



Nuclear Safety Committee

Minutes

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| Date | 19 March 2025 |
| Time | 8:45 AM – 4:30 PM |
| Location | ARPANSA, 619 Lower Plenty Rd, Yallambie VIC 3085 |
| Members Present | Dr Tamie Weaver (Chair), Dr Gillian Hirth AO (CEO of ARPANSA), Dr Joanna Wriedt, Mr Michael Parker, Dr Peter Karamoskos, Ms Jasmin Diab CSC, Mr Tony Irwin (items 5 - 7 only), Dr Peta Miller, Mr Peter Wilkinson, Mr Stuart Parr (recused himself from items 5 - 7), Mr Cameron MacPhail (recused himself from items 5 - 7). |
| Apologies | Mr Brent Rogers |
| Attendees | ARPANSA: Mr John Ward, Mr Lachlan Whittle, Mr Jim Scott (CRO of ARPANSA), Mr Vaz Mottl (items 1.4 & 9 - 11), Mr Andrew McCormick (item 9), Mr Ryan Hemsley, Ms Fran Wigney (Items 5 - 7) NPSRD: Ms Michele Miller |

1 - Introduction

1.1 - Opening

The Chair opened the Nuclear Safety Committee and gave an acknowledgement of the Traditional Owners of the land, paying respect to Elders past and present.

1.2 - Attendance and apologies

Mr Brent Rogers provided an apology for this meeting. Mr Tony Irwin was able to attend only items 5 -7. Mr Stuart Parr and Mr Cameron MacPhail both recused themselves from items 5 - 7.

1.3 - Declarations of conflicts of interest, real, perceived or potential

Mr Stuart Parr and Mr Cameron MacPhail recused themselves from the items on the Controlled Industrial Facility (CIF), due to a potential conflict of interest from their mutual employer being involved in this project.

No additional conflicts of interest were raised at this meeting.

1.4 - Minutes of the previous meeting

Draft minutes of the previous NSC meeting, in November 2024, had been distributed to, and accepted by, NSC members out of session. All comments regarding the minutes raised by members were addressed. However, additional information received before the minutes were published required further attention.

At the November 2024 NSC meeting, ANSTO reported to the Committee on changes to existing OPAL riser cracks. Following the November 2024 NSC meeting, ANSTO supplied ARPANSA with its latest OPAL riser visual investigation reports, taken after the reactor was restarted post the CNS replacement. The latest reports concluded that there had been no visual changes to the riser crack as previously reported to ARPANSA. The visible change to the riser cracks is now understood to be debris released during the course of the CNS replacement works, that had settled into the riser cracks. The debris, measuring less than 2mm², has subsequently been dislodged from the riser crack to the reactor cooling and filtration system, and therefore is no longer visible.

The Committee was informed of this additional information out of session, and received a further presentation during the meeting. The wording of an addendum to be included in the November 2024 minutes to reflect this information was discussed at the March 2025 meeting to be finalised out of session.

The finalised [minutes](#) of the November 2024 meeting will be published on the ARPANSA website.

1.5 - Meeting dates

Meeting dates for the remainder of 2025 have been decided, and were shared with members.

The Committee will meet on July 2 – 3 (noting this was subsequently rescheduled to 29 –30 July 2025), and again on November 19 - 20. Meetings will take place over one or both days depending on the meeting's agenda.

2 - Business arising

2.1 - Outstanding actions

The Committee noted that there are no outstanding actions.

2.2 - Incoming correspondence

The Committee received no correspondence.

2.3 - Outgoing correspondence

The Committee sent no correspondence.

2.4 - Media enquiries update

The Committee was informed of media enquiries ARPANSA had received during the period October 2024 – January 2025, which saw slightly fewer enquiries than the same period in 2023-24. Topics of interest during this period included mobile phones, microwaves, sun protection and historical nuclear tests in Maralinga.

