Senate Education Workplace Relations and Employment Legislation Committee

Submission to inquiry into Commonwealth Radioactive Waste Management Bills

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In recent years I have conducted some research into nuclear issues in Australia, focussing on the back end of the nuclear fuel cycle: the disposal of nuclear waste. Three articles I have published on this topic form attachments to this submission.

A flawed site selection process

The Commonwealth has made much of its 'objective, scientifically based study to find a highly suitable site for a national' repository (Dr Nelson, House of Representatives Debates, 13 Oct 2005, p.1). However the process was not transparently objective, nor clearly scientific, and in particular ignored science that should have been given more weight in the process: social science (see the paper at Attachment 2).

A site selection process that was not thorough and evidence-based was likely to be fraught with difficulty, and risked failure.

In what respects has the site selection process to date been flawed?

- It involved agreement amongst governments regarding the policy objective, but not an agreement from each jurisdiction that they might host the site
- It was underpinned by a decision support system that gave too much weight to natural scientific and technical criteria, and not enough to social scientific or ethical criteria
- It purported to be driven exclusively by science, however economics and infrastructure also played a major part, undermining confidence in the process
- The process selected only one region for further assessment at Stage 2, when several should have been chosen
- The only site chosen happened to include the location where a large quantity of waste was temporarily stored, further undermining confidence in the objective basis of the process
- It did not give a role to Indigenous communities or representatives, even though most of the possible regions for locating the site included large areas of aboriginal land or land under native title claim
- It involved little community participation
- It did not seek volunteer towns or regions to host the facility
- It did not respond constructively to community input
- Assurances were given by governments and then directly contradicted, compromising the integrity of participants in the process.

None of this is to cast doubt on the professionalism of those who conducted the Commonwealth's process. However, the decision criteria they were given, and the

constraints they were placed under, severely curtailed their capacity to run an effective process.

A good site selection processes

Australia's site selection process began with intergovernmental agreement to support a search for national repository. This should not have commenced without a more explicit undertaking. A good site selection process would have commenced with Commonwealth, State and Territory governments stating that they each recognised that the process might result in a site being selected within their jurisdiction. Without this public commitment, the process should not have proceeded.

On its own, this could have risked single jurisdictions exercising a veto power over the whole process. The Commonwealth has, I think rightly, taken the approach that not every jurisdiction has to participate, but only jurisdictions that sign up to the process and the outcome have a right to use the facility.

The question is then what would be the features of a process that identified a site or sites for actual use. Site selection is a process about which we know quite a lot from international research. What does a good site selection process look like?:

- It ensures that those who benefit most from something (such as radiation-based medicine and research) also bear the burdens (such as managing the resultant nuclear waste)
- It aims at a voluntary approach to siting a facility, rather than forcing it on a community
- It works by looking at several possible locations, not narrowing it down to one
- It does not place the burden on communities that are disadvantaged
- It actively engages communities
- It does not proceed based exclusively on natural scientific and technical criteria.

Storage versus disposal

One of the other questions that needs to be addressed is whether the facility should be for storage or disposal of radioactive material. As technologies for managing nuclear material are in their infancy and evolving fairly rapidly, we would do future generations a disservice by managing waste in ways that makes it harder for them to deal with any inadequacies of our current limited abilities. In general, storage is to be preferred over disposal, such as by burial.

Shallow burial of low level waste has been referred to as 'international best practice', but this must seriously be questioned. Shallow burial is a practice encouraged and endorsed by countries, agencies and professionals who work in the nuclear sector and generally are supportive of the continued use and expansion of nuclear power. One does not have to have an opinion about nuclear power to see that this gives scope for conflicts of interest to arise. Support for shallow burial also seems to fly rather in the face of history. We have experience of past claims (including by governments) that burial of hazardous wastes, both radioactive and otherwise, has been safe. These claims have sometimes turned out to be seriously wrong. Such past errors do not seem to be giving enough pause to those today advocating the same practice.

Equally, however, anti-nuclear activists seem to encourage a perception that anything in any way contaminated by radiation must be treated as though it had the potential to

cause cancer or the plague. This makes no sense. As some pro-nuclear activists rightly (though disingenuously) point out, radiation is a natural, ubiquitous phenomenon.

For these reasons, I argue that good radioactive waste management involves two strategies:

- Burial for waste that does not exhibit a level of radiation significantly higher than natural background radiation. Some wastes could also be diluted to achieve this effect.
- Storage for other radioactive waste. This allows the radioactivity to naturally decline, but it is to be preferred primarily to await better technologies and better management strategies in the future. The Bill should be re-drafted to reflect such an approach.

Role of Indigenous communities

As already stated, the literature on site selection indicates that voluntarism is a feature of a good practice process. One of the positive features of the current process may be that a community – in this case an Indigenous community – may be volunteering to host the site. It was indicated during debate on the Bill that the Northern Land Council had expressed interest in hosting the facility.

