



Summary of the meeting held on 17 June 2005 **ARPANSA – Miranda Campus**

OPENING OF MEETING

All Members attended with the exception of Professor Marcela Bilek and Dr John Loy who had tendered their apologies.

CONFIRMATION OF THE MINUTES OF THE MEETING OF 25 FEBRUARY 2005

The minutes of the previous meeting were confirmed with minor amendments.

REPORT FROM WASTE MANAGEMENT WORKING GROUP

The Committee was briefed on the progress of the WG to date. Replies to questions put by the WG had been received from ARPANSA and ANSTO. The visit to ANSTO on the previous day had enabled the WG to resolve some outstanding issues and the WG was in the position to commence drafting its report to the CEO.

In preparing the report, the WG would need to consider specific issues relating to waste management including:

- Supercompaction of waste;
- The possibility of reducing waste by running the reactor at lower power;
- The potential use of Synroc for long term storage of waste;
- The airborne release of noble gases from molybdenum production;
- Long term storage and transport of spent fuel and radioactive waste; and
- Australian Government Waste repository and the intermediate level waste store.

The WG tabled a proposed outline for the report and would commence preparing its report following the meeting. A draft report would be ready for Committee discussion at a proposed extraordinary meeting of the NSC on 22 July 2005.

REPORT FROM CONDUCT OF OPERATIONS WORKING GROUP

Two important considerations for the Conduct of Operations WG were:

1. The delegation of responsibilities within the ANSTO organisational structure; and
2. The functions and responsibilities in the safety management systems for the OPAL reactor.

Information on these issues would be obtained from Part B and Chapter 13 of the SAR and chapter 12 on operational radiation safety and compared with the requirements of IAEA document DS272.

ANSTO were still in the process of developing a large amount of detailed information but the WG had noted that similar systems, such as incident reporting to both ARPANSA and the IAEA, competencies and training, were already in place for the operation of HIFAR.

DS272 was still considered to be the “best practice” document for the reactor although it was very general in its reference about structure and staff training.

An outline for the report was proposed and the WG would commence preparing its report following the meeting. A draft report that would highlight specific issues such as incident reporting systems, devolution of responsibilities within the organisation, staffing structures and radiation safety committee structures would be ready for Committee discussion at a proposed extraordinary meeting of the NSC on 22 July 2005.

OPAL REACTOR COMMISSIONING PROCESS – BRIEFING

ANSTO representatives briefed the Committee on the construction and commissioning of the OPAL reactor. ANSTO staff and INVAP staff would work together during all phases of construction and commissioning including pre- and post-implementation at the project phase, the plant level system phase and the specific inspection and test phases.

The four commissioning stages would be:

Stage A – cold commissioning: This stage would be done without fuel and was designed to test protection and control systems. Integrated system tests would be carried out on each of the operational reactor states – power, physics test, shutdown and refuelling.

The remaining stages would be contingent on the issue of a licence to operate the reactor as each stage required fuel in the reactor.

Stage B1 – hot commissioning: Currently planned for May 2006, this stage involved part fuel core loading and the first approach to criticality.

Stage B2 – hot commissioning: Currently planned for June 2006, the reactor would be run at low power (<400 kW) but with a full fuel load. This stage would provide first and second shutdown system tests, reactor shielding measurements and a loss of normal power test.

Stage C – hot commissioning: Currently planned for July 2006, this is the power ascension stage, with the reactor running up to full power in steps with testing at 1, 3, 5, 10, 15 and 20 MW. This stage would confirm reactor thermal-hydraulic parameters, test the performance of systems, test the consequences of loss of normal power, allow radiation surveys to be done and test the irradiation facilities.

Personnel from both INVAP and ANSTO would be involved with the commissioning of the reactor and ANSTO personnel would carry out the operation of the reactor once it was commissioned.

UPDATE BRIEFING ON THE DECOMMISSIONING OF HIFAR

The Committee was advised that proposals to decommission HIFAR were being considered by the ANSTO Board and, as such, the Committee could not be briefed on the issue. The Committee requested a briefing on this issue at its October meeting.

REPORTS

General Report from the CEO

Members noted the tabled report on the **Status of Regulation of the OPAL Research Reactor**.

Report on Council – Meeting of 13 April 2005

Members noted the tabled Web summary from the previous Council meeting.

Report on RHC – Meeting of 9-10 March 2005 and provisional agenda for the meeting of 20-21 July 2005

Members noted the tabled Web summary from the previous RHC meeting.

Findings of and proposed actions to deal with the ANAO audit report

The Committee was briefed on the process to deal with the ANAO report on ARPANSA. The first stage involved a detailed review of ARPANSA's regulatory processes and included consultation with ARPANSA's stakeholders, followed by an assessment of the submissions and redesigning ARPANSA's regulatory business where appropriate.

The final stage would entail implementation of agreed recommendations including changes to policy, training of staff and evaluation of the new processes.

Monthly briefings were provided to the parliamentary secretary and to the Prime Minister's Office.

CLOSURE AND NEXT MEETING

The next meeting would be an extraordinary meeting to finalise the reports of the two WGs scheduled for 22 July 2005. The next ordinary meeting of the NSC was scheduled for Friday 14 October 2005.