2.5 - Public enquiries update

The Committee was informed of enquiries made to ARPANSA by the public. Note that this is separate from enquires received directly by the Committee, discussed at agenda item 5. The number of enquiries received was comparable to the number received in previous years. The greatest number of enquiries concerned ionising radiation, radiofrequency exposure, and extremely low frequency exposure. When this data was broken down on a state-by-state basis for the most recent quarter, it was seen that while there were enquiries from QLD, NSW, Victoria, and SA, none had been received from WA, ACT, NT or Tasmania.

Mr Michael Parker, the CEO of Rockingham Council in WA, advised that the lack of enquiries from WA may reflect that there is a lack of knowledge about the existence of ARPANSA's public enquiry system ([Talk to a Scientist](#)) in the state.

3 - ARPANSA significant activities

3.1 - Chief Executive Officer (CEO) update

The CEO of ARPANSA updated the Committee on recent ARPANSA activities. These included, but are not limited to: ARPANSA's international engagements; licence applications received; an update from CSIRO on the categorisation of waste at the CSIRO Waste Storage Facility located at Woomera, SA; continued engagement with the Australian Radioactive Waste Agency (ARWA); ARPANSA's role in the recently updated Australian Government Crisis Management Framework; and lessons learned from ARPANSA's report on ANSTO's OPAL Periodic Safety and Security Review (PSSR), including those learned through the NSC's review of this report.

Regarding the NSC's review of the PSSR document, the Committee noted that having a more clearly defined scope for the task would allow the NSC to better serve the CEO.

3.2 - Chief Regulatory Officer (CRO) update

The CRO of ARPANSA updated the Committee on recent international engagements, including the Nuclear Energy Agency (NEA) Regulator's forum, and a bilateral meeting with the Authority for Nuclear Safety and Radiation Protection (ANVS), the Dutch nuclear regulator.

4 - Member representing the interests of the general public

The member representing the interests of the general public provided an update to the Committee. One topic raised regarded the stewardship of radioactive waste at ANSTO, and the efforts made towards waste minimisation. The CEO of ARPANSA commented that waste minimisation is a key established principle of waste management both for ARPANSA and for ANSTO. Waste minimisation is considered through the design of facilities and processes, and in addition, through regulated exemption and clearance activities which both reduce volumes of waste and contributes to recycling and the circular economy.

Other topics raised by the member of the public were recognised as being out of scope both for ARPANSA and for the Committee.

5 - Update on Controlled Industrial Facility (CIF)

ARPANSA has received the construction licence application from the Australian Submarine Agency (ASA) regarding the CIF which is proposed to be constructed at HMAS *Stirling*. The draft regulatory assessment

report (RAR) for this construction application which represented the technical review of this application was shared with the Committee. The next stage of the licensing process is public consultation, which is intended to be undertaken before the next NSC meeting in July. An overview of any public comment provided through consultation will be provided to the NSC and all relevant submissions will be used, along with the technical review to inform the CEO's licensing decision.

The Committee was provided with detail regarding:

- Dose modelling conducted both by ASA and independently by ARPANSA.
- International and Australian best practice which has informed design.
- The technical, human and organisational factors considered in design.
- The transfer of waste within facility areas in terms of both physical measures to ensure environmental protection, and the transferring of responsibility for waste.

The Committee discussed public engagement and communication regarding the CIF. This included communication on results of modelling, and on the transfer of regulatory responsibility from ARPANSA to the Australian Naval Nuclear Powered Submarine Regulator (ANNPSR) anticipated to occur in November 2025. The Committee was informed of work being done at ARPANSA as part of continuous improvement for public consultation to encourage public submissions which fall within ARPANSA's jurisdiction. This includes a frequently asked questions webpage, and a video from the CEO explaining ARPANSA's processes in conducting assessments. ARPANSA has also encouraged the ASA to provide more information on the CIF in the documents that are published for public consultation.

Questions posed by the Committee will result in additional information being included within the RAR, and these updates will be provided to the Committee. The Committee was informed that at this stage of the licence application the detailed design of the facility is being finalised. This is in line with ARPANSA's expectations and is normal in the staged approval process for facilities. ARPANSA's regulatory framework is designed to manage this process. The finalisation of all design elements would be expected to be complete before a licence to operate the facility is received or considered.

