



SUMMARY OF MEETING OF 8 AUGUST 2008

OPENING, ATTENDANCE, APOLOGIES & CONFIRMATION OF MINUTES

Council met at ARPANSA's Yallambie Office on 8 August 2008. Em Prof Ian Lowe, Dr Graeme Dickie, Ms Trish Worth, Mr Ian Sawyer could not attend the meeting. Council also noted that Dr Jezukaitis had resigned from Council following the last meeting. All other members were present. The minutes were confirmed without amendment.

REPORT ON REVIEW OF THE EFFICIENCY AND EFFECTIVENESS OF THE NATIONAL DIRECTORY FOR RADIATION PROTECTION, EDITION 1 (NDRP)

The Chair outlined the process undertaken by Council to review the NDRP, noting that the Consultant had provided his report at Council's April meeting and since that time the report had been circulated to all jurisdictions to allow them to confirm that the factual material for their jurisdiction was correct. The final report had then been received on 24 June 2008. Council reviewed the draft advice to the CEO and the covering letters to the CEO and to RHC.

Council agreed to make amendments to note that while the NDRP process was the best that could be achieved at the time, it was not necessarily the most efficient process, and that the model should be reviewed at an appropriate time, to ensure that more efficient regulatory processes for improving uniformity can be developed in the future. Council also noted that one factor affecting the efficiency of the process is the changes to the regulatory impact assessment system that have occurred since NDRP was published, which has resulted in times to produce changes being lengthened.

Council agreed that these points would be included in the draft and the revised version of the advice and letters would be circulated for review by members before being finalised.

MANAGEMENT AND DISPOSAL OF LONGER-LIVED INTERMEDIATE LEVEL RADIOACTIVE WASTE (ILW)

Mr Geoff Parsons, ANSTO and Dr Geoff Williams, ARPANSA attended for this item. The Chair noted that Council had been requested to review Recommendations 3 and 9 of its 2002 advice to the CEO. The information circulated included a summary of international guidance on radioactive waste and a summary of management approaches in place or planned in nine selected countries. Council noted that in nuclear power countries, high level waste (HLW) was the main concern and proposals for managing HLW usually included provision for ILW to be co-located. RHC work to develop proposals on classification of waste was described. These would be based on DS390, but would include both operational and disposal aspects. Council noted the type and annual arising of ILW, and that the first waste from reprocessing of HIFAR spent fuel was expected to return to Australia from 2013-2015.

Council was advised of the work of IAEA's Waste Safety Standards Committee (WASSC) and in particular the generic safety assessment that is to be an Annexe of the Safety Guide on Borehole Disposal. The IAEA Safety Assessment Driving Radioactive Waste Management Solutions (SADRWMS) program was also described, including the SAFRAN software tool.

Council noted the need for Australia to gain further expertise in safety assessment and safety case development for radioactive waste facilities and in the development of waste acceptance criteria, and agreed that international collaborations with relevant countries could be an effective approach to this issue.

Council agreed that despite public perception, the transport of radioactive waste was managed safely. UNSCEAR figures indicated that there were no transport accidents with significant consequences reported.

Council discussed the outline of the proposed report and agreed that the Secretariat would prepare a draft report taking account of the points raised by members.

PUBLICATION OF SAFETY GUIDES

Council recommended that the CEO adopt the following five Safety Guides:

Safety Guide on Management of Naturally Occurring Radioactive Material (NORM)

Safety Guide on Radiation Protection in Interventional and Diagnostic Radiology

Safety Guide on Radiation Protection in Nuclear Medicine

Safety Guide on Safe Transport of Radioactive Material

Safety Guide on Predisposal Management of Radioactive Waste

CURRENT RADIATION PROTECTION ISSUES IN VICTORIA

Dr Brad Cassels, Expert Advisor Radiation and Mr Noel Cleaves, Acting Manager, Legionella & Radiation Safety, Department of Human Services attended the meeting to give an overview and outline current issues associated with radiation protection in Victoria.

Council was advised that the objectives of the Radiation Safety Section (RSS) in Victoria were to minimise the health impact of radiation while still allowing the beneficial use of radioactive material and devices through appropriate legislative controls, as well as ensuring that radiation is used in a safe and responsible manner.

New Victorian radiation legislation came into effect on 1 September 2007 with the implementation of the *Radiation Act 2005* and *Radiation Regulation 2007*. The Act was drafted to give effect to the ARPANSA *National Directory for Radiation Protection Ed.1 (NDRP)*. This legislation replaced Part V of the *Health Act 1958* and the *Health (Radiation Safety) Regulation 1994* respectively.

