongoing litigation in France, the Committee does not accept that there are adequate guaranteed arrangements in place at this stage for the future reprocessing of spent fuel from the new reactor. Similarly, a question still remains over the capacity of Argentina to accept and reprocess or condition silicide fuel, should it be required.

11.23 The Committee considers that assurances concerning the timely establishment of a storage facility for waste arising from the reprocessing of Australia's spent fuel rods must be critically examined. The Committee once again notes the pre-conditions proposed by the McKinnon Review namely that a solution to the problem of waste 'was essential and necessary well prior to any future decision about a new reactor.'<sup>2</sup>

11.24 The Committee is highly critical of the Government for ignoring this important recommendation of the McKinnon Review and makes the following recommendations.

**Recommendation**

**The Committee recommends that the contract with COGEMA and any subsequent agreements for the re-processing of Australian spent fuel rods be made public.**

**Recommendation**

**The Committee recommends that, in light of the growing opposition overseas, ANSTO prepare and fully cost a contingency management plan for spent fuel conditioning and disposal within Australia. This plan should fully describe the technologies to be used should Australia have to manage its spent fuel wholly within Australia.**

**Recommendation**

**The Committee recommends that the Government satisfactorily resolves the question of the safe disposal of new reactor spent fuel before approval to construct a new reactor is given.**

**Michael Forshaw**

Chairman