



Nuclear Safety Committee

Meeting Minutes

Date: Friday, 10 June 2022

Location: Level 3, 38-40 Urunga Parade, Miranda and via Microsoft Teams

Chair: Dr Tamie Weaver

Members: Ms Fay Bellis, Mr Ian Drinnan, Ms Jasmin Diab, Mr Tony Irwin, Dr John Loy (via video), Mr Cameron MacPhail, Mr Stuart Parr, Dr Peta Miller (via video), Mr Peter Wilkinson, Dr Joanna Wriedt

Secretariat: Mr John Ward, Mr Scott Muston

Apologies: Dr Gillian Hirth

Invitees: Mr Jim Scott, Mr Vaz Mottl (Item 2.2-3.3), Mr Andrew McCormick (Item 2.1), Dr Rick Tinker (Item 4.3)

Observers: Nil

1. Introduction

Item 1.1 Acknowledgement of Country Jim Scott

ARPANSA provided an Acknowledgement of Country to open the meeting at 10:00.

Item 1.2 Attendance and Apologies Chair

Dr Gillian Hirth was an apology for this meeting, Mr Jim Scott attended as the Lead ARPANSA representative.

Item 1.3 Declaration of Potential Conflicts of Interests Chair

Two potential conflicts were declared ahead of this meeting.

The conflicts relate to an ARPANSA licence holder, ANSTO, who has awarded a contract to a company for work in relation to its proposed new radiopharmaceutical manufacturing facility. The company has subcontracted some of the work out to other entities. Two Committee members are currently working on the project within the entities that are undertaking the subcontracted work.

ARPANSA is reviewing the matter and will decide how best to manage the declared interests in future meetings. For this meeting, it was decided the members did not need to recuse themselves or be excluded from any of the agenda items.

Previously declared conflicts of interest are maintained by the secretariat.

Item 1.4 Minutes of the previous meeting **Chair**

Draft minutes of the 25 February 2022 meeting were emailed to members, member comments were addressed. The minutes are published on the ARPANSA Website.

Item 1.5 Meeting dates **Chair**

The following dates have previously been confirmed:

- NSC22-03 Friday, 21 October 2022
- NSC23-01 Friday, 10 February 2023

The following meeting date was proposed and agreed to at this meeting:

- NSC23-02 Friday, 2 June 2023

Item 1.6 Safety/Security Moment **Chair**

The NSC secretariat presented the safety moment on group decision making using a charity sporting event during a severe weather event as a case study.

The committee discussed the different biases that were present in this scenario and how the committee needs to be mindful of these and other factors when considering advice and decisions on nuclear safety. The benefit to have diversity, a safe environment to speak and to consider alternative viewpoints or positions was highlighted.

Item 1.7 Outstanding Actions **Chair**

The Committee noted that all outstanding actions were completed.

Item 1.8 Correspondence **Chair**

The Committee noted that no correspondence was sent or received.

2. Main Items for Discussion

Item 2.1 Convention on Nuclear Safety - Draft Report for Australia **Andrew McCormick**

The Convention on Nuclear Safety (CNS) was ratified by Australia in December 1996. The aim of the convention is to commit participating states operating land based nuclear installations to maintain a high level of safety by setting international benchmarks to which members states would subscribe. The Convention is based on the common interest to achieve higher levels of safety that will be developed and promoted through regular review meetings.

Australia does not have any nuclear installations (under the definition used by the CNS). The content of the Australian Reports provides details related primarily to the OPAL and HIFAR research reactors and how the obligations under the CNS are met. The committee discussed the benefits of the continued Australian commitment to the CNS by reporting on these activities and observed this is a good practice adopted by

Australia and other non-nuclear power countries that operate research reactors or are involved in uranium mining.

The committee was provided a presentation on the main items within the Joint 8th and 9th Country Report for Australia for the March 2023 Convention on Nuclear Safety meeting. The report is in draft format and after feedback is consolidated will undergo a final review by the CEO of ARPANSA in Quarter 3 of 2022.

The Committee noted the content of the presentation and members agreed to provide comments on the draft report by 17 June 2022.

Item 2.2 Opal Riser updates

Vaz Mottl

The committee was provided with updates on the OPAL riser defect and potential engineering solutions to rectify the issue. The Committee had discussed this defect, which includes weld cracks in the riser, at its past four meetings.

In compliance with a special licence condition, ANSTO inspects the OPAL riser cracks periodically. The visual inspections search for new cracks, observe known cracks and check for propagation. External surfaces at the bottom of the riser, all external surfaces of the riser and internal surfaces with identified cracks are inspected in monthly, three-monthly, and six-monthly intervals, respectively.

The reports of the visual inspections over the period since the last NSC meeting in February 2022 showed that no defects have grown since they were first observed in November 2020 and May 2021 and no new cracks have been identified. Based on these results, ANSTO proposes that the inspection of the riser external surfaces, currently conducted every three months, be carried out on a six-monthly interval. There are no proposed changes to the frequency of the other inspections.

The committee discussed this proposal based upon information relayed via ARPANSA. Whilst ANSTO were using a multi-legged argument regarding the continued safety, several aspects of the investigation are interrelated and may not be truly independent. It was not clear how the individual legs are being considered separately, and on balance provide reasonable assurance of safety. The committee considered that the fracture mechanics was still not sufficiently understood to balance the risk and benefits of a change to the inspection frequency. Therefore, the Committee concluded that monitoring crack growth remains a key input for ARPANSA regulatory decisions and it is important for ARPANSA to articulate what it needs from ANSTO when considering the request for approval of a reduction to the frequency of inspections.