The main changes to the legislation were outlined, and it was noted that there are now much harsher penalties that apply for breaches of the Act. Exemptions from the legislation will now be published in the Victorian Government Gazette and made public via their web site.

The challenges that have arisen with the new legislation included matching of the definitions in the NDRP with Victorian Act, and the complexity of moving data from a registration to a licensing system.

Current and future work by the RSS includes renewing and reshaping the existing approach to the licensing of transport related issues, review of the disposal of radioactive material, working with ARPANSA and Queensland Health on the national register of sealed sources, implementation of the Security Code, monitoring of the testing of diagnostic X-ray equipment against newly developed radiation safety standards, and developing and implementing better field inspection protocols based on auditing principles.

Council noted that the Victorian RIS on regulation of solaria was expected to be released for public comment soon. Council thanked Mr Cleaves and Dr Cassels for the presentation.

COUNCIL TRIENNIUM REPORT

Council reviewed the draft triennium report, noting a number of suggestions for editorial changes.

REPORT FROM THE CEO

The CEO informed Council of the following matters:

OPAL Reactor: The issue with the fuel plates has been finalised, with the design of new fuel from France being approved by ARPANSA. Subsequently, the modification of existing fuel was approved and the French manufacturer came to Australia to make modifications. However, an earlier problem with light water seeping into the heavy water in the reflector vessel has reappeared with the previous repair apparently not being successful. ANSTO are currently investigating how to rectify the problem. This is not a safety issue but a performance one with the efficiency of the reactor being reduced. .

Neutron Beam Instruments: Commissioning of the neutron beam instruments has been occurring at ANSTO. The major safety issue during commissioning is ensuring that the shielding (or administrative measures) achieve the target dose rates for users of the instruments.

Molybdenum production: ANSTO have submitted an application for the irradiation of uranium targets for production of molybdenum. A new process for molybdenum extraction must be commissioned and approved by both ARPANSA and TGA before production can start.

HIFAR: Before decommissioning can take place, the reactor needs to be put into a state of “safe storage” for approximately 10 years. ARPANSA will need to issue a licence to ‘possess and control’, which will require approval of refurbishment and dismantling of non-radioactive systems and the characterisation of the remaining systems.

Other Issues: The CEO outlined the licence holder forum that was held in Melbourne on 12 June 2008. The CEO also gave a brief overview of international meetings that have taken place. These included the fourth review meeting on the Convention on Nuclear Safety, IAEA Commission on Safety Standards meeting with discussion on NORM and uranium mining and an initial revision of the Basic Safety Standards. He also reported on a visit to the NRC in the USA and noted the proposed construction of more nuclear power plants and the assessment of the proposed repository for high level waste at Yucca Mountain Nevada. Council was also informed of WHO work on radiation in medicine, the Interphone study, and the Talisman International report on lessons learned following the regulatory issues over the NRU reactor in Canada.

COMMITTEE REPORTS

Report from the Radiation Health Committee (RHC)

Council was advised that RHC met on 16-17 July 2008 and had discussed amendments to the NDRP, solaria regulation, a chiropractors' code, the ELF Standard, a safety guide for schools on ionizing radiation and lasers, and the Australian Radiation Incidents Register. RHC had also decided to replace the Cabinet Code and X-ray Analysis Code with equipment standards in NDRP, and held a teleconference with TGA to obtain information on their approach to regulation of intense pulsed light (IPL) devices. Representatives from Government Skills Australia (GSA) attended the meeting to discuss progress in developing competencies for radiation protection. A working group was established to work with GSA.

Report from the Nuclear Safety Committee (NSC)

Council noted the Secretariat notes on the NSC meeting.

OTHER BUSINESS

Information from UNSCEAR

Council was informed that at its July 2008 meeting, UNSCEAR had finalised five new Annexes for publication. These related to health effects from the Chernobyl accident, exposures to the public and workers from various sources of radiation, effects of ionizing radiation on non-human biota, radiation exposures in accidents and medical radiation exposures. He also advised the Council of discussions on UNSCEAR's future work program. The next cycle of work was expected to include energy production, risk estimates, methodology for estimating discharge concentrations, a summary of biological effects, and improving data collection.

CLOSURE AND NEXT MEETING

The Chair thanked Council members for the productive work undertaken during the triennium, and commented members could be proud of the significant number of reports prepared during their term of office.. The Chair also thanked in particular those members who were not intending to seek re-appointment.

The CEO echoed those remarks and thanked the Chair, noting that her contribution had been important for Council.