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1<sup>st</sup> August 2003

To: Ian Thackeray  
Senior Inquiry Officer to the NSW Joint Select Committee  
Transportation and Storage of Nuclear Waste Inquiry

### **Re: Australian Conservation Foundation Summary of Submission**

The Australian Conservation Foundation (ACF) is a leading national environment organisation of over 30 years standing with conservation programs in all States and Territories. ACF is active in promoting, defending and celebrating our environment and in campaigning for sustainability and a nuclear free future for Australia.

ACF has long held deep concerns over the Federal Government's nuclear expansion plans for a new Sydney reactor and intended imposition of nuclear waste transport and nuclear dumping across Australia to facilitate new reactor license conditions.

ACF contends that there is no net benefit to community from the nuclear industry. Effective alternatives exist for provision of medical isotopes without any reactor in Australia. In fact there is significant and unnecessary risk to the health, safety and rights of community in Sydney from ANSTO's reactor operations and waste production at Lucas Heights, and to community across the State from proposed nuclear waste transport and from potential siting of the "National Store" in NSW.

ACF commends the Committee's attention to these important public interest issues.

This ACF Summary of Submission focuses on 3 areas:

- Federal Government plans for nuclear waste production, transport and storage;
- Key responses to these plans from community, State and Territory Governments and other organisations across Australia; and
- Consequent implications for community rights and safety in Sydney and across New South Wales if the Federal Government agenda should go ahead.

In our view a socially and politically acceptable outcome to nuclear waste management can only be realised when the threat of new reactor risk and waste production and of imposed nuclear waste transport and dumping has been overcome.

ACF request opportunity to appear before the Committee and will provide supporting material to this Summary by 8<sup>th</sup> August. Please feel free to contact David Noonan, ACF Campaign Officer, on any aspect of these issues, by Ph 08-82322566 or mobile 0408 821 058, or email: [d.noonan@acfonline.org.au](mailto:d.noonan@acfonline.org.au).

Yours sincerely

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## Summary of ACF Submission

### 1. New Reactor waste production and storage in Sydney

Inherent in plans for a new nuclear reactor at Lucas Heights is for Sydney to face the hazards of reactor risk and nuclear waste production and be used as a new high level nuclear waste storage facility. This is the best offer to Sydney even if all of the Federal Government's other wastes plans were to come to fruition.

**The new reactor plan is clearly contrary to undertakings from the NSW Premier: *"Expressing total opposition to the creation of a new nuclear waste storage facility – anywhere in NSW."*** ("Nuclear Waste", news release 27<sup>th</sup> February 2003)

If a Reactor Operating License is issued by ARPANSA in 2005-2006 the proposed new reactor will produce and store on-site some 40 spent fuel rods a year for the following 8 years before the first intended removal of only 5 years of spent fuel in 2013-14. Leaving a minimum 3 years worth of spent fuel some 120 spent fuel rods 'cooling' in storage in Sydney. The amount of waste would increase from 120 to 320 spent fuel rods before the next planned removal of a 5 yearly accrual in 2018-2019.

This cycle of high level waste production and storage would continue against the health and safety interests of generations of community in Sydney over the proposed 40-50 year period of new reactor operations. Compared to existing reactor operations the new reactor would produce twice the rate of spent nuclear fuel waste and up to four times the rate of wastes in other categories from expanded isotope production facilities with increased discharge of liquid wastes to the sea at Cronulla.

It is likely that claimed arrangements for overseas reprocessing of spent fuel with periodic removal from Lucas Heights will either not occur or will expire well within the period of new reactor operations. ANSTO has also failed to act on Senate Inquiry and ARPANSA Nuclear Safety Committee recommendations to provide a comprehensive plan for management of spent fuel wholly within Australia. Over time this will leave new reactor spent fuel to either remain at Lucas Heights or to be directly transferred to a National Store as has been envisaged by Environment Australia.

In attempting to impose a new reactor onto Sydney the Federal Government is now going back on repeated assurances to Sydney community for demonstrated waste management by 2005 in line with the proposed start of new reactor operations. These assurances were given by ANSTO and by Environment Australia throughout the public Environment Impact Statement process for the new reactor and in the Site License process by ARPANSA. They also ignore recommendations of 2 Senate Inquiries and of a Federal Reactor Review that a solution to the problem of waste including a permanent site for disposal of Lucas Heights wastes is essential well prior to any decision on a new reactor going ahead. This is now not going to occur.

NSW must face the reality that if the new reactor goes ahead in Sydney the wastes from the existing reactor and from the new reactor are increasingly unlikely to leave NSW. Either remaining in Sydney or be moved to a National Store site in NSW.

**ACF recommends this NSW Inquiry consider findings to protect NSW community from hazardous and unnecessary reactor waste production and to call on the NSW Government to take up an effective intervention against the new reactor going ahead in Sydney as it is a new nuclear waste storage facility.**

## 2. Responses to proposed interstate transport and storage of reactor wastes

There is overwhelming community, State and Territory Government and Senate opposition to the imposition of two national nuclear waste dumps in Australia.

The Federal Government intend a National Repository as a shallow burial site for short lived intermediate level and low level wastes. With some 132 truckloads being prepared for proposed transport in 2004 from Lucas Heights to a site near Woomera. They have also secretly prepared a short list of Commonwealth owned sites for a National Store as an above ground bunker for long lived intermediate and high level wastes. They have been unwilling to consult on the Store with any other Government.

In response the SA Government has passed legislation prohibiting the import, transport, storage and disposal of radioactive wastes for any nuclear dump in SA. Premier Rann has committed to use all legal means including a High Court challenge to prevent the National Repository in SA and has started a process for a Federal Court appeal against recent compulsory land acquisition of a site near Woomera.

The ACTU Executive passed a Motion on 16<sup>th</sup> July 2003 calling *“on all affiliated unions to support the SA union ban on construction of and provision of services to such a dump”*. The National Rail Union is in process of endorsed this position and opposing any Federal Government plan for rail transport of wastes from NSW to SA.