It is good that some communities might be engaging in this process voluntarily. Indigenous communities could be ideal hosts for a waste store, because ideas of custodianship and caring for land are so fundamental to them. Indigenous communities can be very dynamic and adaptable, and they can be effective at integrating the distinctive issues and technologies surrounding managing radioactive material with their traditional values of guardianship and caring for country.

However, the circumstances of this case seriously undermine this possibility. Those circumstances are made clear, ironically enough, by the words of supporters of the Commonwealth's approach. During debate on the issues, government MP Mr Tollner praised the NLC, talking of how they 'wanted to be *part of the decision-making process* and asked that an amendment be proposed to allow the NLC to nominate an *alternative* site…' (emphases added). He also quoted an editorial from the Northern Territory News that said the NLC 'understand that by engaging the Federal Government they will be *able to have some control* over the siting of facility – and, possibly, pick up development dollars along the way' (House of Representatives Hansard, 1 November 2005, p.37, emphasis added).

The NT News editorial neatly encapsulates the two key reasons why this does not appear to be truly voluntary participation in the process.

First, the NLC may only have got involved under a form of duress. The Commonwealth identified only three sites, all in the Northern Territory and all within the jurisdictions of just two Land Councils, then made it clear that it intended to pass laws to confirm its powers to place the facility on one of those sites. In these circumstances the Indigenous communities would not have felt they had been given much of a choice. They would have known that the Commonwealth intended to build a facility at one of three sites, and that they would have no legal capacity to prevent it. Their best bet was, as the NT News indicated, to engage in the hope of having 'some control' of a process in which they would have few legal rights. This is underscored by the fact that the NLC indicated it was interested in nominating an 'alternative' site, implying concern about the Commonwealth's current proposals.

Second, Indigenous communities also face significant economic disadvantage. In the 1990s, a process was conducted in the United States seeking volunteer communities to host a nuclear waste storage facility. Indigenous communities were disproportionately likely to volunteer to participate in the process, and were the only communities to persist beyond the first stage of the review. Internal divisions emerged within some of the communities and critics have argued that they volunteered essentially in pursuit of economic benefits, not because they had interest or skills particularly suited to hosting the store.

Similar questions need to be asked about the Australian siting process. Why are some of Australia's most disadvantaged communities likely to be carrying a burden refused by so many others to date, while the benefits of nuclear research and medicine continue to accrue primarily to wealthy city dwellers?

For any community (not just an Indigenous one) to host a nuclear waste facility, they should be given that opportunity without duress, and without acceptance being the result of economic disadvantage.

Comments on the bill

The Bill appears to focus exclusively on getting a facility developed in the Northern Territory. The process of siting the facility in the Northern Territory has a long way to run and may still fail. Even those who hope it succeeds would be foolish to support a Bill on the presumption that it will do so. For if the Commonwealth is to learn anything from the site selection processes so far, it should be that nothing is certain to work, even when it looks like it is a done deal. The South Australian process came apart very late in the piece for quite surprising legal reasons.

The capacity to use regulations to prescribe laws (clause 14) appears excessive. At the very least the Bill should be worded to list those laws that *can* be prescribed for the purpose of the Bill, not a list of just three that *cannot*.

The Bill essentially grants or confirms the Commonwealth almost unfettered rights to construct a facility in the Northern Territory. 'Facility means a facility for the management of controlled material generated, possessed *or controlled by* the Commonwealth or a Commonwealth entity' (Part 1 clause 3, emphasis added). This appears to mean that, once passed, the Act could be used by the Commonwealth to build and operate, or to contract with a private company to build and operate, any nuclear waste management facility including one to receive foreign high-level waste.

The Tollner amendments

After its introduction, amendments were put forward by Mr Tollner, and these have been accepted by the House of Representatives. The amendments put forward by Mr Tollner (House of Representatives Hansard 1 November 2005, p. 53) contain some desirable features, but I am inclined to agree with some of his critics that, in the current circumstances, they are mostly redundant (see the House of Representatives debate for arguments to this effect). Nevertheless many of them should be supported, because if the current site selection process fails (as I imagine it may), then they will have improved the bill.

It is appropriate, for example, that the Bill specify that the Northern Territory Chief Minister or a Land Council can nominate land as a potential site. However one wonders why the Bill does not allow *any* premier or chief minister, or *any* land controlling entity, to nominate a site. Why these two particular ones? And one has to question the point of it, given that the Commonwealth has already claimed to have narrowed down the search

to three sites already chosen. If the Commonwealth is to be believed, then these clauses serve no useful purpose.

