

2rd April 2018

To: The Secretary

Senate Economics References Committee Inquiry

“Selection process for a national radioactive waste management facility in SA”

RE: Flaws in site selection process, inappropriate *indefinite storage* floats best practice, failure to follow essential Nuclear Safety Committee advice, and serious threat to human & cultural rights.

Dear Secretary

Please accept this public submission & consider my request to appear as a Witness at this Inquiry.

This submission focuses on the *“appropriateness and thoroughness of the site selection process”* & associated matters for the proposed National Radioactive Waste Management Facility (NRWMF).

Specifically: on inappropriate Siting of a proposed *indefinite* above ground Store for primarily ANSTO irradiated nuclear fuel wastes & long lived Intermediate level reactor wastes in regional SA.

An Executive Summary and a few public interest & Safety Questions for this Inquiry to consider under your Terms of Reference are provided – along with an offer to expand on points raised.

Over the last two full years the Federal government has solely targeted regional communities in SA to site the nuclear waste Store & associated required nuclear Port and waste transport routes.

In doing so, the Federal process is unacceptably inadequate (rather than thorough) in failing to follow essential advice of the Nuclear Safety Committee to the regulator ARPANSA (NSC advice to the CEO, Nov 2016) on the NRWMF: for transparency in decisions and for *“The ongoing requirement to clearly and effectively engage all stakeholders, including those along transport routes.”*

My submission to the Minister (May 2017) on his decision under the *National Radioactive Waste Management Act 2012* to assess two sites near Kimba as potential sites for the proposed NRWMF raised a range of issues that have not been thoroughly addressed since (see Attachment 1).

I request opportunity to appear as a Witness to provide evidence at a Hearing of this Inquiry, and was a Witness as an individual on nuclear waste issues at the SA Parliament Joint Committee Inquiry on the Findings of the Nuclear Royal Commission, held in 2016.

My background experience is relevant, as an Australian Conservation Foundation (ACF) campaigner based in Adelaide over 1996 to 2011, including 5 years on the prior Federal attempt to impose a nuclear waste facility in SA over 1998 to 2004 – another flawed process that had to be abandoned.

Please feel free to contact regarding any aspect of this public submission.

Yours sincerely

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Independent Environment Campaigner

Mr D Noonan public submission to Senate ERC Inquiry: Contents

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Executive Summary

For two full years since April 2016 the NRWMF site selection process has solely targeted SA in an arbitrary agenda to inappropriately co-locate an above ground Store, primarily for ANSTO nuclear fuel wastes & Intermediate level reactor wastes, at a Low Level waste disposal site in SA (p.7).

ANSTO intend to double their Intermediate Level Waste inventory, while other such wastes are largely historical with only minor projected future arising by States & Territories & other agencies.

Lucas Heights is by far the best resourced & secure facility to responsibly manage ANSTO irradiated nuclear fuel waste & Intermediate Level Wastes until permanent disposal options are determined.

Co-location of a nuclear fuel waste Store is unnecessary and was abandoned by Howard government over Feb 2001 to mid-2004, with the National Radioactive Waste Repository that was to be sited near Woomera in SA (as assessed & approved under EPBC Act) to take 'Low Level' (300 year) wastes.

The site selection process has been seriously compromised by Federal failure to follow essential advice of the Nuclear Safety Committee to the regulator ARPANSA (NSC advice to the CEO, Nov 2016) on the NRWMF: for transparency in decisions and for *"The ongoing requirement to clearly and effectively engage all stakeholders, including those along transport routes"* (p.8).

This Nuclear Safety Committee advice goes to the core of Inquiry Term of Reference e) and affirms a clear and essential yes in answer to the question: e) *"whether wider (Eyre Peninsula or State-wide) community views should be taken into consideration"*.

Transparency in NRWMF decision making is essential but has been seriously lacking. Site selection process at Kimba & at Hawker have correspondent required transport route communities and a required but not yet identified SA Port to ship in ANSTO nuclear wastes to a co-located Store (p.9).

The Federal government has unacceptably failed to engage these communities over last 2 full years.

It is axiomatic that site selection at Kimba will require requisition of an Eyre Peninsula Port for decades of intended shipments of ANSTO nuclear fuel waste, first due from the UK in circa 2020-21.

In addition, SA regional and State-wide communities have a public interest right to be engaged on the fact that hundreds of truckloads of ANSTO nuclear & reactor wastes are to be brought into SA.

Further, the site selection process has failed to engage communities on key Safety issues in transport & shipping of ANSTO reprocessed / irradiated nuclear fuel wastes into regional SA (p.10).

The SA Nuclear Fuel Cycle Royal Commission (2016) concluded that terrorist attack scenarios are conceivable during the transport of nuclear fuel wastes & that if a cask was lost at sea and was irrecoverable the radioactivity that escapes is expected to affect thousands of cubic km of seawater.

The site selection process must have to answer public interest, safety and reputational risk questions on intended nuclear waste transport in SA & on shipping into an SA Port, including comparable marine contamination risks & conceivable terrorist attack scenarios as raised by the SA NFCRC.

Key Q: What are the proposed or potential SA Ports involved, surely after two full years of solely targeting SA for NRWMF siting the Federal government must start to be transparent on this issue?

Q: Is the matching required nuclear Port to be located on the eastern side of Eyre Peninsula – in either site selection case of Kimba or of Hawker? What are the implications for agricultural exports?

The NRWMF site selection process for “*indefinite storage*” of ANSTO irradiated nuclear fuel wastes & Intermediate Level Wastes is not consistent with longstanding advice of the ARPANSA Radiation Health and Safety Advisory Council on the requirements of International Best Practice (p.11).

ANSTO has produced irradiated nuclear fuel wastes & Intermediate Level Wastes at Lucas Heights for 60 years without any nuclear waste disposal capacity (or even a program to do so) and intends to continue this mal-practice for another 40 years under an OPAL reactor Operating License up to 2057.

It is an **untenable fact** that the proposed nuclear fuel waste Store in SA is intended to operate “*above ground for approx. 100 years*”, however responsible management of ANSTO irradiated nuclear fuel wastes requires isolation from the environment for 10,000 years (p.12).

NRWMF site selection process & *indefinite* storage agenda is inappropriate in compromising Safety in SA in importing nuclear waste without any waste disposal capacity (or even a disposal program).

A Store in SA is unnecessary given the safe option of Extended Storage at Lucas Heights (p.13).

In 2015 ANSTO purpose-built an “*Interim Waste Store*” (IWS) at Lucas Heights with a conservative design operating life of 40 years to take reprocessed nuclear fuel waste shipments from both France & the UK. The IWS received the French waste in Dec 2015 and can take the UK waste due in 2020-21.

The Operating Licence for this Store at Lucas Heights “*is not time-limited*” and was approved by ARPANSA with a Contingency plan for this Store to operate for longer than 40 years, and potentially to store reprocessed nuclear fuel wastes “*until the availability of a final disposal option*”.