The Kungka Tjuta Senior Aboriginal Women’s Council of north SA and the Kokatha Native Title Claimants oppose imposition of poison ground on their traditional lands.

The Federal ALP state that *“The Labor Party remains committed to our 2001 election commitment to exclude South Australia from consideration as a site for a dump”* and that *“Labor in the Senate will oppose attempts to impose, by way of regulation under the ARPANS Act or other means, a waste facility in South Australia.”* (8<sup>th</sup> July 2003 , Shadow Minister for Sustainability and the Environment Kelvin Thomson)

Extensive opposition to nuclear dumping has forced the Federal Liberal Government to change their plans by now excluding SA from further consideration as a site for the National Store. Having targeted SA for the Store from Nov 1997 they have had to recognise the prohibitive liability in imposing the Store against strong community will.

The National Store has now been rejected in all other jurisdictions. In July 2003 the WA Premier Gallop committed to legislate against the National Store and to make the next Federal Election a referendum on nuclear dumping if they attempt to impose a Store in WA. In June 2003 the NT Chief Minister Martin stated *“The Northern Territory Government will not accept responsibility for the radioactive wastes of other jurisdictions”* and *“will not accept any unilateral decision by the Commonwealth”* to site the proposed Store in NT. In May 2002 Premier Beattie stated Qld as *“..off limits for such a facility”* saying *“The answer is a final blunt ‘no’ and there will be no rethink.”*

The Australian Democrats and The Australian Greens oppose the National Repository in SA and will combine in the Senate with the ALP to prevent passage of any proposed further Commonwealth powers for national nuclear waste dumps.

In Dec 2002 ALGA opposed any increase in nuclear waste production without a satisfactory resolution of waste issues with the States. This is no such agreement.

### **3. Implications for Sydney and NSW of the Federal Government nuclear plans**

Community across NSW face imposition of reactor waste transport along two nominated routes from Sydney to the proposed National Repository in SA. With 132 of a total of 170 truckloads of radioactive wastes that the Commonwealth intends to bring into SA being sourced from the Lucas Heights reactor facility. Most of the radioactivity in this waste is classed as short-lived intermediate level, hazardous for 2-300 years and requiring shielding. This is a significant, hazardous and unnecessary transport of wastes against the rights, interests and safety of local communities.

**Premier Carr has taken a strong position on proposed transport: “I have also informed the Federal Government of our clear opposition to the trucking of nuclear waste through western NSW.”** (In correspondence dated 20<sup>th</sup> June 2003)

In respecting the rights and safety of community this opposition to truck transport of reactor wastes must apply equally to the Federal Government plans to use either the Blue Mountains to Broken Hill route, or the Goulburn to Hay and Mildura route. And applies equally to waste transport through western or southern suburbs of Sydney.

While the Commonwealth has stated a preference for use of the Blue Mountains route the Minister for Science has reserved a ‘right’ to use both or either route and to make a decision through a non-public process. In any case they do not intend to give notice of waste transports to any local government or local MP or State Agency.

They are attempting to play off communities against each other and to then take the path of least resistance. In following this approach a potential rail option presents many of the same hazards and targets the same set of unwilling local communities.

If this practice should get established the Minister for Science intends to impose 40-50 years of new reactor waste transport. And with decommissioning of the Lucas Heights reactor up to 250 truckloads of radioactive waste material would be imposed along his chosen route of least resistance across NSW to a Repository site in SA.

**NSW faces siting of the Store, with transport of higher level wastes and associated requirement for use of a NSW port to receive reprocessed nuclear wastes, as the new reactor plan prevents any waste management agreement.**

The Federal Government has included NSW sites in a Store short list prepared in late 2002 and is now secretly considering these sites. A Store involves two transport corridors, from the reactor to the Store and from a port to the Store. With the port proposed to receive reprocessed nuclear wastes from France and from the UK, following from Australia’s earlier export of spent fuel wastes, and potentially also from Argentina under the new reactor contract to export spent nuclear fuel to that country.

ACF calls on the Inquiry to investigate the significant implications of potential Store sites in NSW and their associated transport corridors including required port access.

**There are two propositions facing the Inquiry:** The Federal Government plans for new reactor waste production, with imposed transport and dumping, which effectively prevents any agreement to reactor wastes ever leaving NSW. And the option to first turn off the tap of nuclear waste production as a prerequisite to any socially and politically acceptable outcome in management of existing reactor wastes.

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## 1. New Reactor waste production and storage in Sydney

### 1.1 Spent Fuel is High Level Nuclear Waste

*“The spent fuel rods at Lucas Heights can only sensibly be treated as high level waste. ... The pretence that spent fuel rods constitute an asset must stop.”*

(McKinnon Review, Principal Conclusions p.xxiii, July 1993)

Existing reactor spent fuel and that proposed to be produced in Sydney for decades to come by the new reactor can only be considered as high level nuclear wastes.

Further, the wastes intended to be returned to Australia from reprocessing of spent nuclear fuel require all of the same stringencies of management, in handling, in required isolation and in the perpetual period of hazard management as the original spent fuel high level nuclear wastes.

ANSTO refers to reprocessed wastes as “long lived intermediate level wastes”. However the radioactive composition and hazard remains the same as that of the original spent fuel and the only effective difference is mixing with an other material as a matrix to lower the heat output per unit volume of the wastes.

Federal Government claims that spent fuel is not radioactive waste as it may be intended to be reprocessed and claims that it is not high level hazard were not accepted by the Senate Inquiry “A New Research Reactor?” (May 2001) finding:

*“The fact is that spent fuel rods from Lucas Heights have, for many years, been regarded as waste”* (p.203); and

That claimed differences in technical definitions: *“...were more concerned with the decision of a controlling party about how to ‘deem’ spent fuel that the nature of the radioactive hazard posed by the material itself.”* (p.204).

