

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Friday, December 13, 2002, beginning at 10:30 a.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

C.R. Barnes

J. Dosman

Y.M. Giroux

A. Graham

L. MacLachlan

M.J. McDill

M.A. Leblanc, Secretary

I. V. Gendron, Senior Counsel

C.N. Taylor, Recording Secretary

CNSC staff advisers were B. Howden, J. Blyth, J. Douglas, B. Pearson, T. Schaubel and T. Viglasky.

#### Adoption of the Agenda

1. The agenda, CMD 02-M75.A, was adopted as presented.

**DECISION**

#### Chair and Secretary

2. The President took the Chair and the Secretary of the Commission acted as Secretary of the meeting with C.N. Taylor acting as recording secretary.

#### Constitution

3. With the notice of meeting having been properly given and a quorum of Members being present, the meeting was declared to be properly constituted.
4. Since the meeting of the CNSC held November 14, 2002, Commission Member Documents CMD 02-M74 to CMD 02-M81 had been distributed to Members. These documents are further detailed in Annex A of these minutes.

Minutes of the CNSC Meeting Held November 14, 2002

5. The Members approved the minutes of the November 14, 2002 meeting of the Commission (reference CMD 02-M76) without change.

**DECISION**

Significant Development Report

6. As noted in CMD 02-M77, there were no significant developments to report for the regular period of October 30, 2002 to November 21, 2002.
7. Significant Development Report (SDR) no. 2002-8 (CMD 02-M77.A and CMD 02-M77.B) were submitted by staff on December 5 and December 10, 2002. Staff reported on the following with reference to these CMDs.
8. Staff informed the Commission that the *Nuclear Fuel Waste Act* came into effect on November 15, 2002, and that a Nuclear Waste Management Organization (NWMO) and an Advisory Council have been established. Staff noted that it will provide scientific, technical and regulatory information and advice to the NWMO on request.
9. Staff reported on a vehicle accident that occurred at Cameco's Rabbit Lake Mine operation. Workers were injured in the accident, but none seriously. Cameco is conducting an investigation. A Cameco representative gave a short presentation on the accident, outlined the corrective actions that will be taken by the corporation in the future to reduce the risks of such an accident reoccurring. Corrective actions include limiting the number of passengers, more training for drivers and adding protective mesh to the vehicle. On this last item, a Member suggested that if mesh is added, hatches should be built to provide exits to the passengers.
10. Staff reported on the conduct of a CNSC-sponsored workshop on nuclear emergency and response in Ontario. Additional workshops are scheduled to take place in Quebec and New Brunswick in early 2003. The workshops were organized following an initial briefing at the Commission meeting on May 23, 2002 and the Commission's request for more detailed information on the status of the off-site measures and practices in place near the major licensed nuclear facilities. Staff reported a positive response to the workshop in Ontario. Staff reiterated its plan to present the results of all three workshops to the Commission in the spring of 2003.

**ACTION**

11. Staff reported on the possible overexposure of a courier worker from radioactive packages in the period of July to November 2002. CNSC staff reported on its investigation of this matter. Staff was informed by the employer of the courier that the dosimeter used by the courier showed overexposures to radiation. CNSC staff is to report back to the Commission in a public proceeding on the results of their investigation.
12. Staff reported on an overexposure to extremities (hands) of two workers at the Edmonton Radiopharmaceutical Centre. An investigation was conducted and the causes identified. Staff reported that it has authorized, with conditions, the return to work of the affected individuals. Staff is following up on the corrective actions being taken.
13. Staff reported that Bruce Power Inc., despite significant efforts, has not been able to bring closure to the issue of its non-compliance with the conditions of the Operating Licence for the Bruce Power Nuclear Generating Stations concerning the maintenance of financial guarantees. Staff also reported that it was continuously assessing the Bruce operations from a safety consideration and that it was satisfied that the issue of financial guarantees does not pose safety risks warranting enforcement action at this time. The CEO of Bruce Power provided a response to the CNSC staff presentation. Discussions took place on the issue of financial guarantees, particularly on the wherewithal of the financial guarantees. At the request of Bruce Power, the President agreed to hold a closed session to discuss issues of a financially sensitive or confidential nature. This matter resumed in the public session with the President reading, on behalf of the Commission, a statement on the Commission's position regarding this matter. The statement is attached as Annex B to these Minutes.

#### Status Report on Power Reactors

14. The status of all power reactors as summarized by CNSC staff in CMD 02-M78 elicited one question from the Members on a turbine trip at Point Lepreau. Staff explained that the cause of the trip was a problem off site on the NB Power grid. The trip response is normal and designed to protect the turbine generator.