3. Update on major Controlled Facilities and Inspections

Item 3.1 Periodic Safety and Security Reviews

Vaz Mottl

The Committee was provided with an update on progress of the Periodic Safety and Security Review for OPAL. ARPANSA has awarded a contract to Frazer-Nash Consultancy (FNC) through AusTender to carry out a high-level review of the OPAL Periodic Safety and Security Review. FNC has now initiated their review and it is expected to be finalised within 3 months. ARPANSA will independently review the ANSTO submission and use the FNC report to focus further detailed assessment into areas identified by FNC, utilising in-house ARPANSA resources.

The Committee discussed and noted this item.

Item 3.2 ANSTO Health Products & ANM**Vaz Mottl**

The Committee was provided with an update on ANSTO Health Products & ANM.

The Committee was provided an update on the progress of an Implementation Plan developed to address the findings on a 2018 independent review of safety at ANSTO Health Products. ANSTO was directed to undertake the review by ARPANSA following a workplace contamination accident and other safety incidents. The implementation plan was developed to address more than 80 recommendations from the independent review. ANSTO reports on progress in implementing corrective actions on a six-monthly basis with the last report being provided in January 2022. ARPANSA is now focussing on the sustainability of the actions and their ongoing effectiveness to ensure that the improvements become properly entrenched. This has now been incorporated into the regulatory inspection program. ARPANSA will produce an assessment report to summarise the regulatory outcomes from the implementation plan. The conclusion of the ARPANSA review will be presented to the CEO ARPANSA and an update on the outcomes will be provided to the Committee at its October meeting.

Following a notification from ANSTO, ARPANSA has been monitoring an issue regarding the seepage of rainwater into a conduit housing a pipeline that will be used for the transfer of liquid intermediate level radioactive waste from the ANSTO Nuclear Medicine (ANM) facility to the ANSTO SyMo waste processing facility. The SyMo facility is currently being constructed and is not in operation. This system consists of three stainless-steel pipes (200% redundancy) laid in a stainless-steel drip tray within a concrete conduit which is where the identified issue originates.

The conduit has experienced issues with water ingress from the surrounding ground, however, the integrity of the transfer pipe itself seems to be unaffected.

ARPANSA is overseeing ANSTO's work in reviewing options to rectify the issue of water entering the conduit.

The Committee noted this update.

Item 3.3 Other updates**Vaz Mottl**

The Committee was provided an update on other regulatory activities undertaken by ARPANSA including inspections, enforcements, and licencing.

The Committee noted this update.

4. Reports**Item 4.1 ARPANSA significant Activities****Jim Scott**

The Committee was provided an update on significant ARPANSA activities. This included:

- Recruitment activities undertaken by ARPANSA and other nuclear agencies in Australia
- Shortage of nuclear talent broadly within Australia and options being considered such as a shared graduate program between nuclear agencies to develop talent

Planning is underway for the International Atomic Energy Agency (IAEA) Integrated Regulatory Review Service (IRRS) follow-up mission with is scheduled for 2023. ARPANSA is preparing to consolidate the

Advance Reference Material (ARM) which summarises the actions taken and supporting evidence to address the recommendations and suggestions from the November 2018 Mission. This is a significant undertaking and needs coordination across ARPANSA, all jurisdictions through the Environmental Health Standing Committee (enHealth) and with the Department of Industry, Science, Innovation, Energy and Resources (DISER).

The Committee noted the items presented.

Item 4.2 Radiation Health Committee Fay Bellis

The Committee was provided a summary of the recent activities of the Radiation Health Committee.

Minutes of the Radiation Health Committee meetings can be downloaded from the [ARPANSA website](#).

Item 4.3 Radiation Health and Safety Advisory Council Rick Tinker

The Committee was provided a summary of the recent activities of the Radiation Health and Safety Advisory Council.

Minutes of the Radiation Health and Safety Advisory Council meetings can be downloaded from the [ARPANSA website](#).

Item 4.4 Member of Public Update Joanna Wriedt

No issues or submissions were received.

5. Other Business

Item 5.1 Licence Holder Forum John Ward

The Committee was provided an update on the ARPANSA Licence Holders Forum held at Australian National University, Canberra on the 25th of May 2022 which was attended by 78 delegates. The forum is a key stakeholder engagement activity for ARPANSA that allows useful multi-direction communication and networking. This year's forum focussed on radioactive waste management. Information on the forum will be published on the ARPANSA website.

The Committee noted this update.

Item 5.2 Regulatory Guide – Radioactive Waste John Ward

John Ward provided an overview of the principles and approaches being introduced into the revised regulatory guide on radioactive waste and the core basis of the process being linked back to the ARPANS Regulations. The objectives of the revised guide are to:

- Improve the quality of applications and regulatory assessment
- Assist with mutual understanding of requirements and expectations between applicants and ARPANSA assessors
- Improve the clarity of regulatory expectations
- Describe and inform how ARPANSA makes decisions

The Committee noted the updated and will be requested by ARPANSA to review the draft guide out of session prior to the October meeting.

Item 5.3 Ukraine Update

Tony Irwin

The Committee was provided a presentation on the status of nuclear power plants and sites within Ukraine.

The Committee noted this update.

6. Information on Nuclear Safety Matters and Regulatory Activities

Item 6.1 International Engagement Reports

The Committee noted the item.

Item 6.2 Public consultation and publications

The Committee noted the item.

7. Closure and Next Meeting

The meeting closed at 15:45 and the next meeting is scheduled for 21 October 2022.