



Summary of the meeting held on 1 May 2009

ARPANSA – Miranda Campus

OPENING OF MEETING AND CONFIRMATION OF THE MINUTES

All Members were present with the exception of Dr Rob Lee, and Professors Rob Melchers and Ian Polmear who had tendered their apologies.

The Chair welcomed Members to this the first meeting of the fourth triennium of the Nuclear Safety Committee. The minutes of the previous meeting were noted without amendment.

CORRESPONDENCE

There was no correspondence other than that relating to individual members' appointments.

BRIEFING ON NUCLEAR SAFETY IN THE CONTEXT OF THE ROLE OF ARPANSA AND ITS STATUTORY RESPONSIBILITIES

Licence assessment

The Committee discussed current and past licensing issues relating to ANSTO including OPAL, HIFAR and Moata. Under the ARPANS Act, the CEO of ARPANSA was required to take international best practice (IBP) in radiation protection and nuclear safety into account when assessing a licence application and deciding whether or not to issue a licence. The process of considering IBP in radiation protection and nuclear safety was spelt out in the CEO's statement of reasons for issuing a licence to construct the Open Pool Australian Light Water (OPAL) research reactor and when issuing a licence to operate the OPAL research reactor.

The CEO's approach to considering international best practice in radiation protection and nuclear safety was affirmed by the Federal Court of Australia following an action taken by Greenpeace Pacific Ltd to challenge the lawfulness of the decision to issue a construction licence for OPAL in April 2002.

Nuclear power

Members of the Committee surmised that if Australia were to adopt nuclear power, it was unlikely that a nuclear power reactor would be of a unique design. Constitutional issues relating to the appropriate regulator would need to be solved as would prohibitions against the construction and operation of this type of nuclear installation currently contained in the ARPANS Act.

OPAL

ANSTO had developed a site wide safety management system and within that system, the OPAL reactor operated under its own business management system.

A condition of the facility licence authorising the operation of the OPAL reactor required ANSTO to revise and update the Safety Analysis Report within two years of the commencement of operation. Although OPAL was still considered to be in Stage C commissioning, ANSTO had already commenced some review work on the Safety Analysis

Report. The Committee considered that ageing management issues could be discussed in the Safety Analysis Report and then updated during the life of the facility.

BRIEFING ON THE SCOPE OF NUCLEAR REGULATION CURRENTLY UNDERTAKEN BY ARPANSA

Nuclear reactor installations

The Committee was briefed on issues arising from ARPANSA regulation of ANSTO nuclear reactor facilities including:

- An update on the light water leak into the heavy water. This problem only affected the efficiency of the reactor operation and did not impact on safety. Several solutions had been attempted and a heavy water isotopic purification system was proposed and was being assessed by ARPANSA.
- Some category 2 and 3 instruments were out of calibration. A program of work was in place to ensure that all instruments were calibrated. Members noted that all category 1 safety instruments relied upon in the OLCs were appropriately calibrated.
- The HIFAR reactor was shut down and had been de-fuelled and all of its heavy water removed. A facility licence authorising ANSTO to possess and control the facility was in place.
- The Moata reactor had been under a care and maintenance regime since May 2001. All supporting systems had previously been removed. ANSTO was proposing to undertake further dismantling of the remaining reactor block in the short term subject to ARPANSA approval.
- The Committee discussed OH&S issues that could arise from the dismantling of ANSTO reactors such as disposal of non-radioactive hazardous waste (e.g. asbestos) associated with the reactors, a matter within the jurisdiction of Comcare.

Non-reactor nuclear installations

The Committee was updated on ARPANSA regulation of non-reactor nuclear installations including:

- ANSTO Radiopharmaceuticals and Industrials (ARI)
- ANSTO Waste Operations
- ANSTO Fuel Operations

Some of the topics that the Committee discussed included:

- Radioactive waste storage issues;
- Dosimetry and health physics at ANSTO, particularly in relation to incident reporting and investigation; and
- The role of the Criticality Officer, and where that person fitted into the ANSTO Safety Committee structure.

CURRENT INTERNATIONAL ISSUES IN NUCLEAR SAFETY

ARPANSA perspective

The Committee was updated on international issues of relevance including:

- France was constructing the Jules Horowitz research reactor and the Netherlands was undergoing a tender process for the construction of a new research reactor (PALLAS) to replace the 45 MW High Flux Reactor at Petten.
- The third review meeting on the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was scheduled for Monday 11 May 2009 in Vienna. Professor Peter Johnston of ARPANSA would head the Australian delegation.
- Several meetings of the IAEA Safety Standards Committees including those related to safety, transport and waste were scheduled for the upcoming months and ARPANSA staff would represent Australia on those Committees.

POSSIBLE SCOPE OF THE PROGRAM FOR NSC OVER THE NEXT THREE YEARS

Discussion

The Committee discussed possible areas that NSC could consider over the next triennium including:

- Ongoing advice on assessment of important issues related to nuclear safety including integrated management systems, incident reporting, human factors and status of training and professional development
- Criticality issues.
- The proposed national radioactive waste management facility.
- Stakeholder involvement and public acceptance of the nuclear licence review process.
- Waste storage and disposal, including the return to Australia of spent fuel reprocessed overseas.
- Standardising nuclear terminology.

REPORTS

General Report from the CEO

Mr Burns advised of several issues of interest to the Committee including:

- That he had been appointed the Acting CEO of ARPANSA following Dr Loy's resignation (effective from 28 November 2008) pending recruitment of a new CEO.
- The 56th session of UNSCEAR in Vienna in July 2008 finalised five annexes relating to exposure to ionizing radiation.
- ICRP Committee 4 met in Dublin in September 2008 and finalised two documents relating to the protection of populations.
- The 25th meeting of Commission on Safety Standards took place in Vienna in April with the main focus being the continued review of Basic Safety Standard 115.

Report on Council – Meeting of 27 February 2009

Members noted the tabled [web summary](#) from the previous Council meeting.

Report on RHC – Meetings of 19-20 November 2008 and 18-19 March 2009

Members noted the [web summary](#) from the November RHC meeting and the agenda from the [March 2009 meeting](#).

CLOSURE AND NEXT MEETING

The next meeting was scheduled for Friday 9 October 2009 at Miranda.