Furthermore, the Tollner amendments indicate that the Minister does not have a duty to consider a nomination. The additional clause that states 'no person is entitled to procedural fairness in relation to a Minister's approval' just underlines the contempt being shown to anyone making a nomination. When these clauses are taken together with the exemption of much of the process from administrative review (see The Commonwealth Radioactive Waste Management (Related Amendment) Bill), it seems that it does not actually matter whether due process has been followed, including processes of consultation within Indigenous communities. This submission has already outlined that there are particular challenges for Indigenous communities in engaging in the site selection process. This Bill appears deliberately to minimise the legal protections available to a Land Council and particularly those it represents.

One of the Tollner amendments seeks to legislate something that has been a matter of policy for some time: that a Commonwealth facility would not be used to receive high level waste. My view is that to legislate this would be a mistake. Australia could be a suitable country to host a high level waste facility (see paper at Attachment 3). Bargaining with waste producers could give Australia a role in persuading them to phase out nuclear power, for example. As long as the facility is for storage, not disposal by burial, it is nonsensical to rule out this option.

Recommended amendments to the bills

It is hard to envisage a situation in which procedural fairness should be deliberately denied someone. Nothing in the Explanatory Memorandum, Bills Digest or 2nd reading speech gives any defence of this provision. It should be deleted. Indeed I suspect this extraordinary provision was inserted simply as a tactic to provide something for the Senate to amend without going to the heart of the Bill's purpose.

Given that the site selection process might have to be re-started (if things go wrong in the Northern Territory), how should the Bill be drafted? It should be drafted to encourage good selection processes rather than bad ones, and to recognise the site may be anywhere in Australia, not necessarily the Northern Territory.

Good site selection processes have been described earlier. The Bill should contain clauses that:

- Mandate community consultation
- Allow any landholder to make a nomination, provided it meets certain criteria.

The Bill should not contain clauses that:

- Give the minister absolute discretion to ignore nominations or make their own nominations regardless of the views of others
- Strip people of procedural rights
- Prevent the operation of legislation that was designed to apply to situations like this one (such as the Environmental Protection Biodiversity Conservation Act).

Thus even if aspects of the Tollner amendments are accepted, some sections such as proposed clauses 3C(2) and 3D should not be supported. Clauses 6, 8 and 14 of the original Bill should similarly be opposed.

Anything in the Bill that is confined in its application to the Northern Territory would seem extremely ill-advised. It is hard to believe the Commonwealth would have great difficulty siting a facility anywhere in Australia provided the Land Acquisition Act's effect was modified to avoid the peculiar circumstances of the South Australian case. This appears to indeed be taken care of by clause 10 of the Bill. So confining the Bill to the Northern Territory is poor practice. Even if one were to believe that the States could act effectively to prevent a site in their jurisdiction, there is no reason to exclude other Commonwealth territory (including the Australian Capital Territory) from the Bill's application. Curiously, the ACT and other Commonwealth Territories outside the Northern Territory appear to be the only ones exempt from clause 10 of the Bill. This is itself possibly revealing of the fact, pointed out by critics of the Bill, that the Commonwealth without this Bill already has most or all of the legal powers it needs, certainly in respect of Commonwealth Territories.

Anything in the Bill that applies only to the Northern Territory should be amended to apply at the very least to all Commonwealth territories, if not to all Australia. This would include Part 2 section 4(2); Part 3 sections 7(2), 10(1) and 11, 12(2)(f)

The Bill does not specify whether a facility is for storage or disposal of waste, stating only that is for the 'management' of controlled material. My view is that management should be defined to exclude burial, other than of material not exhibiting a level radioactivity significantly higher than natural levels.

Conclusion

This is highly objectionable law in pursuit of a reasonable policy goal by bad policy means.

Given the propensity of people in this debate to engage in NIMBYism, let me conclude by suggesting the ACT be considered for the siting of a radioactive waste store. It has numerous advantages:

- It is host to a highly skilled and educated workforce that could provide all the personnel needed to manage a facility effectively
- It is relatively close to some of the main waste sources, particularly when compared with sites such as outback South Australia and the Northern Territory, thus reducing the amount of transportation of waste involved
- It has a wealthy population, hence there would be no question of it signing up just for the economic benefits
- The ACT enjoys all the benefits of other national facilities that are seen as positives – the National Library, War Memorial, National Museum of Australia, National Gallery of Australia, and so on – and it would redress the balance somewhat if it hosted a national facility that might be seen as a burden
- It has an educated population that is attuned to, and sympathetic to, ideas of the national interest – a population more capable and willing than others of understanding the policies underpinning the need for the facility
- It is geologically relatively stable, and probably more easily secured than a site in a major city such as Sydney
- Most of the waste is Commonwealth waste, and the ACT is the most truly Commonwealth location. The benefits and burdens would be matched up in this sense.

A store does not need to be remote from population centres. Anyone who doubts this should ask where most waste is stored at present, both in Australia and overseas.

I encourage the Committee to recommend the Bill be amended along the lines already described, and for the site selection process to be revisited, this time taking account of the desirable features of such a process.

Attachments

1. Parliamentary Library Chronology
2. AJPA article
3. AJPS article