The ARPANSA CEO (Feb 2018) has formally addressed the “*Safety and Effectiveness of the Current Storage Facility*”, stating: “*ARPANSA has a high degree of confidence in the safety of this facility which is underpinned by an inspection and compliance monitoring program.*”

This Inquiry should find no manifest need for a nuclear waste Store in SA other than Federal agenda. There is no Safety, Licensing or technical reason to bring these nuclear wastes to SA. ANSTO should retain nuclear wastes in safe responsible Extended Storage at Lucas Heights while determining a final disposal pathway for nuclear wastes in accordance with International Best Practice (p.14-15).

Further, the Department of Industry (2014) reports Contingencies for Lucas Heights to receive & retain decades of shipments of OPAL reactor reprocessed nuclear fuel wastes from France, (p.16) with: “*Intermediate Level Wastes to remain at ANSTO until policy and technological solution for permanent disposal ILW are determined.*”

Contingency Option 1 is that the NRWMF does not proceed (a continuation of the practice over the last few decades). Option 2 b is a more likely Option that the NRWMF proceeds to only take Low Level waste AND the proposed remote site above ground nuclear waste Store does-not proceed.

These Contingency options to responsibly manage OPAL reactor nuclear waste have routine costings and provide for safe Extended Storage of Intermediate level nuclear wastes on-site at by far the best resourced and most secure nuclear facility in Australia – ANSTO’s Lucas Heights.

Executive Summary – Human Rights & Cultural Rights at stake in flawed Hawker process

NRWMF site selection process in iconic Flinders Ranges on Adnyamathanha country at Hawker is inappropriate as the waste dump site threatens areas of special cultural heritage significance (p.17).

This process is deeply and critically flawed from its inception through a secretive ‘nomination’ by one party to a parcel of State Crown Land that is held in trust as a lease with-out any rights to change land use , a power held at the legal discretion of the State Environment Minister.

The contest of these high level public interest matters goes to the core of the Inquiry Term of Reference on “*The appropriateness ... of the site selection process for a NRWMF at ... Hawker in SA.*”

It is not appropriate for any claimed definition of ‘*broad community support*’ to over-ride Aboriginal people’s rights & interests in special cultural heritage significance and in due protection of values.

An immediate adjoining property to the proposed NRWMF siting in the Flinders is an **Indigenous Protected Area**, a part of the *National Reserve System* held under supposed Federal protection.

AND the proposed sites and the broader area are part of a precedent registered **Story Line** under the protection of the SA **Aboriginal Heritage Act 1988** – lead cultural values that must be respected.

However: the Federal Minister holds a draconian discretion under the *National Radioactive Waste Management Act 2012* (NRWMA) to over-ride both Federal and State Aboriginal Heritage Acts.

These are high level public interest issues which then SA Premier J Weatherill addressed in writing to the Prime Minister (Letter 24 Oct 2017, reported in *The Australian* 31 Nov 2017, see Attachment 3).

An Inquiry Task in interests of Transparency: to seek & make public any reply from the PM (p.18).

The Federal government must not continue to target, divide and harm Aboriginal communities and threaten cultural heritage & country on unwilling communities, this process must stop forthwith.

Ending the process now is far preferable to “a final right of veto” which forces Aboriginal people through to the end of a divisive demanding site selection process that is harming their community.

This Inquiry must recognise this is a human rights & cultural rights issue for our fellow Australians.

Community rightly feel betrayed by Federal government imposition of such a flawed divisive site selection process for an illegal radioactive waste dump that is expressly prohibited under State law.

This ERC Inquiry must recognise that Aboriginal people’s ‘voice must be heard and their consent is essential’ as a core part of “broad community consent” and make a Finding that NRWMF siting on Adnyamathanha country in the iconic Flinders Ranges is inappropriate and must stop forthwith.

Pragmatically: if mal-practice extends to an untenable final site selection at Hawker there will be consequences. Like prior programs, this flawed NRWMF process will go on to likely fail, with any claimed benefits of ‘Low Level’ waste disposal again forfeit due to serious lack of due process.

South Australians & others will increasingly organise to support Aboriginal people in defence of their rights & interests and go on to protect the iconic Flinders Ranges from impacts of nuclear dumping.

Executive Summary – *Imposition of an illegal Store is contrary to Democratic rights in SA*

Storage of nuclear wastes compromises safety and affects the rights and interests of all South Australians – that’s *why* it’s prohibited by the *Nuclear Waste Storage (Prohibition) Act 2000*.

The import, transport, storage and disposal of ANSTO irradiated nuclear fuel wastes is illegal in SA and was prohibited under the political leadership of Liberal Premier John Olsen AO in 2000 (p.19).

The Objects of this Act cover the key issues at stake - to protect our health, safety and welfare:

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

The NRWMF Store is illegal in SA as Parliament considered & rejected an analogous Store in 2000.

Labor Premier Mike Rann then extended legislative protections to prohibit other radioactive wastes.

The NRWMF is *fundamentally* a State level public interest issue, as evidenced by clear SA legislation from both sides of politics. This ERC inquiry must of course find under Term of Reference e) that:

“wider State-wide community views should be taken in to consideration”

The fact proposed NRWMF siting is *illegal* in SA is effective proof of intended Federal *imposition* of a nuclear waste dump on to the people of SA at state, regional and local community levels.

This Senate ERC Inquiry should investigate the legitimacy of claims that the Federal government:

“will not impose a facility on an unwilling community” .

The *NRWM Act 2012* (like the prior 2005 Federal legislation) is premised on draconian powers to override an array of State and Federal legislation *“to the extent that it would regulate, hinder or prevent”* actions to authorise (read impose) selecting a site for a nuclear waste facility.

Imposition over an array of due State & Federal legislative protections is inherent in this NRWMF site selection process and is key evidence it is inappropriate & exposes SA to risks & impacts.

South Australian’s exercised their democratic rights to *“prohibit the establishment of certain nuclear waste storage facilities in this State”* as the express will of the people & of the Parliament.

This NRWMF site selection process seeks to over-ride SA law and is an affront to Democratic rights.

The Federal government has an obligation to learn the lessons from experience in failure of prior nuclear waste projects in Australia and internationally and not to deny or override key public interest community concerns (p.20). **This ERC inquiry has a key role to cut through ongoing denial.**

The proposed above ground Store in SA is primarily for ANSTO nuclear wastes:

The “National Radioactive Waste Management Facility” (NRWMF) is really **two dumps in one**:

- **An above-ground Store:** Intended to operate indefinitely “for approx. 100 years”, primarily for ANSTO irradiated nuclear fuel wastes & long lived Intermediate Level Wastes (ILW) from the Lucas Heights reactor. ARPANSA states that nuclear fuel wastes & Intermediate level reactor wastes require isolation from the environment for 10,000 years;
- **A near-surface radioactive waste disposal site:** To bury various so called Low Level wastes including Short Lived Intermediate Level wastes requiring isolation for approx. 300 years;

ANSTO holds an inventory of approx. 450 m³ of various Intermediate level reactor wastes and intends to more than double these wastes through decades of OPAL reactor waste production.

