



## NUCLEAR SAFETY COMMITTEE

### Summary of the meeting held on 5-6 July 2001

#### **ATTENDANCE**

All members, with the exception of Dr. Lee who was issued a formal Leave of Absence by the Chair, were in attendance.

#### **CONFIRMATION OF THE MINUTES OF THE MEETING OF 16 MARCH 2001**

The draft minutes were confirmed with minor amendments.

#### **BUSINESS ARISING FROM THE MINUTES**

*Regulatory Assessment Principles and Criteria:* The Committee was advised of the status of these documents. Both were ARPANSA documents and had been in use for assessment purposes for quite some time. The documents were “living” documents under review and the NSC had assisted in improving them.

*PSAR Peer Review:* The Committee acknowledged the opportunity that its Members had to speak to the PSAR review team members.

*HIFAR and Other ANSTO Licences:* The Sutherland Shire Council had expressed concerns over aspects of the ANSTO licensing process. ARPANSA would forward copies of the ANSTO licences that had already been issued and the associated “statement of reasons” and safety evaluation report from the Regulatory Branch to all Members soon after the meeting, pending their publication on the website.

*Correspondence:* The Committee noted correspondence to the Chair of the Radiation Health Committee regarding the exceptional circumstances clause in RHS 39. The Committee also noted correspondence from Dr Loy requesting NSC advice on key areas relating to the RRR construction licence application.

#### **REPLACEMENT RESEARCH REACTOR (RRR)**

##### **Discussion on the Approach to be Taken to Review the Licence Application for the Replacement Research Reactor**

The Committee discussed the best method of providing advice to the CEO regarding the ANSTO application for a licence to construct the RRR. Working Groups were formed to review the three major issues identified, these being the seismic design, the accident analysis in the PSAR and the adequacy of the strategy for spent fuel management. Terms of reference for the Working Groups were developed and tasks were assigned during the meeting. Each Working Group would provide draft reports to the whole Committee for review at its November meeting.

Dr Loy advised the Committee about the Public Forum proposed for the week commencing 24 September 2001. Much thought had gone into the process and the timing was aimed at having it take place between the two public comment periods relating to the RRR construction licence application. The Committee commented that the forum must go beyond just a public information session and the investigative aspect was also important.

### **ANSTO RRR licence application — briefing**

Dr Ron Cameron from ANSTO briefed the Committee on the application for a licence to construct a research reactor and highlighted some of the major features of the proposed RRR

The Committee asked Dr Cameron about some aspects of the RRR including design, cold neutron production, cooling systems, the anti-aircraft grillage and sabotage prevention.

### **Adequacy of the Seismic Design Basis for Important ANSTO RRR Safety Systems — briefing, establish assessment strategy**

Dr Cameron also briefed the Committee on the seismic analysis consideration relating to the RRR. INVAP were using a conservative approach in the design and there was an independent design review team within INVAP investigating the seismic issue. The review team has similar criteria to meet as those that ARPANSA is setting for ANSTO. Furthermore, ANSTO must meet the seismic safety criteria set by ARPANSA.

### **Comparison of Accident Analysis in PSAR with Regulatory Assessment Principle 28 and the Reference Accident — briefing, establish assessment strategy**

Mr Andy Willers from the Facilities Safety Unit of ANSTO made a presentation to the Committee on the Accident Analysis section of the PSAR. The assessment covered Design Basis Accidents (DBA) and Beyond Design Basis Accidents (BDBA). For DBAs, initiating events were examined and the bounding event analysed. This showed that DBAs would not result in core damage. A PSA had been applied to assess BDBAs.

### **Adequacy of Strategy for Management of Spent Fuel — briefing, establish assessment strategy**

Mr Pat Bull from ANSTO briefed the Committee on the management of spent fuel from ANSTO. Part of the licence conditions would be that ANSTO has a method of spent fuel management although ANSTO was not restricted to where the spent fuel could go. Currently, spent fuel was reprocessed by COGEMA at La Hague in France.

Mr Bull described methods of spent fuel processing at COGEMA and advised that the spent fuel from HIFAR represented only 0.002% of the reprocessing work done at COGEMA. The waste from the entire HIFAR spent fuel inventory would be returned in two canisters.

Mr Bull said that ANSTO hoped to use U-Mo fuel (though the application is presently based on U-Si fuel). He described the process for qualifying the U-Mo fuel types.

## **OTHER ISSUES**

### **ANSTO Discharge Authorisation**

The Committee was informed that the airborne discharge authorisation requirements for ANSTO had been included in the ANSTO licence conditions but were subject to a public comment period for a period of two months and then be reviewed in the light of that comment. A draft background paper to go for public comment on the authorisation was provided to the Committee and comments were requested from Members.

For water discharges, ANSTO must comply with Sydney Water requirements but eventually these will be replaced by an ARPANSA condition of licence.

### **Radioactive Waste Repository**

The Committee discussed issues to do with definition of radioactive waste but noted that radioactive waste is defined in the NHMRC Code of Practice for near surface disposal of waste. The Committee also noted the membership of the National Store Advisory Committee and requested a copy of their Terms of Reference and any information produced by that Committee.

## **REPORTS**

### **General Report from the CEO**

Dr Loy gave a brief report on his recent activities including the issuing of licences to HIFAR, the radiopharmaceuticals division of ANSTO, fuel operations and other areas within ANSTO.

### **Report on Council — Meeting of 9 April 2001**

The Committee was advised of the representation made to Council at its last meeting from members of the Sutherland Shire Council requesting open Council meetings and the appointment of a Councillor to the RH&SAC. RH&SAC had commenced several initiatives to improve its interaction with the public.

### **Report on RHC — Meeting 29-30 March 2001 and agenda for the meeting of 18-19 July 2001**

The Committee noted recent changes to the membership of the RHC. NSC was also advised of the progress of various Codes of Practice and the National Directory for Radiation Protection. The Committee requested both a list of all Codes of Practice, Standards and Guidelines currently under review and that Members be advised of all RHC drafts released for public comment.

### **ARPANSA Organisational Chart facilities**

#### **Draft Transport Code — Progress Report**

The Committee noted both the ARPANSA organisational chart and a paper outlining the progress of the draft Transport Code. The Committee acknowledged that by the time of the next meeting in November, the draft Transport Code would be in place thereby superseding the 1990 Transport Code.

## **GENERAL BUSINESS**

Two issues were raised as general business. The first was correspondence from the Australian Conservation Foundation (ACF) to the Chair regarding a submission that it had made to ARPANSA but had received no feedback on. ARPANSA advised that its process in dealing with public submissions was to provide a response to each organisation advising how the comment had been dealt with and the ACF would receive a response in due course. The Chair would draft a reply to the ACF letter.

The second issue related to reported deficiencies with the INVAP built reactor in Egypt. Dr Loy said that although the Egyptian reactor was different in design to the RRR, ARPANSA would not ignore the issues raised.

## **CLOSURE AND NEXT MEETING**

The next meeting was scheduled for 8-9 November 2001.