**Note:** That a single spent nuclear fuel rod contains more radioactivity than the sum total of radioactivity in the 132 truck loads of lower level wastes proposed to be removed from Lucas Heights to a proposed National Repository in SA.

### 1.2 Sydney as a storage site for new high level nuclear wastes

Inherent in plans for a new nuclear reactor at Lucas Heights is for Sydney to face the hazards of reactor risk and nuclear waste production and be used as a new high level nuclear waste storage facility. This is the best offer to Sydney even if all of the Federal Government’s other wastes plans were to come to fruition.

**The new reactor plan is clearly contrary to undertakings from the NSW Premier: “Expressing total opposition to the creation of a new nuclear waste storage facility – anywhere in NSW.”** (“Nuclear Waste”, news release 27<sup>th</sup> February 2003)

If a Reactor Operating License is issued by ARPANSA in 2005-2006 the proposed new reactor will produce and store on-site some 40 spent fuel rods a year for the following 8 years before the first intended removal of only 5 years of spent fuel in 2013-14. Leaving a minimum 3 years worth of spent fuel some 120 spent fuel rods

'cooling' in storage in Sydney. The amount of waste would increase from 120 to 320 spent fuel rods before the next planned removal of a 5 yearly accrual in 2018-2019.

This cycle of high level waste production and storage would continue against the health and safety interests of generations of community in Sydney over the proposed 40-50 year period of new reactor operations. Compared to existing reactor operations the new reactor would produce twice the rate of spent nuclear fuel waste and up to four times the rate of wastes in other categories from expanded isotope production facilities with increased discharge of liquid wastes to the sea at Cronulla.

Environment Australia clearly set out this cycle of spent fuel production with envisaged removal of part of the accumulated wastes at 5 yearly intervals in their Assessment Report (Feb 1999) on the new reactor EIS:

*"Taking these operational factors into account, the minimum on-site interim storage capacity requirements for the replacement reactor were calculated in the draft EIS as 8 years arising based on criteria of:*

- *minimum cooling time to permit transport (three years); and*
- *minimum practical shipment batch (five years arisings)."*

("Environmental Assessment Report, proposed Replacement Nuclear Research Reactor at Lucas Heights", p.88 On-site storage requirements, Feb 1999, Environment Assessment Branch, Environment Australia)

*"According to the DEIS, the spent fuel arisings from the proposed reactor would be stored on-site at the LHSTC for only the minimum storage time necessary to meet reasonable operational requirements. This equated to an inventory of spent fuel not expected to exceed nine years' arising, or, on the basis of a typical rate of arisings of 40 elements per year, a maximum of 360 elements in storage. This storage would take place in the pond adjacent to the reactor pool."*  
(p. 91 Summary)

Spent fuel high level waste production with continuous storage on site in Sydney at the new reactor facility, and the consequent radiation and security hazards, are only preventable by effective engagement to stop the new reactor plan.

### **1.3 Waste management by 2005 becomes an ARPANSA 'deadline' of 2025**

The Federal Government has gone back on assurances provided to Sydney for demonstrated reactor waste management by 2005. With ARPANSA now attempting to defer the time that a Store would be required, from that promised to Sydney on issue of the reactor operating license, to that of the return to Australia of spent fuel as reprocessed nuclear wastes. By this means Sydney is to be left as a nuclear waste storage facility until potentially 2015, the first expected shipment of reprocessed wastes from France, or as cited as a 'deadline' by ARPANSA, up to 2025.

ARPANSA gave a commitment at the time of granting a Site License to the new reactor stating a pre-condition to an Operating License due in 2005/06 that:

*"A license to operate would not be issued by ARPANSA without there being clear and definite means available for the ultimate disposal of radioactive waste and spent nuclear fuel."*

("Safety Evaluation Report on ANSTO Application for License to prepare a site for the Replacement Research Reactor", p.12 The Radioactive Waste Management Plan for the Controlled Facility, Sept 1999, Regulatory Branch ARPANSA)

However The CEO of ARPANSA John Loy on ABC "PM" 13<sup>th</sup> Sept 2002 states that:

*A Store "would not have to be built before he gave the license", saying only that "at the time we come to considering a license for its operation, I can be convinced that there will be a store. ...at the time its needed";*

and

And giving a 'deadline' for a store by the year 2025, as the time of return to Australia of reprocessed spent fuel wastes from the new reactor, and saying only that *"I really don't want to leave it before 2015 before a store exists"*.

(see: <http://www.abc.net.au/pm/s675940.htm>)

The timelines cited by John Loy of 2015 and of 2025 refer to advice from the Department of Industry, Science and Resources to the last Senate Inquiry regarding potential return to Australia of spent fuel reprocessed wastes:

*"that radioactive waste arising from the reprocessing of spent fuel rods from the new reactor will not begin to be returned to Australia until about 2025. Waste from the reprocessing of spent fuel rods from HIFAR will begin to be returned in 2015."*

("A New Research Reactor? Report of the Select Committee for an Inquiry into the Contract for a New Reactor at Lucas Heights", p.204 Timing of storage facilities for waste arising from spent fuel rods)

In his decision on an operating license for the proposed new reactor John Loy should be addressing matters of the management of existing reactor wastes and of other long lived intermediate level wastes to be produced by the new reactor over time. Instead he is removing the long standing association between a requirement for a Store and start of proposed new reactor waste production operations in Sydney.

#### **1.4 EIS assurances to Sydney for reactor waste management by 2005**

Throughout the Environmental Impact Statement (EIS) and Site Licensing processes and public consultation by the Federal Government on the proposed new Sydney reactor the public were told that a Store would be operational by the time the new reactor was commissioned and started producing nuclear wastes in 2005.

Effectively that if Sydney community and the NSW Government 'accept' a new reactor than the existing reactor wastes would be removed and there would be capacity to manage and remove wastes accruing from the new reactor in the same time line as the new reactor would become operational.