ANSTO also has HIFAR reactor decommissioning waste (scheduled circa 2024 on) reported by Jacobs at approx. 500 m³ of Intermediate level wastes. All reactor wastes should remain at Lucas Heights.

In comparison: a total of 100 m³ of Intermediate Level Waste is held by other Federal agencies (CSIRO and Defence) and a total of 105 m³ of ILW is held by all States & Territories combined.

These are largely historical wastes. The Federal Industry Department projects only minor future arising of Intermediate Level Wastes in Australia (other than ANSTO nuclear & reactor wastes).

Basic waste inventory information is available in: *Long Term Management of Australia’s Radioactive Waste, Initial Business Case (REVISED)*, Jacobs SKM report to the Federal Department of Industry (April 2014), at: <http://www.radioactivewaste.gov.au/files/files/IBC%20revised%20FINAL.pdf>

Importantly: the Industry Department in consultation with ANSTO & ARPANSA reported this “*Initial Business Case*” with Contingency options for irradiated / reprocessed nuclear fuel wastes and ILW to:

“remain at ANSTO until policy and technological options for permanent disposal of ILW are determined” (Table 14, p.34)

I submit that ANSTO’s Lucas Heights is by far the best resourced and secure facility to responsibly manage the extended storage of Australia’s nuclear waste and the intended accruals of OPAL reactor nuclear waste production through to the 2050’s. There is no licensing or technical reason why Lucas Heights can-not conduct on-site extended storage of these nuclear wastes through to disposal.

In contrast: the current Federal agenda is to co-locate an above ground nuclear waste Store at the proposed NRWMF low level site in SA and downplay safety issues associated with the Store.

Store co-location is an unnecessary & arbitrary agenda compromising safety in NRWMF process.

The Howard government abandoned co-location of a nuclear waste Store at a site in SA on 08 Feb 2001 through to mid-2004. The National Radioactive Waste Repository proposed to be sited near Woomera in SA (as assessed by an EIS & approved under the EPBC Act) was to dispose of Low Level wastes and was not to take nuclear fuel wastes or long lived Intermediate Level Wastes.

Contrary to Nuclear Safety Committee advice: stakeholders have not been engaged along waste transport routes - including the required nuclear Port in SA:

The ARPANSA Nuclear Safety Committee (NSC) provided important advice and recommendations to the CEO in Nov 2016 on the plan for the NRWMF – advice which the Federal government has still failed to implement and has thereby seriously compromised the site selection process to date.

The NSC advice and recommendations covers three key areas relevant to this Inquiry's Terms of Reference on the *"appropriateness and thoroughness of the site selection process"*:

- Essential engagement with all stakeholders, including those along transport routes;
- Transparency in decision making regarding the NRWMF;
- Adequate resourcing to develop and maintain a capability for continued engagement with stakeholders at the frequency, locations, and in the form appropriate throughout project;

This Nuclear Safety Committee advice goes to the core of Inquiry Term of Reference e) and affirms a clear and essential yes in answer to the question:

e) "whether wider (Eyre Peninsular or state-wide) community views should be taken into consideration and, if so, how this is occurring or should be occurring"

Nuclear Safety Committee advice is explicit that it is essential to clearly and effectively engage all stakeholders, including along transport routes, at the frequency, locations, and in the form appropriate to specific issues throughout the duration of this nationally important long term project.

The limited practice of the site selection process over the last two full years, to only engage targeted local communities at proposed site locations at Kimba & at Hawker in SA has clearly failed to comply.

Wider Eyre Peninsula, Flinders Ranges and State-wide community views should absolutely be taken into consideration, including but not limited to, their standing as stakeholders along waste transport routes and the as yet unnamed required nuclear Port in SA.

Key extracts of the NSC advice to the CEO of ARPANSA (see Appendix 2), Emphasis added:

*"...the Committee identified several components of this plan that will require ongoing focussed resources for successful engagement. **Such engagement is essential** if ARPANSA is to be effective in developing and maintaining the confidence of stakeholders as a trusted regulator. The components include but are not limited to:*

- ***The ongoing requirement to clearly and effectively engage all stakeholders, including those along transport routes. The purpose of this engagement is to communicate the role of ARPANSA as the independent regulator and to be transparent in the reasoning for future decisions made regarding the NRWMF. Lessons from other industries show that a significant amount of time is required to build a relationship of trust with such a wide range of stakeholders. The objective is to allow stakeholders to consider the regulator as independent and to allow ARPANSA to identify, understand, and address the range of potential concerns raised by stakeholders;***

... however, it is not clear that ARPANSA is adequately resourced to develop and maintain a capability so that ARPANSA is able to learn the lessons from Australian and overseas experience of the concerns stakeholders are likely to raise in connection with technological processes they are unfamiliar with.

Given the recognised examples where similar projects have failed both in Australia and internationally, the Committee requests further information from ARPANSA to confirm that sufficient resources are available within the organisation for continued and independent engagement with stakeholders at the frequency, locations, and in the form appropriate to specific issues throughout the duration of this nationally important and long term project."

Transparency in decision making regarding the NRWMF is essential but has been seriously lacking.

Site selection at Kimba or at Hawker is matched with correspondent waste transport route communities AND with a required (but as yet unnamed) regional Port to ship in nuclear wastes.

Federal gov has unacceptably & inappropriately excluded these wider SA communities for 2 years.

This Senate ERC Inquiry should act on the key NSC advice from Nov 2016 and make Findings to redress exclusion of communities in the wider Eyre Peninsula and Flinders Ranges, along waste transport routes and especially regarding the required but as yet unnamed nuclear Port in SA.

It is axiomatic that site selection at Kimba will require requisition of an Eyre Peninsula Port, for:

- Proposed shipping of UK reprocessed nuclear fuel wastes (NFW) to Australia in 2020-21, direct to an SA Port, then road & or rail onto a Store co-located at NRWMF in regional SA;
- Intended transport of French reprocessed NFW currently held at Lucas Heights to a Store site in SA, with likelihood to utilise shipping through an SA Port after 2021;
- Proposed multiple shipments of OPAL reactor reprocessed NFW from France direct to an SA Port, with the first shipment scheduled from 2030 on & shipments continuing to 2060's;
- Potential future direct shipping of Lucas Heights NFW to an SA Port and onto a Store in SA if French reprocessing does not continue through-out OPAL reactor operation into late 2050's;

In addition to decades of nuclear fuel waste shipments to be imposed through a requisitioned SA Port, wider communities across SA have a right to be engaged on the fact that approximately four hundred truckloads of ANSTO reactor wastes are intended to be transported into SA:

- Truck transport of ANSTO's existing long lived Intermediate Level reactor wastes (ILW) of approx. 450 m³ from Lucas Heights in Sydney NSW to a proposed Store site in regional SA;
- A projected further approx. 500 m³ of long lived ILW to be produced by ANSTO in OPAL reactor operations up to 2050's, which is to be periodically trucked to a Store site in regional SA;
- Approx. 200 truckloads of ANSTO's existing Low Level (LL) reactor wastes (total approx. 2 000 m³ at 10 m³ of LL waste per truckload) with decades of further reactor wastes to be trucked to SA;
- HIFAR reactor decommissioning waste, scheduled circa 2024 on, of up to approx. 1 000 m³ of mixed Low Level and Intermediate Level reactor wastes to require another 100 truckloads to SA;
- The OPAL reactor itself will eventually also be decommissioned and cut up and trucked to SA.