Status Report on Atomic Energy of Canada Limited : Approval to Restart Commissioning of the MAPLE 1 and 2 Reactors

15. With reference to CMD 02-M79, staff provided the Members with the seventh progress report on the completion of prerequisites for the restart of commissioning at the MAPLE 1 and 2 Reactors. In its earlier decision on this matter dated January 15, 2002, the Commission required status reports on this project at each regularly scheduled Commission meeting until staff had authorized the resumption of the commissioning program.
16. Staff reported that AECL has completed all actions identified by as prerequisites to the loading of fuel in MAPLE 1. The designated officer authorized the resumption of commissioning activities for MAPLE 1 on October 24, 2002. The designated officer also approved the loading of fuel for MAPLE 2 on December 6, 2002; however, the actual fuel loading may not commence until a number of outstanding actions are completed.
17. Staff further noted that the fuel was loaded in MAPLE 1 and the reactor achieved nuclear criticality (10 watts) on November 20, 2002. AECL reported that MAPLE 2 is expected to approach criticality in early January 2003.
18. Staff will provide a further update status report at the Commission meeting on January 15, 2003.

**ACTION**

Status Report on Atomic Energy of Canada Limited: Approval to Commence Active Commissioning of the New Processing Facility

19. With reference to CMD 02-M80, staff provided the Members with the seventh progress report on the completion of prerequisites for the commencement of active commissioning at the New Processing Facility (NPF) at the Chalk River Laboratories. In its earlier decision on this matter, dated January 15, 2002, the Commission required status reports on this project at each regularly scheduled Commission meeting until staff had authorized the start of the active commissioning program.
20. Staff reported that AECL has submitted all remaining completion assurances and those have been found acceptable by CNSC staff.
21. Staff noted that the only remaining prerequisite is with respect to the commissioning of the active ventilation system. The verification test for stack effect was submitted by AECL on November 1, 2002 and the matter remains under review. CNSC

staff has confirmed that it and AECL are exchanging information and validating assumptions to bring closure to this prerequisite.

22. Staff will provide a further update status report at the Commission meeting on January 15, 2003.

**ACTION**

**Pickering NGS-A Return to Service – Status Report**

23. With reference to CMD 02-M66.A, Ontario Power Generation (OPG) presented the second status report on the return-to-service of the four units at Pickering NGS-A. The Commission, in its decision to allow the return to service (dated November 5, 2001), requested that OPG present status reports to the Commission on the project every six months and prior to the restart of each unit.
24. OPG reported that, for Unit 4, all engineering and design work is complete, and the field work and operational readiness activities are near completion. OPG expects to be commissioning major systems in early 2003. OPG reported that it has completed the revision and upgrade of its operating procedures as well as the training for restart.
25. OPG also reported that, for Unit 4, 43 of the 76 of the licence condition items have been accepted as complete by CNSC staff. A further 7 items have been submitted and are under CNSC staff review. 17 items remain to be submitted to the CNSC for acceptance prior to the removal of the guaranteed shutdown state (GSS). Staff noted that, while 17 license condition items remain to be submitted, staff has been closely involved in reviewing and verifying the sub-parts of many of these items. The final completion assurance reports remain to be submitted.
26. OPG and CNSC staff stated that the remaining 9 items do not need to be addressed prior to removal of the GSS, since the stated deferment of these items has no safety implication. Staff has specified, however, when those items must be complete, either prior to reaching specific reactor power levels, or prior to rolling of the turbine. With respect to the item concerning steam generator chemical cleaning, staff indicated that it is satisfied, based on the results of recent inspections of the generator, that this cleaning will not be required until the first planned outage following the return to service. CNSC staff agreed to report back to the Commission on the status of these 9 deferrals as they become completed.
27. OPG indicated that once the remaining licence condition prerequisites have been met, and operational readiness has been

**ACTION**

confirmed, it will apply to the CNSC for removal of the guaranteed shutdown state. OPG also indicated that its plan is to have Unit 4 back in service by the end of the second quarter of 2003.

28. Staff noted that most of the remaining prerequisites to the removal of GSS involve the installation and commissioning of new equipment. Staff noted that significant and acceptable progress has been made to date in many of these areas.
29. Staff reported that it has continued to closely monitor OPG's activities and has conducted five detailed quality assurance audits. Staff stated that, while some issues remain open, OPG has responded appropriately to the findings of these audits.