The Federal Government is now going back on clear public commitments given to the Sydney community by ANSTO in July 1998 and in January 1999, by Environment Australia in February 1999 and by ARPANSA's own commitment in September 1999 in the Site License Safety Evaluation Report.



## **As told to Sydney community in the reactor EIS public consultation process:**

### **In the draft EIS by ANSTO, July 1998:**

*“It is clear that these commitments rely on ANSTO being able to arrange contracts such that the company that reprocesses or conditions the fuel, returns it in form suitable for the national storage facility. This is expected to be co-located with the national waste repository and the Commonwealth Government expects the store to be in operation by the time the replacement reactor is operational in 2005.”*

(“Replacement Nuclear Research Reactor, draft EIS, Vol 1 / Main Report”, p.10.20: Environmental Commitments on Spent Fuel, July 1998, ANSTO):

### **In ANSTO’s response to public submissions, January 1999:**

*“The National Radioactive Waste Repository and the National Storage Facility will be operational before HIFAR is decommissioned, the replacement nuclear research reactor is operational and the long-lived intermediate-level radioactive waste arising from the reprocessing of spent fuel is returned to Australia from overseas.”*

(“Replacement Nuclear Research Reactor, Supplement to draft EIS, Vol 3 Supplement”, p.10.21-22: Response to Issue - No Solution or Site exists for Disposal of Radioactive waste in Australia, January 1999, ANSTO and PPK)

### **In Environment Australia’s Assessment of the new Sydney reactor, Feb 1999:**

*“The returned wastes are expected to be stored in the National Storage Facility which is to be co-located with the National Radioactive Waste Repository. The current timing is for the store to be in operation by the time the replacement reactor is commissioned in 2005 (see Section 7.9). Clearly, any long-term planning depends upon the establishment of such a facility.”*

(“Environmental Assessment Report, proposed Replacement Nuclear Research Reactor at Lucas Heights”, p.92 Management of spent fuel from the proposed reactor – Summary, Feb 1999, Environment Assessment Branch, Environment Australia)

Sydney is then to be subject to new reactor waste production with the Federal government looking to retain an option of continuing to use Sydney as a nuclear waste storage facility for existing and accrued new reactor wastes for a period of up to one to two decades from start of new reactor operations in 2005.

Clearly there is no realistic or acceptable long term planning for new reactor wastes.

## **1.5 Recommendations of Reactor Inquiries ignored by Federal Government**

This is clearly contrary to recommendations by a series of three Inquiries held into the reactor over 1993-2001 and set as pre-conditions for required waste management.

### **McKinnon Review in 1993:**

That a solution to the problem of waste *“was essential and necessary well prior to any future decision about a new reactor”*

(Future Reaction: Report of the Research Reactor Review, August 1993, p.xxii).

### **Senate Economic References Committee in 1999:**

Recommending: *“That no new reactor be constructed until a permanent site for disposal of the Lucas Heights nuclear waste is determined”*

and finding in regard to the decision for a new reactor in Sydney that:

*“The Government’s decision...ignored the properly considered findings of the Review and instead, relied largely on the vested interests of ANSTO and those involved in, and dependent on, the nuclear industry.”*

(“A Report on a New Reactor at Lucas Heights”, Executive Summary p.xvii and p.xvi)

### **Senate Select Committee in 2001:**

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

(“A New Research Reactor? Report of the Select Committee for an Inquiry into the Contract for a New Reactor at Lucas Heights”, Executive Summary p.xxxv)

### **1.6 Lack of an Australian management option for Spent Fuel Wastes**

ANSTO has also failed to act on Senate Inquiry and ARPANSA Nuclear Safety Committee recommendations to provide a comprehensive plan for management of spent fuel wholly within Australia. This effectively leaves Australia and in particular NSW with out any contingency plans to manage new reactor spent fuel wastes.

Over time this failure will leave new reactor spent fuel to either remain at Lucas Heights or to be directly transferred to a National Store as has been envisaged by ANSTO in 1998. As it is likely that claimed arrangements for overseas reprocessing of spent fuel with periodic removal from Lucas Heights will either not occur or will expire well within the period of new reactor operations. As it is also likely that the National Store will not proceed in any other State or Territory this leaves new reactor spent fuel to be managed within NSW.

### **The Senate Select Committee Recommendation in 2001:**

*“The Committee recommends that, in the light of 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.”*

(“A New Research Reactor? Report of the Select Committee for an Inquiry into the Contract for a New Reactor at Lucas Heights”, Executive Summary p.xxxv)

## **The Nuclear Safety Committee Recommendations in 2002:**

**Recommendation No.2:** *“A contingency plan for additional spent fuel storage arrangements and/or spent fuel conditioning in Australia should be submitted to ARPANSA as part of its conditions of license to construct the RRR. The Applicant should demonstrate a ‘fall-back’ position which is feasible, practical and socially and politically acceptable in case the international options are not available.”*

**Recommendation No.3:** *“That ANSTO submit a workable contingency plan for the management of wastes generated at Lucas Heights before issuing a license to construct the RRR. The nature of such plans should inform the conditions of the construction license. This contingency plan should contain provisional information about alternate arrangements to the proposals for a national repository and national store currently under discussion.”*

(“Report on the ANSTO application for a license to construct a replacement research reactor”, Recommendations, Spent Fuel Management and Reprocessing /Conditioning p.99-100, Nuclear Safety Committee, ARPANSA February 2002)

The Nuclear Safety Committee is an advisory body to the CEO of ARPANSA, established under the ARPANSA Act 1999. Their formal recommendations were effectively ignored in the construction license decision and are now ever more urgent as pre-requisite conditions for the proposed new reactor operating license in 2005-06. This NSW Inquiry should require ANSTO to demonstrate compliance with this advice.