6 - Update from the CEO of Rockingham Council

The CEO of Rockingham Council, Mr Michael Parker, updated the Committee on the issues facing Rockingham Council and the local community, particularly in regard to the CIF. Mr Parker noted that progress has remained slow surrounding ASA's public consultation on the CIF. Mr Parker noted that while local leaders had been consulted with, much of the information provided to them was not allowed to be shared with the public. As a result, public feedback indicates that meaningful public consultation is still lacking. Public concerns persist surrounding radioactive material both on and off site, waste storage, and transport of waste.

Public concerns are being directed towards local councils. Within the Perth Southwest Metropolitan Alliance (PSWMA) councils received notice of motions regarding greater transparency surrounding AUKUS. Community feedback has specifically asked for face-to-face consultation.

Mr Parker noted that the Rockingham community has a historically positive relationship with Defence, but that a lack of direct engagement is eroding this relationship.

The Committee discussed the impacts of a perceived lack of transparency, and how it may result in undermining public trust in the ASA primarily, but also of ARPANSA and local councils. The Committee discussed extensively whether ARPANSA should consider additional in-person public engagement.

ARPANSA noted that once consultation opened, they intend to invite further engagement with First Nations organisations and local councils. ARPANSA aims to be open and transparent with the public, but the ASA is responsible for sharing project details. ARPANSA can only share information about the licensing process and regulatory approach. If an ARPANSA-led in person consultation were to be held with the public without the ASA, this may result in many questions that can only be answered by the ASA or policy makers and to which ARPANSA would be unable to provide comment. Additionally, all engagement by ARPANSA must consider the upcoming transfer of regulatory responsibility from ARPANSA to ANNPSR. While noting ARPANSA concerns about the potential of undertaking consultation without the ASA, a number of the Committee members proposed to the CEO that ARPANSA public consultation should be planned to be in person, if possible, and open to as much of the community as possible.

The Committee recognised that the ASA has an opportunity to engage with the public through the upcoming public consultation as part of the CIF construction licence, however ARPANSA was yet to receive final consultation material from ASA. ARPANSA had chosen to go to public consultation with the CIF licence application, despite it not being a legislative requirement and ARPANSA noted that all public submissions received would be analysed and used to inform any decision made by the CEO on this application.

7 - Update on Regulatory Assessment Principles (RAPs)

ARPANSA updated the Committee on a set of regulatory assessment principles being introduced to guide ARPANSA's regulatory practice. The document has been shared with Nuclear Powered Submarine Regulatory Design (NPSRD) to see if it could be a joint publication. These RAPs are based on international best practice but have been modified to be Australian specific. The RAPs are to be applied to ionising and non-ionising radiation. A final draft of the RAPs is intended to be shared with the Committee at a later meeting within 2025.

8 - Update on the establishment of the Australian Naval Nuclear Power Safety Regulator (ANNPSR)

The Head of Nuclear Powered Submarine Regulatory Design (HNPSRD) in the Department of Defence updated the Committee on work being conducted by Defence to establish the new ANNPSR as an independent statutory regulator by 1 November 2025, which is the commencement of the *Australian Naval Nuclear Power Safety Act 2024* (the Act). Key activities include the recruiting of the Director General (DG) and Deputy Director General (DDG), and development and approval of ANNPSR's regulations.

The Committee discussed, and had discussed in prior meetings, how the independence of, and oversight over, ANNPSR as established in the Act would work in practice.

9 - Update on ANSTO near miss incident

The Committee was informed of a regulatory review regarding a near miss incident at the ANSTO Health facility. No individuals were harmed during the incident.

A worker incorrectly selected a 4 GBq sample instead of 150 MBq sample when performing a standard work task. This work task was thus carried out on a sample more than 25 times more radioactive than was intended. Microdroplets of the sample were spilled in carrying out the task, which contaminated tools and disposable paper lining in the work area, but did not make contact with the worker. Due to a delayed response in identifying and rectifying the spill, the potential dose that could have been received by a worker, had they been contaminated, would have greatly exceeded occupational dose constraints, and potentially resulted in harm to the worker.