Safety Questions on Shipments of ANSTO nuclear fuel waste to an SA Port:

The site selection process for the NRWMF has failed to engage communities on key safety issues.

The SA Nuclear Fuel Cycle Royal Commission raised and considered safety issues in the transport of nuclear fuel wastes, with the Final Report, Appendix L *Transport Risk Analysis*, Conclusion, stating:

“...if a cask was lost at sea and was irrecoverable, there is a potential for some members of the public consuming locally sourced seafood to receive a very small dose of radiation”;

Further, the Final Report concluded that terrorist attack scenarios are conceivable during the transport of nuclear fuel wastes. With the potential scenario for rocket attack on the transport of nuclear fuel waste reported as having the greatest potential to cause a release of radiation (see NFCRC Final Report, May 2016, [Appendix L - Transport risk analysis](#) Conclusion, p.312).

A further Jacobs MCM desk top Report (15 April 2016, p.50) to the SA Nuclear Fuel Cycle Royal Commission assessed Safety and Risks in the transport of radioactive material to Australia also Concluded that radioactivity that escapes from an unrecovered and degrading nuclear fuel waste cask is expected:

“to be diluted in thousands of cubic kilometres of seawater”

(see "[Safety and risks in the transportation of radioactive material to and from Australia](#)")

After two full years of targeting regional communities at Kimba and at Hawker in SA the flawed NRWMF site selection process has failed to inform, engage and consult relevant wider communities on matching nuclear waste transport issues including public interest, safety and reputational issues.

This Senate ERC Inquiry should make Findings and Recommendations for: the Federal government to now have to start to engage all stakeholders; to become transparent on key NRWMF decision; and to thoroughly answer a range of public interest and safety questions on intended multiple shipments of ANSTO irradiated nuclear fuel wastes into SA through an SA Port.

Q: What are the comparable marine contamination risks and conceivable terrorist attack scenarios in this case, corresponding to those cited in Conclusions of the SA NFCRC Final Report, Appendix L Transport Risk Analysis, and the subsequent Jacobs MCM Report on Safety and Risks?

Q: What are the wider implications for the Eyre Peninsula, including on the reputation of agricultural export industries, in the Federal gov requisitioning a Port on the east of the peninsula for multiple shipments of ANSTO nuclear fuel wastes from circa 2020-21 over decades through to the 2060's?

Q: What are the proposed or potential SA Ports involved, surely after two full years of solely targeting SA for NRWMF siting the Federal government can start to be transparent on this issue?

Q: Is the matching required nuclear Port to be located on the eastern side of Eyre Peninsula – in either site selection case of Kimba or of Hawker? What are the implications for agricultural exports?

Indefinite Storage of ANSTO nuclear fuel wastes in SA flouts International Best Practice:

The ARPANSA Radiation Health and Safety Advisory Council (RHSC, April 2010) have provided advice to the CEO that International Best Practice should have a strategy for ultimate disposal of waste and concludes that Australia's policy for *indefinite storage* of waste is not consistent, stating:

*"Hence, the overall picture of international best practice is that countries should have a policy and strategy for management of radioactive waste, in which storage has a legitimate temporary role **provided there is a further strategy for ultimate disposal of the waste.**"*

This also leads to the conclusion that Australia's current policy of indefinite storage for intermediate level waste does not appear to be consistent with international best practice.

In developing a national strategy it is necessary to ensure an appropriate infrastructure is in place to manage radioactive waste." (Emphasis added)

In: "COUNCIL ADVICE TO CEO REGARDING A REVIEW OF ISSUES RELATED TO THE
MANAGEMENT OF INTERMEDIATE LEVEL RADIOACTIVE WASTE IN AUSTRALIA - APRIL 2010"
(p.22) http://www.arpansa.gov.au/pubs/rhsac/waste_report_RHSAC.pdf

This Senate ERC Inquiry should recognize that:

The NRWMF site selection process for *indefinite* above ground Storage of ANSTO irradiated nuclear fuel wastes & Intermediate Level Wastes is not consistent with longstanding ARPANSA Radiation Health and Safety Advisory Council advice on International Best Practice.

The ARPANSA Nuclear Safety Committee has also provided similar more recent advice to the CEO:

"2. Final Waste Management Prior to Activities Commencing

International best practice points to the need to have in place a policy and infrastructure for final management and ultimate disposal of waste before activities generating waste commence. Currently, there is no infrastructure for final disposal within Australia.

New facilities ANSTO proposes to construct at its LHSTC will generate additional waste requiring long-term storage or disposal. Approval may be granted to conduct activities generating waste provided adequate contingencies are in place. ...

The Committee, therefore, recommends that establishing a long-term storage and disposal facility prior to waste-generating activities commencing continues to be considered the preferred option for any licence application." (Emphasis added)

In: "Nuclear Safety Committee advice to CEO of ARPANSA regarding safety implications of waste stored in interim storage, 22 Nov 2013, http://www.arpansa.gov.au/pubs/nsc/nsc_iwsadvice.rtf

ANSTO has produced irradiated nuclear fuel wastes & Intermediate Level Wastes at Lucas Heights for 60 years without any nuclear waste disposal capacity (or even a program to do so) and intends to continue this mal-practice for another 40 yrs under the OPAL reactor Operating License up to 2057.

Further, this Inquiry should make a Finding that the NRWMF site selection process for proposed indefinite Storage of ANSTO nuclear wastes at sites in SA is inappropriate and should stop.

The nuclear fuel waste Store is to operate “above ground for approx. 100 years”

However, ANSTO nuclear wastes require isolation for 10,000 years:

A range of ARPANSA & ANSTO documents from 2015 on make clear the untenable fact that the proposed nuclear fuel waste Store in SA is intended to operate “for approx. 100 years” - effectively *indefinitely*, for nuclear wastes that require isolation from the environment for 10,000 years.

For instance, documentation on the ANSTO “Interim Waste Storage Facility” (IWS) at Lucas Heights which is already storing reprocessed nuclear fuel waste shipped in from France in Dec 2015.