### **1.7 ANSTO refusal to address contingency plans for spent nuclear fuel**

As part of the new reactor Construction License application process a series of “*Questions on Spent Fuel and Radioactive Wastes*” were asked by ARPANSA on 22 August 2001, the responses from ANSTO were received on 25 September 2001:

*“Q41. What contingency plans does ANSTO have if spent nuclear fuel is not sent overseas?”*

*R41. ANSTO is satisfied that there are comprehensive overseas arrangements in place and available for the management of the spent fuel.*

*Q42. What long term storage options has ANSTO considered within Australia for spent nuclear fuel?”*

*R42. See Q41.*

*Q44. Has ANSTO considered sending unreprocessed / unconditioned spent nuclear fuel to the proposed National Store for LLILW?”*

*R.44. The plans for the National Store do not envisage this scenario. See Q41.”*

It is imperative that this NSW Inquiry not accept the refusal of ANSTO to explain the consequences for Sydney and for NSW of their having no contingency plans for management of spent nuclear fuel. And that this NSW Inquiry not be satisfied by ANSTO claims that new reactor spent nuclear fuel can be simply sent overseas throughout the decades of new reactor high level waste production in Sydney.

Direct transfer of spent nuclear fuel from the new reactor to the National Store has in fact been envisaged by ANSTO during the EIS public consultation during 1998:

*“In the unlikely event that the overseas option should become unavailable, it would be possible at short notice to take advantage of off-the-shelf dry storage casks for extended interim storage at the national storage facility, pending renewed arrangements being negotiated for the reprocessing / conditioning of the fuel. Such dry storage casks systems are being adopted in Germany for interim storage of research reactor fuel, and are available commercially from a number of companies including INVAP in Argentina and AECL in Canada.”*

(“Replacement Nuclear Research Reactor, draft EIS, Vol 1 / Main Report”, p.10-18 “Other Technologies”, July 1998, ANSTO)

In fact ANSTO’s only contingency to the current proposals for a National Repository and a National Store is to leave the full complement of reactor wastes across all waste categories in Sydney.

### **1.8 ARPANSA prepares for long term waste management at Lucas Heights**

The CEO of ARPANSA had earlier accepted that the new reactor proposal is predicated on the National Repository and the National Store going ahead. However in the face of State Government opposition in SA to the Repository he then accepted that existing and proposed new reactor wastes would continue to be kept in Sydney:

*“4.4 Low Level Waste Repository:*

*I note that ANSTO’s application is predicated on low level wastes finally being sent for disposal to the national low level waste (LLW) repository. ....*

*I understand that the Premier of South Australia has now written to the Prime Minister stating that the SA Government ‘is opposed to any national radioactive or nuclear waste dumps being established in this State’. ....*

*Should it come about that the national approach to a waste repository not proceed, it will be necessary for the Commonwealth to devise an approach to final disposal of LLW from Lucas Heights, including LLW generated by operation of the RRR. In the meantime, this waste will have to be continued to be handled properly on the Lucas Heights site. I am satisfied, on the basis of my assessment of the present waste management plan, including the license and conditions applying to the waste operations on site, that it can be.”*

(“Decision by the CEO of ARPANSA on Application to construct the Replacement Research Reactor at Lucas Heights. Reasons for Decision”, p.30 April 2002, ARPANSA)

John Loy CEO of ARPANSA is clearly satisfied that existing and proposed new reactor wastes intended for the National Repository will and can be managed on site in Sydney if the new reactor goes ahead but the National Repository does not.

**The NSW Inquiry should seek answers from ANSTO and from ARPANSA on their satisfaction and intention to proceed with the proposed new reactor:**

- **without the National Repository or the National Store going ahead interstate prior to potential issue of an operating license to the new reactor; and**
- **in the case that the National Store is proposed to proceed in NSW.**

## **2. Responses to proposed interstate transport and storage of reactor wastes**

### **2.1 SA Legislation prohibiting any national nuclear waste dump in SA**

The SA Parliament has passed strong effective State Legislation prohibiting the National Store in 2000 and then prohibiting the National Repository in 2003.

ACF calls on this NSW Inquiry to recommend similar State Legislation is your jurisdiction to prohibit the potential for the National Store and associated waste transport to occur in NSW and to clearly demonstrate the will of your Parliament.

From late 1999 and through 2000 bipartisan political opposition to Federal Government plans for a National Store site in SA led to State Legislation the *Nuclear Waste storage Facility (Prohibition) Act 2000* assented to on 30 Nov 2000. This Legislation prohibits the import, transport, storage and disposal of medium to high level nuclear wastes to SA with penalties of up to \$5 million or imprisonment for 10 years. The Objects of the Act Clause 3 set out the intent and will of the Parliament:

*“The Objects of this Act are to protect the health, safety and welfare of the people of SA and to protect the environment in which they live by prohibiting the establishment of certain nuclear waste storage facilities in this State.”*

The first Bill put to Parliament by the new ALP Premier Mike Rann in early 2002 led to passage of the *Nuclear Waste Storage Facility (Prohibition Amendment Act 2003* in March 2003. This Legislation prohibits the import, transport, storage and disposal in SA of wastes intended for the National Repository and expands the legal protection offered by the earlier Legislation against the National Store. The Legislation was further considered and endorsed by the Parliament in July 2003.

### **2.2 SA State Government and ALP Convention opposition to nuclear plans**

The Premier of SA has given commitments to use all legal means at the disposal of the State Government, including a potential High Court challenge, to prevent any national nuclear dump being imposed onto SA. And has now started a process for a Federal Court Appeal against compulsory land acquisition of a proposed dump site with further commitments to oppose any licensing process by ARPANSA.