The Committee discussed the incident in the context of the ANSTO Health contamination accident in 2017, when a worker was injured through radiation exposure. Particularly, discussion centred around whether common causes were behind both incidents, and whether ANSTO has continued to implement the lessons learnt from that accident.

ARPANSA informed the Committee of their response to date, including a reactive inspection. ARPANSA will update the Committee on any further action taken.

10 - Update on controlled facilities and inspections

ARPANSA updated the Committee on details regarding the closure of the ANSTO Cold Neutron Source (CNS) replacement to the OPAL reactor. This included final dosimetry, which concluded that doses to workers remained below imposed constraints.

ANSTO was subject to multiple licence conditions relating to the First Reactor Protection System (FRPS) upgrade to the OPAL reactor. One of these licence conditions was met by its end of 2024 deadline. Another licence condition required a comparison of calculations between those calculated for the updated safety instrument systems against those calculated for the version used prior to the upgrade. However, the prior version is no longer supported by the manufacturer, and ANSTO cannot obtain the reliability data for that version needed for the comparison. ARPANSA is considering whether this licence condition is still required or should be withdrawn.

ANSTO's HIFAR reactor has entered Phase A stage 1 of decommissioning. As part of this work, unexpected radioactive contamination was found behind an instrument being removed. This contamination did not result in any significant exposure to workers, with no worker receiving more than 13 µSv.

11 - Other facility updates

ARPANSA received the application for ANSTO's Nuclear Medicine Manufacturing Facility (NMMF) siting licence. A regulatory review of the application has commenced.

There are two expected major submissions. These include the PSSR for ANSTO Health, and a submission from ANSTO to modify flap valves in the OPAL reactor's primary cooling system, and are to be submitted under section 63 of the Australian Radiation Protection and Nuclear Safety Regulations 2018.

12 - ARPANSA's 2023 Safety Culture Assessment

The Committee was informed of the results of ARPANSA's 2023 Safety Culture Assessment. This is ARPANSA's second safety culture self-assessment, with the first conducted in 2019. Action planning informed by the assessment has been taking place.

A [summary report of the 2023 Safety Culture Assessment](#) has been published on ARPANSA's website.

13 - General reports

13.1 - Radiation Health Committee (RHC) update

The RHC met on 19-20 November 2024, and again on 5-6 March 2025. The RHC discussed a range of topics, including: a cost-sharing proposal for the drafting of new radiation protection series (RPS) documents; the status of ongoing drafting of RPS documents relating to radiation gauges, borehole and well-logging, non-medical human imaging, dosimetry service provides, exemption and

clearance of radioactive material, and the safe use of medical radiation; the referral of items from the Environmental Health Standing Committee to the RHC; correspondence received from the Australian Radiation Protection Accreditation Board; and continued discussion on returning items such as medical import permitting, collariums, WorkCover/SafeWork regulation, and the Department of Health and Aged Care Scope of Practice Review.

The minutes of the [RHC](#) meetings are available on ARPANSA's website.

13.2 - Radiation Health and Safety Advisory Council (RHSAC)

RHSAC last met on 21 November 2024. The Council discussed industry workforce challenges, a letter received regarding national collaboration, updating the Skin Cancer Register working group, non-ionising radiation and PhD work on cosmetic injuries. The council approved the publication of the ARPANSA's *Code for Radiation Protection in Dental Exposure* (RPS C-7) which replaces the older *Code of Practice and Safety Guide for Radiation Protection in Dentistry* (RPS No. 10). The next meeting of Council is scheduled for April 2025.

The minutes of the [RHSAC](#) meeting are available on ARPANSA's website.

14 - Information on nuclear safety matters and regulatory activities

The Committee noted the item.

15 - Meeting close

The next meeting of the NSC is scheduled for 2-3 July 2025 (noting this was subsequently rescheduled to 29–30 July 2025).