



Nuclear Safety Committee

Meeting Minutes

- Date:** 22 June 2018
- Location:** Level 3, 38-40 Urunga Parade, Miranda
- Chair:** Dr Tamie Weaver
- Members:** Ms Fay Bellis, Mr Ian Drinnan, Mr Tony Irwin, Dr Carl-Magnus Larsson, Dr John Loy, Mr Stuart Parr, Mr Don Macnab, Mr Peter Wilkinson, Dr Joanna Wriedt
- Secretariat:** Mr Chris Nickel
- Apologies:** Ms Kerrie-Anne Christian
- Invitees:** Mr Jim Scott, Ms Francesca Wigney, Mr Vaz Mottl
- Observers:** None

1. Introduction

Item 1.1 Attendance and Apologies

Meeting commenced at 10am.

Ms Kerrie-Anne Christian was an apology for this meeting. All other members were present.

Item 1.2 Passing of Dr Rob Lee AO

Dr Rob Lee AO, a member of the Committee, passed away peacefully on 27 April 2018. The Committee remembered Rob as a highly dedicated professional in the area of human factors and systems safety with a distinguished career in the aviation safety industry, among other areas. Rob had served the Committee with distinction for a period of 18 and a half years and made a significant contribution to ARPANSA's work. Rob's insights to human factors and systems safety informed a number of significant regulatory decisions during this time and his contributions will be sorely missed. The Committee paused for a moment of silence to reflect on the life and work of Rob Lee.

Item 1.3 Declaration of Potential Conflicts of Interests

No potential conflicts were declared at this meeting. Previously declared potential conflicts of interest are maintained by the Secretariat.

Item 1.4 Minutes of the previous meeting

Draft minutes of the previous meeting were circulated to members following the meeting. Member comments were addressed and the minutes have been agreed and published online.

Item 1.5 Meeting dates

The following meeting dates were confirmed and reviewed at the meeting:

- 2 November 2018
- 15 March 2019
- 21 June 2019

Item 1.6 Safety/Security Moment

A Committee member presented on human factors in the processing of uranium.

2. Business Arising

Item 2.1 Outstanding Actions

The Committee noted that all outstanding actions were completed.

3. Correspondence

Item 3.1 Incoming Correspondence

None.

Item 3.2 Outgoing Correspondence

None.

4. Main Items for Discussion

Item 4.1 Human Factors in Design

A Committee member provided an overview of Human Factors considerations in design.

Item 4.2 Human Factors and Critical Controls

A Committee member provided an overview of Human Factors considerations for operation, including the effective monitoring of controls.

(The agenda item originally tabled as item 4.3 'risk assessment' was included in item 5.1)

5. Update on major Controlled Facilities and Inspections

Item 5.1 ANSTO Health (tabled as 5.2 in the agenda)

The Committee was informed of ARPANSA's regulatory activities related to ANSTO Health.

The Committee was previously provided with information on an event that occurred in August 2017, which involved radiation exposure and health effects to an ANSTO staff member. ARPANSA undertook an investigation, including conducting an inspection focusing primarily on the human and organisational factors which may have contributed to the event. Non-compliances were identified with regulations 46 and 48 for failing to take actions to prevent accidents and for exceeding an annual dose limit. As a result of the accident, a special report was prepared and submitted to Parliament by the CEO in February 2018, providing information on the radiation overexposure and the follow up investigation.

ARPANSA provided the Committee with a review of regulatory activities associated with the event and investigation. ARPANSA presented a report on identified lessons to be learned in the regulatory management of future events and accidents, including increased focus on licence holders' risk assessments. The Committee discussed and agreed with the main points made in this report.

ANSTO has undertaken a risk assessment of the high hazard/risk processes at ANSTO Health Building 23 in order to identify specific hazards which might be eliminated or substituted and situations where the residual risks can be reduced. An updated risk assessment was recently submitted to ARPANSA, and was provided to the Committee.

Action: Five Committee Members were selected to review the ANSTO Health high hazard/risk assessment and provide comments to ARPANSA.

The Committee was provided with information on an event that occurred in March involving significantly higher activity concentration of material being dispensed for Quality Control purposes than was intended. This event did not involve any significant radiation exposure to any individuals. Following this event, an augmented inspection was carried out which found that some of the lessons learnt were not effectively implemented. A potential non-compliance with regulation 49 was identified by ARPANSA as part of this process.

The Committee was also provided with information on an event, which occurred in June at ANSTO Health. This event involved the spill of material contaminating the floor and a workers clothing. However, there was no significant radiation exposure to any individual. The event was assessed under the IAEA International Nuclear and Radiological Event Scale (INES), which categorises events on a scale of 0 to 7; where 7 is the most serious type of event. This event was categorised as INES level 1 due to the potential to result in significant radiation exposure to an individual.

The Committee considered that systemic issues including insufficient consideration of human factors in risk assessment, workflows and design might have contributed to these events.

The CEO of ARPANSA informed NSC that he intends to issue a direction in light of the recent series of events. This direction would require an external independent review of ANSTO Health processes and procedures associated with quality control of Molybdenum-99. The Committee discussed in detail the use of a direction and the requirements of the direction. The members in attendance unanimously endorsed ARPANSA's enforcement approach, including issuing a direction, in relation to the events in Building 23.

Item 5.2 **OPAL** (tabled as 5.1 in the agenda)

The Committee was provided with an overview of the ANSTO OPAL reactor regulatory performance, applications and assessments since the last NSC meeting. No significant regulatory issues or concerns were raised among Committee members. This included the recent assessment and approval of a Regulation 51 to allow the OPAL reactor to achieve its design power of 20 MW.

At the previous meeting, the NSC inquired whether interlocks were in place to ensure that transport casks cannot be traversed above the reactor. The Committee was informed that an electronic interlock was in place, which prevents the cask from traversing this region.

Item 5.3 **Other Facilities**

The Committee noted the update on other regulatory activities, including that the ANSTO Nuclear Medicine Mo-99 Facility operating licence was issued, with conditions. No significant regulatory issues or concerns were raised among Committee members.

6. Reports

Item 6.1 **ARPANSA significant Activities**

ARPANSA's significant activities were discussed in the following items:

Item 6.2 **Integrated Regulatory Review Service (IRRS) Mission**

The Committee was provided with a brief overview of the upcoming IRRS mission in November 2018.

Item 6.3 **Regulatory Performance Framework (RPF)**

The committee was provided with a brief overview of the upcoming annual self-assessment in July 2018.

Item 6.4 **Radiation Health Committee (RHC)**

The Committee noted there were no RHC meetings held since the previous NSC meeting. Minutes of the Radiation Health Committee meetings can be downloaded from the [ARPANSA website](#).

Item 6.5 **Radiation Health and Safety Advisory Council (RHSAC)**

The Committee noted there were no RHSAC meetings held since the previous NSC meeting. Minutes of the Radiation Health and Safety Advisory Council meetings can be downloaded from the [ARPANSA website](#).

7. Other Business

Item 7.1 Review of Roles and Expectations of Advisory Bodies

NSC reviewed and endorsed the revised document 'Roles and Expectations of Advisory Bodies'.

8. Information on Nuclear Safety Matters and Regulatory Activities

Item 8.1 Travel Reports

The Committee noted the item.

Item 8.2 International and national drafts for Comment

The Committee noted the item.

9. Closure and Next Meeting

The next meeting will be held on 2 November 2018.

Meeting Close 16:00.