*“The Rann Government will force a Federal Court Judicial Review into the Howard Government’s decision to compulsorily acquire land, against the wishes of South Australians, for its radioactive waste dump. ...*

*Premier Mike Rann says that while these proceedings are underway, the Government will explore other options to fight the State and Federal Liberals who want to impose this radioactive waste dump on our State.*

*“I am told that it is unlikely the Review will be held before December this year, even though it will take no longer than about two days to conduct.*

*“The Review decision may take a month to bring down and if the State fails, we have a month to appeal which could take a further two or three months to be held.*

*“I warned the Federal Government in May this year to prepare for several long hard legal battles if it chose to push ahead with plans to build its nuclear waste dump in our outback.*

*"I said then that the legal battle would be fought on a number of fronts including the compulsory acquisition of State-owned land, and the application for a license to operate a radioactive waste dump.*

*"The State Government is determined to explore every possible avenue to try to put a stop to the construction of this waste dump – and that is exactly what we are doing," Mr Rann said.*

( In: "Nuke Waste Dump – the Legal Battle Begins", News Release 9<sup>th</sup> August 2003, by Hon Mike Rann MP Premier of SA.)

The ALP in SA recognise the proposed new Sydney reactor as unsafe and unnecessary, have called for the Federal ALP to permanently mothball the reactor facility, and condemns the proposed transport of wastes from Sydney across populated and environmentally sensitive areas to the proposed dump site in SA.

*"47. Convention notes the relationship between a second nuclear reactor, currently being built by the Federal Government at Lucas Heights and the perceived need for a national nuclear waste repository. Therefore Convention:*

- 1. reaffirms its complete opposition to a national nuclear waste repository;*
- 2. reaffirms its complete opposition, as expressed by Kim Beazley prior to the last Federal election, to a new nuclear reactor. This opposition is based on the fact that a second reactor is both unsafe, particularly because of its location, and unnecessary because the material required for medicine and research can be either made safely in cyclotrons or imported;*
- 3. calls on the Federal Parliamentary Labor Party, if elected prior to the commencement of operations at the new Lucas Heights reactor, to mothball the facility permanently to prevent unnecessary risk to the people of Sydney and South Australia, with due consideration of the relevant legal questions, and*
- 4. condemns the Federal Government for proposing that waste be transported from Sydney, across populated and environmentally sensitive areas, in order to reach the proposed dumps in South Australia.*

*Further, that this motion be referred to the Federal ALP Policy Review as the SA Branch position."*

( Environment Motions moved by Senator Penny Wong and accepted by SA ALP State Convention, October 2002 )

### **2.3 Trade Union opposition to Nuclear Waste Transport and Dumping**

The ACTU Executive, the SA United Trades and Labor Council and key emergency services unions has taken a strong position to ban the intended National Repository and associated transport of reactor wastes. They recognise this is a human rights and cultural rights issue for the Kungka Tjuta Women's Council and support their opposition to the dump being imposed on their traditional lands.

ACF support the ACTU Executive call to ban the national nuclear dump and endorse the submission of the NSW Fire Brigade Employees Union (FBEU) which clearly sets out the safety concerns over this unnecessary transport of reactor wastes across Australia. There will be significant and widespread union movement opposition to these nuclear dump plans if the Federal Government should attempt to proceed.

### **ACTU Executive Motion 15-16<sup>th</sup> July 2003:**

*"That the ACTU Executive supports the position of the UTLC in South Australia to oppose the establishment of a national nuclear waste dumping facility in SA, and calls on all affiliated unions to support the SA union ban on construction of and provision of services to such a dump.*

*In addition, the ACTU Executive support the Kupa Piti Kungka Tjuta in opposing the building of a nuclear waste dump on their land."*

### **United Trades and Labor Council of SA Motion 14<sup>th</sup> March 2003:**

*"That the UTLC support the CFMEU in it's opposition to the establishment of any Nuclear Waste Dumping Facility in South Australia, and calls on all SA unions to ban the construction of and provision of services to any dump.*

*In addition the UTLC supports the Kupa Piti Kungka Tjuta in opposing the building of a nuclear dump on their land."*

### **NSW Fire Brigade Employees Union (extract of July 2003 submission):**

*"It follows that the FBEU believes that any proposal from the Commonwealth Government involving the transportation of nuclear waste represents an unnecessary and avoidable danger imposed on our membership.*

...

*The FBEU contends that the storage of nuclear wastes on one site, being the site where the majority of that waste is generated and a site where the resources are best placed to deal with a hazardous materials emergency provides the most effective level of risk minimisation.*

...

*The proposed National Repository near Woomera SA will be opposed by this Union in an effort to ensure that no transportation of low level or short lived intermediate level nuclear waste takes place.*

...

*If the safety of firefighters and the public were at all given prominence by the Commonwealth Government the only logical solution would be to cease producing waste.*

...

*It is of significant concern to professional firefighters that the Commonwealth Government indicates there are no plans to inform emergency services of shipments of nuclear waste. ... The Commonwealth Government's attitude of keeping professional firefighters and other ESO's (Emergency Services Organisations) 'in the dark' is entirely unacceptable from the perspective of Occupational Health and Safety and represents a serious and inexplicable threat to firefighters, local communities and the environment.*

...

*The FBEU and the UFU (United Firefighters Union of Australia) foreshadows nationwide industrial action directed against the Commonwealth Government unless the current position is reviewed and the Commonwealth undertakes to ensure emergency services are notified of each and every shipment of nuclear materials*

...

*The concerns of the public about the level of service provided by the firefighters in regional areas should be acute. Staffing, resources and long response times over large distances in regional NSW render any notion of an effective response in these areas to the realms of fantasy.*

...