#### Information Item – ACR-700 Advanced CANDU Reactor

30. With reference to CMD 02-M81, staff informed the Commission that it will, in response to a request by Atomic Energy of Canada Limited, be undertaking a technical review of Atomic Energy of Canada's new 700 Megawatt-electric, Advanced CANDU Reactor (ACR-700) design.
31. Staff noted that AECL has also requested similar reviews of the design by the United States Nuclear Regulatory Commission and the United Kingdom Nuclear Installations Inspectorate. Staff reported that it has had preliminary discussions with these other agencies to explore opportunities for a coordinated review.
32. Staff provided the Commission with a brief description of the ACR-700 design, pointing out the main differences from the CANDU-6 designs in operation in Canada. A more detailed discussion took place with staff and representatives of AECL on the attributes of negative versus positive void activity coefficients, including the related requirements for slightly enriched uranium fuel in the design.
33. Staff noted that it has agreed to undertake the review, subject to a clearly defined review plan and full cost recovery.
34. Staff noted that the review will be a significant undertaking, involving dedicated and experienced resources. Staff confirmed that it would draw from its current pool of highly experienced employees as well as hire more specialists to conduct the work. As such, staff indicated that it would keep the Commission informed of its progress and likely seek the Commission's approval at key stages. The Commission stated to CNSC staff and the public that

the CNSC staff review would not bind the Commission in any way with respect to subsequent licensing proceedings involving ACR-700. The Commission also stated that it will assess its role regarding this technical review as appropriate.

**ACTION**

**Closing of Public Meeting**

35. The public meeting concluded at 12:52 p.m.

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*Chair*

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*Recording Secretary*

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*Secretary*

## ANNEX A

CMD	DATE	File No
02-M74	2002-11-08	(1-3-1-5)
Notice of Meeting		
02-M74.A	2002-11-29	(1-3-1-5)
Notice of Meeting - update		
02-M75	2002-11-29	(1-3-1-5)
Agenda of the meeting of CNSC		
02-M75.A	2002-12-06	(1-3-1-5)
Agenda of the meeting of CNSC - update		
02-M75.B	2002-12-11	(1-3-1-5)
Agenda of the meeting of CNSC - update		
02-M76	2002-11-26	(1-3-1-5)
Approval of minutes of Commission meeting held November 14, 2002 in Ottawa		
02-M77	2002-11-25	(1-3-1-5)
Significant Development Report no. 2002-8		
02-M77.A	2002-12-04	(1-3-1-5, 22-C1-126-1)
Significant Development Report no. 2002-8 - Supplementary Information		
02-M77.B	2002-12-09	(1-3-1-5, 22-C1-126-1)
Significant Development Report no. 2002-8 - Supplementary Information		
02-M78	2002-11-25	(1-3-1-5)
Status Report on Power Reactors		
02-M79	2002-11-26	(26-1-62-0-0)
Atomic Energy of Canada Limited: Status Report on Approval to Restart Commissioning of the MAPLE 1 and 2 Reactors		
02-M80	2002-11-26	(24-1-3-0)
Atomic Energy of Canada Limited: Status Report on Approval to Commence Active Commissioning of the New Processing Facility		
02-M81	2002-11-26	(26-1-30-0-0)
CNSC Review of the ACR-700 Advanced CANDU Reactor		



## **Commission Statement on Status of Bruce Power Inc. Financial Guarantees**

**The following statement was made by the President of the Canadian Nuclear Safety Commission (CNSC) on behalf of the Commission following its Public Meeting held on December 13, 2002.**

The Commission notes that this is the third meeting where this issue of a financial guarantee for Bruce B has been addressed and Bruce Power Inc. is still unable to meet its licence condition. This is a serious matter of grave concern to the Commission. The Commission acknowledges the efforts made by Bruce Power Inc. to examine alternative means of providing the required financial guarantees. However, a solution must be found. The Commission requires that all parties involved urgently pursue an immediate resolution to this matter.

The CNSC staff located both at the Bruce NGS site and CNSC staff in Ottawa are continually assessing operations and compliance of the Bruce Power nuclear installation. The Commission is satisfied that the current situation regarding the financial guarantee does not pose a safety risk warranting enforcement action by the CNSC at this time. However, the Commission has authority to take regulatory enforcement action to ensure this matter is resolved in a timely manner.

The Commission intends to review this matter on a day to day basis and will be requesting a further report so the public are aware of this at the next scheduled meeting on January 15, 2003.

I hope this statement illustrates the seriousness with which the Commission takes this matter and acknowledges the efforts that were taken in-camera to bring us up to date. However, we do know that there are several parties involved in this discussion and we do urge these parties to take this matter very seriously and to move forward with it.

**December 13, 2002**