The ARPANSA “Regulatory Assessment Report – Operating” for the IWS (May 2015, p.42) states:

*“Noting that the Government is currently inviting nominations of sites for the NRWMF, possibly involving co-location of a near surface disposal facility for Low Level Waste (LLW) and an above ground store for Intermediate Level Waste (ILW) **it is feasible that the NRWMF will cater for the long term above ground storage (approximately 100 years) of Intermediate Level Waste including the waste reprocessed in France and the United Kingdom. ...***

*ANSTO refers to the Government’s planning for siting and construction of the NRWMF which will be a near surface disposal repository for low level waste (LLW), **co-located with an above ground store for ILW. This plan will have the provision for ILW storage above ground for approximately 100 years.**” (Emphasis added)*

The ARPANSA “CEO’s Statement of Reasons for the IWS operating licence” (May 2015), at 3.Reasons for my Decision (p.14, a summary of the CEO’s considerations of the evidence before him) accepts ANSTO’s Contingency planning, including the NRWMF plan for an above ground store for ILW:

“This plan will have the provision for ILW storage above ground for approximately 100 years.”

See: “Interim Waste Store” <http://www.arpansa.gov.au/regulation/ReturnofWaste/index.cfm>

And: “CEO’s Decision - ANSTO Interim Waste Store”

<http://www.arpansa.gov.au/regulation/ReturnofWaste/iwsdecision.cfm>

ANSTO nuclear fuel waste & Intermediate Level Wastes require isolation for 10,000 years:

The current ARPANSA draft Code for Disposal of Radioactive Waste (Dec 2017), among many official documents, makes clear that both nuclear fuel wastes & ILW require isolation for circa 10,000 years:

Based on international best practice, an applicant needs to undertake a safety assessment ... over the very long timescales that are deemed appropriate by the Relevant Regulatory Authority (e.g. 10,000 years for disposal of intermediate level waste); (p.51)

The proponent may impose a time cut-off in the assessment of passive safety ... based on expectations from international best practice, for disposal of intermediate level waste should not be less than 10,000 years. (p.53)

see <https://www.arpansa.gov.au/code-disposal-solid-radioactive-waste-rps-c-3>

A Store in SA is unnecessary given the option of Extended Storage at Lucas Heights:

In 2015 ANSTO purpose-built an “*Interim Waste Store*” (IWS) at Lucas Heights with a conservative design operating life of 40 years to take reprocessed nuclear fuel waste shipments from both France and from the UK (equivalent to HIFAR reactor nuclear fuel wastes previously sent overseas).

This Store is operating at Lucas Heights, having received the French waste late in 2015, with a plan for its operations to accommodate the waste intended to be returned from the UK circa 2020-21.

This intended UK shipment of reprocessed nuclear fuel waste can also go to Lucas Heights rather than continuing to target communities in SA - including the requisition of an as yet unnamed Port.

Both the UK and French reprocessed nuclear fuel wastes from ANSTO HIFAR reactor operations can be safely managed in Extended Storage in an existing facility at Lucas Heights for 40+ years.

The Operating Licence for this Store at Lucas Heights “*is not time-limited*” and was approved by ARPANSA with a Contingency plan for this Store to operate for longer than 40 years, and potentially to store reprocessed nuclear fuel wastes “*until the availability of a final disposal option*”.

Further, the Federal Industry Department (2014, in consultation with ANSTO & ARPANSA) reported an “*Initial Business Case*” for the NRWMF, with Contingency options:

- for ANSTO nuclear fuel wastes and ILW to “*remain at ANSTO until policy and technological options for permanent disposal of ILW are determined*”;
- AND with proposed additional nuclear fuel waste Stores to be built at Lucas Heights for future shipments of OPAL reactor reprocessed nuclear fuel wastes on return from France.

ANSTO’s Lucas Heights is by far the best resourced and secure facility to responsibly manage the Extended Storage of all of Australia’s nuclear fuel waste including the intended accruals of OPAL reactor nuclear fuel waste and Intermediate level waste production through to the 2050’s.

Equally, ANSTO can manage OPAL reactor nuclear fuel wastes in Extended Storage at Lucas Heights rather than seek to impose these nuclear wastes onto un-willing communities in SA.

There is arguably no technical reason why ANSTO can-not also conduct Extended Storage of OPAL reactor nuclear wastes, at least through-out the period of ongoing reactor waste production on-site.

Evidence for safe Extended Storage of ANSTO nuclear wastes at Lucas Heights:

ARPANSA has made a submission (23 Feb 2018) to a parallel nuclear Inquiry “*Reprocessing nuclear fuel – France*” by Joint Standing Committee on Treaties (JSCT) regarding the “*safety and effectiveness of the current storage facility*” for nuclear fuel wastes at Lucas Heights, stating (at p.2):

“ARPANSA has a high degree of confidence in the safety of this facility which is underpinned by an inspection and compliance monitoring program.”

See <https://www.aph.gov.au/DocumentStore.ashx?id=0739bc51-9403-4490-b0ce-c8cc6ed074a2&subId=563939>

There is no manifest need for a nuclear waste Store in SA other than Federal agenda:

The ARPANSA “**Regulatory Assessment Report – Operating**” (May 2015) for the IWS states at p.43:

“ANSTO’s application is predicated on a 40 year operating life for the IWS. ...

If the NRWMF were to be delayed beyond the 40 years, ANSTO would undertake actions to support an extension of the facility and container, or the safe transfer to another approved dual usage container.

... Conclusion:

It appears there are some uncertainties regarding establishment of the NRWMF. ...

The ARPANSA assessor notes that though the (IWS) facility is for interim storage, the licence is not time-limited.”

The ARPANSA “**CEO’s Statement of Reasons for the IWS operating licence**” (May 2015) states:

“3.1.1 Purpose of the facility

*The purpose of the IWS Facility is to store radioactive waste resulting from reprocessing of fuel that has been used in the now permanently shut down High Flux Australian Reactor (HIFAR). **The application concerns spent fuel that was shipped to France (La Hague) and to the UK (Dounreay)** under agreements with AREVA and UKAEA to reprocess the fuel and to return the radioactive waste resulting from the reprocessing...*

General characteristics of the returned waste

*... In addition, **the waste to be returned from the UK may be required to be stored temporarily at the IWS Facility.** This will only happen if the NRWMF is not available when the waste is returned. The return of the waste from the UK is planned to take place around the year 2020.*

... I consider it appropriate that ANSTO dimension the IWS Facility and plan for its operations so that it may accommodate the waste returned from the UK.

Further, the ARPANSA “**Regulatory Assessment Report – Operating**” (May 2015) considered ANSTO Contingency Planning for the IWS to operate for longer than 40 years and importantly to potentially store reprocessed nuclear fuel waste on-site “**until the availability of a final disposal option**”:

“3.2 ANSTO Contingency Plan 3.2.1 Lifetime and future use of the IWS Facility

*... The **conservative design life considered is 40 years.** ...*

3.2.2 Long term storage of waste and final disposal

ANSTO considers that in the unlikely event that the NRWMF is not built within 40 years, ANSTO would make a submission to ARPANSA to amend the licence to extend it for a defined period of time. ... ANSTO also considered reloading the waste into a new TN81 cask, and the reloading operation will be undertaken in a purpose-built facility subject to regulatory approval.