**Summary: 2.** *That the professional firefighters of NSW supported by the entire membership of the UFU will actively oppose the construction of a nuclear dump within Australia's borders."*

## **2.4 National & State Groups: Federal Election 2001 - Policy on Nuclear Issues**

National Environment Groups and State Conservation Councils across Australia agree that a socially and politically acceptable outcome to nuclear waste management depends on prevention any new reactor and closure of the existing reactor. These are pre-requisites to a recommended full Public Inquiry under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC), to be held without the pressures and threat of imposed nuclear transport and dumping:

*“4. Nuclear Free Future:*

- *Prevent the construction of a new nuclear research reactor in southern Sydney or anywhere else in Australia.*
- *Implement an accelerated phase out of the existing HIFAR reactor and the adoption of radioisotope importation and alternative technologies.*
- *Establish a public inquiry under EPBC provisions into Australia's radioactive waste management status and regime and commit to not proceed with either the current national repository or national store proposals or the shipment of spent fuel rods until this reports.”*

( In: “An Australian Sustainability Reform Agenda for the 21<sup>st</sup> Century. Environmental Policy Priorities for the 2001 Federal Election”, August 2001, by:

Australian Conservation Foundation ♦ Greenpeace ♦ The Wilderness Society ♦ Friends of the Earth ♦ National Toxics Network ♦ NSW Nature Conservation Council ♦ Queensland Conservation Council ♦ Conservation Council of South East Region and Canberra ♦ Conservation Council of South Australia ♦ Environment Centre of Northern Territory ♦ Conservation Council of Western Australia ♦ Tasmanian Conservation Trust ♦ Total Environment Centre ♦ Environment Victoria. )

## **2.5 NSW Conservation Groups: NSW Election 2003 - Policy on Nuclear Issues**

In October 2002 NSW Conservation Groups considered Federal Government nuclear expansion plans for NSW and called for State Legislation to prohibit a National Store in NSW and associated transport of nuclear wastes from interstate and overseas.

In opposing the proposed second Sydney reactor they look to a sustainable future with enhanced employment at Lucas Heights as a non-reactor based centre for excellence in nuclear medicine, site remediation and waste management.

*“The next NSW Government should commit to:*

*2.8 Radioactive waste:*

*2.8.1 All NSW political parties should commit to amend existing state legislation or introduce new legislation in order to clearly prohibit the development of a national store for intermediate and higher level radioactive wastes in NSW.*

*2.8.2 All parties should support legislation banning the entry and transport within NSW of interstate or international radioactive wastes for placement in any such proposed store.*

*2.9 Lucas Heights Reactor:*

*2.9.1 All NSW political parties should oppose the construction of the planned second reactor at the Australian Nuclear Science and Technology Organisation's (ANSTO) Lucas Heights facility.*



*2.9.2 All parties must accept that NSW Government agencies have a key role to play in emergency management and response in relation to ANSTO's operations. Accordingly all parties must support the full disclosure of existing radiological consequence analysis and risk evaluations; an independent review of emergency preparedness and response that is informed by the position of the Local Emergency Management Committee and includes strategies for the emergency provision of iodine tablets; formal public consultation mechanisms on matters arising from this radiological analysis and emergency review.*

*2.9.3 The Lucas Heights site should become a non-reactor based, centre for excellence in nuclear medicine, site remediation and waste management."*

( In: "A Clean Green Future, 2003 Election Policy", 25 October 2002, by: Nature Conservation Council of NSW, Total Environment Centre, Australian Conservation Foundation, National Parks Association of NSW, and Colong Foundation for Wilderness. )

## **2.6 Federal ALP opposition to a new Sydney reactor and to a dump in SA**

Federal ALP Policy opposes a new reactor in suburban Sydney at Lucas Heights. They understand that the future direction of nuclear medicine lies with cyclotron produced products and accelerators. With Australia to have a secure supply of medical isotopes for cancer treatment, medical research and other applications under Labor's policy of not building a nuclear reactor at Lucas Heights.

The Federal ALP have also given clear commitments against any national nuclear dump in SA and against use of Commonwealth powers to override the genuine concerns of the States. And through the Senate will oppose attempts by any means to impose a waste facility in SA. This applies equally to waste transport issues.

*"Australia will have a secure supply of medical isotopes for cancer treatment, medical research and other applications under Labor's policy of not building a nuclear reactor at Lucas Heights. ...*

*Other countries, including the United States and Japan do not produce their own medical Molybdenum. In fact, the great bulk of this material is currently produced in Canada and shipped around the world.*

*Australia imports this material on a regular basis when the existing reactor is shut down for maintenance.*

*The Senate Inquiry into Lucas Heights examined this issue in detail and was not convinced that logistical difficulties constitute a serious obstacle to the successful importation of radioisotopes.*

*In addition, other nuclear materials are already produced in Australia using the National Medical Cyclotron. The future direction of nuclear medicine lies with cyclotron produced products and accelerators.*

*Labor remains unconvinced of the arguments for the need for a new nuclear reactor and believes it is completely inappropriate for a reactor in suburban Sydney at Lucas Heights."*

( In: "Howard Wrong on Medical Isotopes", 4<sup>th</sup> Nov 2001 Joint Media Release by Jenny Macklin MP Shadow Minister for Health, and the Shadow Ministers for the Environment and for Science and Resources.)

### **“NO NUCLEAR REACTOR:**

*Labor opposes a new reactor in suburban Sydney at Lucas Heights. ...*

*Despite public concern about the environmental and health impacts of the reactor and questions within the scientific community about the relative priority of this project, the Howard Government has arbitrarily decided to proceed with the construction of a replacement reactor. ...*

*This is in spite of the legitimate concerns of local residents and without any real consideration of possible alternatives to a new reactor.*

*Labor remains unconvinced that there is a need for a new reactor.*

*Labor will therefore: ...*

- *promote and assist the development of the remaining facilities at Lucas Heights into a centre for medical, scientific and technological research; and*
- *review the purpose, functions and aims of reprocessing of Australian generated nuclear waste; “*

( In: “Kim Beazley’s Plan for the Environment and Heritage. ALP Policy. Election 2001”, Federal ALP, 2001. )

*“The Labor Party remains committed to our 2001 election commitment to exclude South Australia from consideration as a site for a dump. Unlike the Howard Government, Labor is committed to ensuring any decision is only taken after extensive community consultation, and without the arbitrary use of Commonwealth powers to override the genuine concerns of the States.*

*Labor in Government would ascertain international best practice in storing low, intermediate low and intermediate level waste. ...*

*Labor in the Senate will oppose attempts to impose, by way of regulation under the ARPANSA Act or other means, a waste facility in South Australia.*

( In: “Liberal party contempt for South Australia.” Kelvin Thomson, Shadow Minister for Sustainability and the Environment, 8th July 2003.)