... ANSTO states that a final disposal strategy will be subject to Australian Government policy including monitoring of best practice disposal for such waste worldwide.

3.2.3 Contingency options

In the scenario of the unavailability of the NRWMF, ANSTO has identified the following options for contingency. ...

3.2.3.2 Retention of the returned residues at ANSTO until the availability of a final disposal option

... This (NRWMF) plan will have the provision for ILW storage above ground for approximately 100 years. The Government will continue to explore final disposal options including geological disposal over this period taking into account international best practice of disposal of such waste."

The ARPANSA "**CEO's Decision - ANSTO Interim Waste Store**" (May 2015) imposes a relevant Condition (see <http://www.arpansa.gov.au/pubs/regulatory/ansto/SOR-IWS.doc> p.25) that:

"The licence is not limited in time; however, the purpose of the facility is temporary storage of the waste, pending solution for its final management. The length of storage is contingent on the establishment of the NRWMF, or any alternative final management solution that may be considered in the future. It is therefore reasonable to request, at appropriate times, updated information as regards the performance of the IWS Facility, and projections for the future. I have therefore included the following licence condition:

The licence holder must submit to the CEO, no later than 30 June 2020 and in a form acceptable to the CEO, plans for the removal of waste stored in the facility."

However: The ARPANSA CEO's Condition does not require removal of the waste by June 2020 only projections of future plans for removal, subject to fruition - or not - of the proposed NRWMF.

This is confirmed in the ARPANSA submission to the JSCT Inquiry which addresses this issue:

"In addition, under condition 5 of the Interim Waste Store Licence, ANSTO must submit a plan, by no later than June 2020, for removal of the waste stored in the facility. The contents of the plan will be contingent on the progress made by the Department in establishing a NRWMF and establishing a final disposal pathway for Australia's Intermediate level waste.

*... However the NRWMF has not been established ... **ARPANSA would be the responsible regulator ... but is unable to pre-empt any regulatory decision or provide any estimate of timelines of when this may occur.**"* (Emphasis added)

It would be realistic and prudent for the Federal government and ARPANSA to have Contingencies:

- In the arguably likely case that the NRWMF remote Store does not eventuate (just as it has not in preceding decades – without discernible impact on Lucas Heights operations);
- AND to provide for Extended Storage of nuclear wastes at Lucas Heights – while determining a final disposal pathway for nuclear wastes in accordance with International Best Practice.

There is no manifest need for a nuclear waste Store in SA other than a flawed Federal agenda.

See relevant ARPANSA public documentation and information available at: "**Interim Waste Store**" <http://www.arpansa.gov.au/regulation/ReturnofWaste/index.cfm>

And at: "**CEO's Decision - ANSTO Interim Waste Store**" <http://www.arpansa.gov.au/regulation/ReturnofWaste/iwsdecision.cfm>

Contingency to return OPAL reprocessed nuclear fuel waste to Storage at Lucas Heights:

The ANSTO agenda for the OPAL reactor is premised on reprocessing of five decades of OPAL reactor nuclear fuel waste in France AND on proposed return of these wastes to a NRWMF store site in SA.

Arguably either or both of these agency preferences may fail to eventuate and leave OPAL stranded.

The Federal Department of Industry in consultation with ANSTO & ARPANSA in 2014 set out two Contingency options for return of OPAL reactor reprocessed nuclear fuel wastes to Lucas Heights:

In Option 1 the NRWMF does not proceed (a continuation of the practice over the last few decades), and in Option 2 b the NRWMF proceeds to only take Low Level waste AND the proposed remote site above ground nuclear waste Store does not proceed.

“Table 14 List of options to meet the criteria:

Option 1 Business as Usual (“Do nothing”):

Continue as at present without long term radioactive waste management arrangements in place and operate via a series of interim storage measures for both the Commonwealth and the States and Territories (via ARPANSA-approved “contingency measures”).

Propose separate ILW stores to be delivered at ANSTO prior to each separate delivery of OPAL Spent Fuel (to the design of the current IWS with a delivery cost of \$8M each) and a 1,000 m³ capacity LLW store to be constructed in 2016 and each decade thereafter (\$1M each) with associated operating expenses. (Emphasis added)

Further, “**Option 2 b**” also has OPAL reprocessed nuclear fuel wastes returned to Lucas Heights in (an arguably likely) Contingency that if the NRWMF proceeds it will only provide for Low Level (LL) waste Disposal in a Spanish style engineered above ground *El Cabil* design basis:

“Construct NRWMF with 100 years capacity for both legacy and future LLW at (remote) site in accordance with the NRW Act 2012 and ARPANSA Guidance.

ILW to remain at ANSTO until policy and technological solution for permanent disposal of ILW are determined. ... ILW storage to continue at ANSTO with foreseeable capital and operating costs as for the ILW element of the BAU. (Emphasis added)

In: *Long Term Management of Australia’s Radioactive Waste, Initial Business Case (REVISED)*, Jacobs SKM report to the Federal Department of Industry, April 2014, Table 14, p.34.
See <http://www.radioactivewaste.gov.au/files/files/IBC%20revised%20FINAL.pdf>

These Contingency options to responsibly manage OPAL reactor nuclear waste have routine costings and provide for safe Extended Storage of Intermediate level nuclear wastes on-site at by far the best resourced and most secure nuclear facility in Australia – ANSTO’s Lucas Heights.

To respect Aboriginal rights & concerns: The site selection process in Flinders must stop

The broad Australian community, and this Senate ERC Inquiry in my opinion, have an obligation to respect and to protect Aboriginal culture and country. This should be reflected in Inquiry Findings.

Proposed siting in the iconic Flinders Ranges on Adnyamathanha country is inappropriate as the proposed site selection expressly threatens areas of special cultural heritage significance.

An immediate adjoining property to the proposed NRWFM siting in the Flinders is an **Indigenous Protected Area**, a part of the *National Reserve System* that is supposed to be under Federal protection. AND the proposed sites and the broader area are part of a precedent registered **Story Line**, values that must be respected, under the protection of the SA **Aboriginal Heritage Act 1988**.

However: the Federal Minister holds a draconian discretion under the *National Radioactive Waste Management Act 2012* (NRWMA) to over-ride both Federal and State Aboriginal Heritage Acts.

Sections 12 & 13 of the NRWMA state that: “*the significance of land in the traditions of Indigenous people ... has no effect to the extent that it would regulate, hinder or prevent*” actions that are authorised by Section 11 *Selecting the site for a facility*.

The contest of these high level public interest matters goes to the core of the Term of Reference on “*The appropriateness ... of the site selection process for a NRWFM at ... Hawker in SA.*”

Terms of Reference on “*how the need for ‘broad community support’ has played and will continue to play*”; on “*the definition of broad community support*” and on “*how broad community support will be determined*” are all also directly relevant to these public interest matters.