## **2.7 Opposition by WA, NT and Qld Government’s to any National Store**

Extensive opposition to nuclear dumping forced the Federal Liberal Government to change their plans on 7<sup>th</sup> July 2002 by excluding SA from further consideration as a site for the National Store. Having targeted SA for the Store from Nov 1997 they have had to recognise the prohibitive liability in public, media and political terms of imposing the National Store against strong community and Parliamentary will.

This is a lesson for NSW interests for concerted community and Parliamentary act against the new reactor if you wish the National Store to be prevented in NSW. Unlike the situation in other jurisdictions it is not enough for NSW interests to oppose the Store as the new reactor will produce wastes in Sydney to then be retained in NSW.

The National Store has already been strongly rejected in all other State/Territory jurisdictions. The Australian 7<sup>th</sup> August 2002 “Premiers dump on nuclear site” (Roger Martin & Alison Crossweller) reported that:

*“State Premiers yesterday lined up to block the establishment of a medium-level waste dump within their borders, effectively sabotaging a federal government national site search before it has begun.*

*The six states and two territories yesterday declared they would oppose being host to the dump, making the selection of a site an almost impossible task. The federal government is on the verge of awarding a contract to a private consultancy to identify up to 20 possible sites for the dump. It would take wastes from Sydney's Lucas Heights reactor nuclear reactor, and be in operation for up to 50 years."*

### **Western Australian bipartisan opposition to the Store**

On 6th July 2003 WA Premier Gallop used his "Keynote Address to the ALP Conference" to commit to legislate against the National Store and to make the next Federal Election a referendum on nuclear dumping if they attempt to impose a Store in WA. See also WA Premier's Media Release 6/7/03 "Premier pledges new legislation to block planned radioactive waste dump".

Premier Geoff Gallop MLA has written to the ACF on these issues stating:

*"The Government will vigorously oppose any attempts by the Commonwealth to locate the proposed facility in Western Australia. I have publicly committed the Government to amend the Nuclear Waste (Storage) Prohibition Act 1999 to impede any move by the Commonwealth to locate the new storage facility within Western Australia's borders. This amendment would prohibit the storage and transportation in Western Australia of nuclear wastes generated in other States. Any move by the Commonwealth to override this legislation would require it to introduce new regulations that could be blocked in the Senate. ... Western Australia prides itself on its clean green reputation and that is something we as a Government are not going to allow the Commonwealth to tarnish."*

( Letter from Dr Geoff Gallop MLA, Premier of WA, to ACF Campaigns Director John Connor, dated 31<sup>st</sup> July 2003)

As in SA this is a bipartisan political position in WA with then Liberal Premier Court having rejected a National Store in early in the last WA State election campaign.

Premier Gallop has repeatedly sought release of the Store short list of sites from the Federal Minister for Science who has never consulted with any State, Territory or Local Government jurisdiction or port authority. In Media Release of 31<sup>st</sup> Dec 2002 "Premier demands answers on radioactive waste dump site" Premier Gallop stated:

*"Premier Dr Geoff Gallop has called on the Commonwealth to immediately release a shortlist of potential sites which it is compiling for a new radioactive waste facility.*

*"The Prime Minister advised me in September that the shortlist would be completed by the end of this year so it's now time to come clean" Dr Gallop said. "If the Commonwealth has identified any WA sites for a radioactive waste dump, then we have a right to know."*

## **Northern Territory and Queensland Government opposition to the Store**

On 23rd May 2002 in a Media release titled “Beattie rules out Queensland as a site for Nuclear waste Dump” Premier Peter Beattie stated that:

*“The Howard Government should not even consider Queensland as a site for either of its two proposed nuclear waste dumps. ... I place the Federal Government firmly on notice that Queensland is off limits for such a facility.”*

*Mr Beattie noted comments made by the Federal Science Minister in Adelaide recently in which he stated that one of the dumps “which will be built above ground – may still go elsewhere – it does not have to be in South Australia any more than it has to be Queensland or New South Wales”.*

*“I have news for Senator McGauran and his Federal coalition colleagues and it is all bad” he said.*

*“That facility will not be coming to Queensland and they need not bother even asking. The answer is a final blunt ‘no’ and there will be no rethink,” Mr Beattie said.*

The Queensland Labor State Platform also provides a clear policy position that:

*“Labor will: 3.10.3 Not permit the dumping or storage in Queensland of nuclear wastes from reactors or fuel processing plants.”*

Northern Territory Chief Minister Clare Martin has written to the ACF stating that:

*“The Northern Territory Government will not accept responsibility for the radioactive wastes of all other jurisdictions, particularly under the current site selection processes that have allowed little consultation with states and territories. My Government will not accept any unilateral decision by the Commonwealth to site the proposed national repository for intermediate level wastes in the Northern Territory.”*

( Letter from Clare Martin Chief Minister of the Northern Territory to ACF Campaigns Director John Connor, dated 5<sup>th</sup> June 2003)

### **3. Implications for Sydney and NSW of the Federal Government nuclear plans**

#### **3.1 National Store siting and associated NSW port and transport corridors**

The Federal Government has included NSW sites in a Store short list prepared in late 2002 and is now secretly considering these sites. A Store involves two transport corridors, from the reactor to the Store and from a port to the Store. With the port proposed to receive reprocessed nuclear wastes from France and from the UK, following from Australia’s earlier export of spent fuel wastes, and potentially also from Argentina under the new reactor contract to export spent nuclear fuel to that country.

ACF understands NSW now faces siting of the Store largely because the new reactor waste production plan prevents any agreement with other State/Territory jurisdictions.

ACF calls on the Inquiry to investigate the significant implications of potential Store sites in NSW and their associated transport corridors including required port access.

**ACF requests to be able to address NSW Store issues in a Committee Hearing.**