It is not appropriate for any claimed definition of ‘*broad community support*’ to over-ride Aboriginal people’s rights and interests in special cultural heritage significance and in due protection of values.

This Inquiry should make a Finding that any Federal discretion to override Aboriginal Heritage must not be used to site a NRWFM on Adnyamathanha country in the iconic Flinders Ranges.

This is a high level public interest issue which then SA Premier J Weatherill addressed in writing to the Prime Minister (Letter dated 24 Oct 2017, as reported in *The Australian* on 31 Nov 2017):

South Australian Premier Jay Weatherill has asked Malcolm Turnbull to give Aborigines the “final right of veto” over any site chosen by the federal government for the planned national radioactive waste dump. ...

In the letter obtained by The Australian, Mr Weatherill said Aboriginal leaders were deeply concerned about the Hawker proposal and urged the commonwealth to commit to “provide a local Aboriginal community with a final right of veto over any future facility proposed on their lands”.

<http://www.theaustralian.com.au/news/nation/bernardi-seeks-to-lift-ban-on-nukes/news-story/06ef1d96c74c833146722aaeb88c3248>

The Premier wrote to the PM (see Letter at Attachment 3) regarding the NRWMF to convey the Adnyamathanha community's expressed "*deep concern about the proposed site at Hawker, and potential impacts on Adnyamathanha Cultural Heritage*".

The Premier raised the SA Nuclear Fuel Cycle Royal Commission, the Final Report's statement that broad social consent was required to successfully deliver such a facility, and the response of the SA Government in a community engagement process, stating:

"This engagement process was insightful and highlighted the need for a bigger conversation about how Aboriginal people want to be seen, valued and recognised, and on unfinished business from the past.

In particular, Aboriginal people's history with the nuclear industry demonstrates a need for significant healing.

In recognition, the South Australian Government committed to provide a local community with a final right of veto over any future facility proposed on their lands.

I recommend that the Commonwealth Government now consider adopting a similar policy position as part the National Radioactive Waste Management Facility process.

I would be happy to discuss this with you in greater detail." (Emphasis added)

In the interests of transparency this Inquiry should seek and make public any reply from the PM.

The Adnyamathanha Traditional Lands Association (ATLA, the Adnyamathanha Native Title Committee) has rejected proposed NRWMF siting on their Adnyamathanha people's country.

This must be explicitly and effectively respected by thoroughly putting an end to proposed NRWMF siting in the Flinders Ranges. **I submit that this should be a key Finding of this Senate ERC Inquiry.**

The Federal government must not continue to target, divide and harm Aboriginal communities and to threaten their cultural heritage and country through this flawed NRWMF site selection process.

That is also preferable to "*a final right of veto*" which forces Aboriginal people through a demanding lengthy site selection process that threatens their cultural heritage and divides & harms community.

Premier Weatherill had earlier committed to provide Aboriginal communities a right of veto over any proposed International nuclear waste facilities (Jay Weatherill *The Advertiser*, Nov 18, 2016):

"...local Aboriginal people would be given a final right of veto on any future facility.

"A key finding of the citizens' jury was the importance of listening to local Aboriginal communities. Their evidence to the jury was compelling.

"This final right of veto would exist if a proposed facility would affect their lands and would not be overridden by the broader community.

"Their voice must be heard and their consent is essential."

This ERC Inquiry should recognise that Aboriginal people's 'voice must be heard and their consent is essential' as a core part of "broad community consent" and make a Finding that NRWMF siting on Adnyamathanha country in the iconic Flinders Ranges is inappropriate and must stop forthwith.

Attachment 1: 28 May 2017

To: Senator The Hon Matthew Canavan
The Minister for Resources and Northern Australia

c/o The Department of Industry, Innovation and Science
National Radioactive Waste Section
[REDACTED]

RE: Proposed Federal government imposition onto community in South Australia of an illegal “100 year” Store for ANSTO’s “10 000 year” irradiated Nuclear Fuel Wastes.

Dear Minister

Storage of nuclear wastes affects the rights, interests and safety of all South Australians and is prohibited in our State under the *Nuclear Waste Storage (Prohibition) Act 2000*.

Proposed imposition of ANSTO reactor nuclear wastes is a major public interest concern in SA and detracts from public trust and confidence in the Federal government, in ARPANSA and in ANSTO.

The National Radioactive Waste Management Facility (NRWMF) comprises two co-located waste management facilities: an above ground 100 year Store for wastes that ARPANSA states require isolation for 10 000 years, AND a Disposal Facility for wastes requiring isolation for up to 300 years.

This submission focuses on the proposed imposition of the illegal Store & consequences thereof.

The Store is primarily for ANSTO irradiated Nuclear Fuel Wastes (NFW) and other existing and proposed reactor wastes, with only minor projected future arising’s of Intermediate Level Wastes (ILW) from States & Territories or from other Commonwealth agencies.

ARPANSA’s CEO (May 2015) has formally considered the proposed NRWMF Store and stated:

“This plan will have the provision for ILW storage above ground for approximately 100 years.”

This *indefinite* storage plan compromises safety in importing nuclear waste to SA without a waste disposal capacity or even a requisite program for disposal of NFW and ILW.

ARPANSA’s Radiation Health and Safety Advisory Council (April 2010) has provided formal advice which concluded: *“that Australia’s current policy of indefinite storage for intermediate level waste does not appear to be consistent with International best practice.”*

The import, transport, storage and disposal of ANSTO irradiated Nuclear Fuel Wastes is illegal in SA and was prohibited under the leadership of Liberal Premier John Olsen in 2000:

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

Since April 2016 the NRWMF project has *exclusively* targeted community and environment in SA in an attempt to again impose an illegal Store for ANSTO’s irradiated Nuclear Fuel Waste in our State.

The Minister's release "*Kimba 90-day consultation begins*" (20 March 2017) invited submissions on potential approval under the *National Radioactive Waste Management Act 2012* of two nominated sites near Kimba for assessment as potential sites for the proposed NRW Facility.

This is in-parallel with the Federal government targeting the iconic Flinders Ranges on the country of the Adnyamathanha people in a serious threat to their human rights and cultural interests.

These are fundamentally State level public interest issues and represent a multi-generational threat to community in SA: including intended Federal requisition of an as yet unnamed SA port for imposition of decades of irradiated Nuclear Fuel Wastes imports, along with affected stakeholders on transport routes, in addition to the rights & interests of community around a potential Store site.

The Federal government has unacceptably failed to take up the recent Advice of the ARPANSA Nuclear Safety Committee (4 Nov 2016) for transparency and for the essential "*ongoing requirement to clearly and effectively engage all stakeholders, including those along transport routes*".

This Store also exposes SA to unresolved security and potential terrorist risks in shipping, transport and indefinite above ground storage of irradiated Nuclear Fuel Wastes and other reactor wastes.

However, Lucas Heights is Australia's best placed institution and facility to responsibly manage ANSTO's Nuclear Fuel Wastes and can do so through-out the operating period of the Opal reactor.

An "Interim Waste Store" built at Lucas Heights in 2015 has a design life of 40 years and an approved purpose to take *both* the Nuclear Fuel Waste from France (NFW received Dec. 2015) and NFW to be received from the UK in circa 2020. The ARPANSA license for this Store "*is not time limited*" and has Contingency options to retain these NFW's at ANSTO "*until the availability of a final disposal option*".

The policy agenda to impose a NFW Store in SA is a flawed, unnecessary, contested and unsafe plan.

A broad public interest campaign protected SA rights and interests from prior Federal government attempts to impose nuclear waste facilities onto our State over 1998 to 2004 - and can do so again.

That "National Store Project" was *abandoned* - just as this NRW Facility Store will have to be set aside.

Further, the Federal government's flawed policy agenda for *imposition* of nuclear waste effectively precludes a long term resolution to Australia's "low level" radioactive waste responsibilities.

The Minister has an obligation to learn the lessons from experience in failure of prior projects in Australia and internationally and not to deny or override key public interest community concerns.

My background includes experience as an Australian Conservation Foundation (ACF) Campaigner over 1996 to 2011 based in Adelaide. Please feel free to contact to discuss this public submission.

Yours sincerely

Mr David J Noonan B.Sc., M.Env.St.

Independent Environment Campaigner

[Redacted signature]

Attachment 2:

Our Reference: R16/12918

4 November 2016

██████████
Chief Executive Officer
ARPANSA
██████████
████████████████████

Nuclear Safety Committee

Advice to the CEO of ARPANSA

Dear ██████████

I refer to Agenda Item 2.2 of the Nuclear Safety Committee (NSC) meeting held on the 18 March 2016 where the Committee provided you with their advice and recommendations relating to the ARPANSA Communication Strategy and Plan for the National Radioactive Waste Management Facility (NRWMF). The Committee discussed this topic further at the 17 June 2016 NSC meeting as additional information regarding project timeframes and progress was presented to the Committee.

The Committee considers the ARPANSA Communication Strategy and Plan for the NRWMF to be well developed and to contain elements that are required to manage the regulatory process and community expectations successfully. However, in both meetings, the Committee identified several components of this plan that will require ongoing focussed resources for successful engagement. Such engagement is essential if ARPANSA is to be effective in developing and maintaining the confidence of stakeholders as a trusted regulator. The components identified by the Committee are generally consistent with those identified by ARPANSA and include but are not limited to:

- The ongoing requirement to clearly and effectively engage all stakeholders, including those along transport routes. The purpose of this engagement is to communicate the role of ARPANSA as the independent regulator and to be transparent in the reasoning for future decisions made regarding the NRWMF. Lessons from other industries show that a significant amount of time is required to build a relationship of trust with such a wide range of stakeholders. The objective is to allow stakeholders to consider the regulator as independent and to allow ARPANSA to identify, understand, and address the range of potential concerns raised by stakeholders.
- The continued need for ARPANSA to be aware of, and informed by, case studies for similar scale projects in Australia and internationally. These case studies provide a range of examples of both successful and unsuccessful communication of technical and non-technical risks with stakeholders. The Committee discussed several case studies, highlighting the importance of identifying, understanding and managing technical, social, and economic

concerns raised by stakeholders. Those concerns are likely to vary between stakeholder groups and stakeholder concerns are likely to change over the course of such a long-term project. ARPANSA will need to be able to respond effectively and promptly to such changing concerns.

- The importance of integrating learnings and experience derived from effective stakeholder engagement in other industries and in the international nuclear community into the plan, and the requirement for the plan to be responsive and flexible for the duration of the project.
- The Committee emphasised the need to continue to engage with, rather than to just inform, stakeholders.
- The wide range of tools available for facilitating communication between stakeholders and ARPANSA was discussed with the recognition that ARPANSA will need to identify those tools that are considered most effective for reaching the wide range of stakeholders, and to develop an approach to the consistent and moderated use of such tools.

The Committee notes that ARPANSA has included the above in the ARPANSA Communication Strategy and Plan for the NRWMF; however, it is not clear that ARPANSA is adequately resourced to develop and maintain a capability so that ARPANSA is able to learn the lessons from Australian and overseas experience of the concerns stakeholders are likely to raise in connection with technological processes they are unfamiliar with. Experience from overseas and from other industries strongly suggests ARPANSA will need an ongoing capacity in this area.

Given the recognised examples where similar projects have failed both in Australia and internationally, the Committee requests further information from ARPANSA to confirm that sufficient resources are available within the organisation for continued and independent engagement with stakeholders at the frequency, locations, and in the form appropriate to specific issues throughout the duration of this nationally important and long term project.

Yours sincerely



Chair of the Nuclear Safety Committee



Hon Jay Weatherill MP
Premier of South Australia

PREM17D05989

The Hon Malcolm Turnbull MP
Prime Minister of Australia
Parliament House
CANBERRA ACT 2600

Dear Prime Minister *Malcolm*

I write regarding two matters related to the National Radioactive Waste Management Facility.

I understand that there are three nominated sites in South Australia currently under consideration; two situated near Kimba and one near Hawker.

First, I am seeking an update in relation to the assessment and engagement process undertaken to date, and an understanding of what the next stages will involve.

Second, I recently met with Traditional Owners of the Adnyamathanha community, who expressed deep concern about the proposed site at Hawker, and the potential impacts on Adnyamathanha Cultural Heritage.

In 2015, a Nuclear Fuel Cycle Royal Commission recommended South Australia consider pursuing the storage and disposal of international nuclear waste. The report also stated that broad social consent was required to successfully deliver such a facility.

In response, the South Australian government undertook a comprehensive community engagement process, which included discussions with more than 50,000 South Australians. A targeted Aboriginal engagement program was also designed with the assistance of Aboriginal leaders, which involved visits to 31 Aboriginal communities.

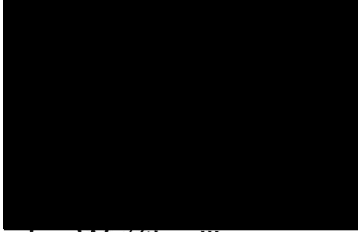
This engagement process was insightful and highlighted the need for a bigger conversation about how Aboriginal people want to be seen, valued and recognised, and on 'unfinished business' from the past. In particular, Aboriginal people's history with the nuclear industry demonstrates a need for significant healing.

In recognition, the South Australian government committed to provide a local Aboriginal community with a final right of veto over any future facility proposed on their lands.

I recommend that the Commonwealth Government now consider adopting a similar policy position as part the National Radioactive Waste Management Facility process.

I would be happy to discuss this with you in greater detail.

Yours sincerely



Jay Weatherill
PREMIER

27/10/2017