

June 27, 2002

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, June 27, 2002, beginning at 3:15 p.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

Absent:

L.J. Keen, Chair

C.R. Barnes

Y.M. Giroux

A.R. Graham

L.J. MacLachlan

M.A. Leblanc, Secretary

I. V. Gendron, Senior Counsel

C.N. Taylor, Recording Secretary

CNSC staff advisers were C. Maloney, J. Blyth, R. McCabe, B. Pearson, S. Cook, R. Lane and M. Taylor.

#### Adoption of the Agenda

1. The agenda, CMD 02-M41.A was adopted as presented.

#### 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 May 22 and 23, 2002, Commission Member Documents CMD 02-M40 to CMD 02-M49 had been distributed to Members. These documents are further detailed in Annex A of these minutes.

#### Minutes of the CNSC Meeting Held May 22 and 23, 2002

5. The Members approved the minutes of the May 22 and 23, 2002 meeting of the Commission (reference CMD 02-M42) without change.

**DECISION**

### Significant Development Report

6. There were no significant developments during the reporting period of May 7 to June 7, 2002 (Ref. CMD 02-M43).
7. With reference to CMD 02-M43.A, staff presented Significant Development 2002-5 which was added after publication of CMD 02-M43 on June 10, 2002. The report provided an update on repeated failures of the raise borer drill strings at Cameco Corporation's McArthur River Operation. The problem was first reported to the Commission during a public hearing in August 2001.
8. The incidents have the potential to cause personal injury to workers involved in the recovery operations and have increased radiation doses to those workers. No personal injuries have occurred as a result of the failures.
9. In response to questions from the Members, Cameco provided additional information on the suspected failure mechanisms, related hazards to workers and steps being taken to track down the cause more precisely.
10. Staff stated that it continues to conduct technical analyses of the problem and to review additional planned remedial actions by Cameco. Staff also noted that Saskatchewan Labour will investigate the incidents and provide its findings to the CNSC.
11. Staff indicated that an application from Cameco to amend the licence to permit modifications of the mining method is expected in the near future. In response to Members' questions about the application, Cameco explained that it would like to remove the ore collection chute and pick up the ore directly from the floor using a scoop tram. This would reduce the stop/start stresses on the borehead and, more importantly in Cameco's view, reduce the radiation doses received by the raise bore operators.
12. Staff also reported on the current status of forest fire conditions in the vicinity of the McArthur River Operation. At the time of the meeting, a number of precautionary measures had been taken to protect the facility and 110 employees had been evacuated. The fire had reportedly slowed by the morning of the meeting and the mine personnel were preparing to return to the site.

**Status Reports:****Status Report on Power Reactors**

13. With reference to CMD 02-M44, staff presented the regular status report on power reactors.
14. Staff highlighted item 1.1.6 of the report concerning the shutdown of Pickering B Unit 6 for the purpose of inspecting and investigating cracking of turbine generator blades on two similar spindles removed from the unit earlier. Staff stated that the root cause of the cracking has not yet been determined by OPG. Staff further noted that similar cracking on the other units has yet to be confirmed. Staff noted that the problem does not pose a safety hazard, but could have an economic impact should there be a turbine blade failure during operation. Unit 6 has since been returned to service.
15. With regard to item 1.1.7 (Point Lepreau NGS), staff noted that it is reviewing the consequences of recent decisions by the New Brunswick Minister of Energy to restructure NB Power.
16. Referring to CMD 02-M44.A, staff described an event that occurred at Unit 6 of Bruce B during the Spacer Location and Relocation (SLAR) operation. The event created a small hole in both the fuel channel pressure tube and calandria tube. Staff added that it is seeking pre-restart assurances from OPG that other fuel channels have not been damaged in the same way by the SLAR tool.

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

17. With reference to CMD 02-M45, staff provided the Members with the fourth 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.
18. Staff reported that 4 of the 11 prerequisites are now complete, 3 of the prerequisites are experiencing minor delays (i.e., 2 weeks or less), and the 4 remaining prerequisites are on schedule. Staff expressed its satisfaction with the progress being made by AECL to

address the remaining prerequisites.

19. The Members sought additional information on the problems with the Control Absorber Rod stepper motors reported in section 2.3 of the status report. Staff stated that the stepper motor problem would not affect the function of the second shutdown system and that the problem will be resolved as part of the future commissioning activities.
20. In response to a question from the Members, AECL confirmed that it had reviewed the staff's status report and that it concurs with the information presented therein.
21. Staff will provide a further update status report at the Commission meeting on September 12, 2002.

**ACTION**

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

22. With reference to CMD 02-M46, staff provided the Members with the fourth 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.
23. Staff reported that 3 of the 6 prerequisites are now complete and that the remaining items are generally on schedule.
24. In response to a question from the Members, AECL confirmed that it had reviewed the staff's status report and that it concurs with the information presented therein.
25. Staff will provide a further update status report at the Commission meeting on September 12, 2002.

**ACTION**

**Information Reports**

**Cancer and General Mortality in Port Hope**

26. Staff referred to a report prepared by Health Canada and attached to CMD 02-M47 titled, Cancer and General Mortality in Port Hope, 1956-1997, June 2002. Staff explained that the report was intended to extend the earlier cancer mortality analysis

commissioned by the AECB and carried out by Health Canada (Cancer Incidence in Port Hope 1971-1996, August 2000). The current study was also to include all other major causes of mortality and compare the results with the previous study.

27. Staff reported that the present study found no evidence of increased overall cancer mortality in Port Hope compared to the rest of Ontario, and that there was no excess mortality for cancers known to be associated with radiation exposure. Staff noted that this was consistent with the earlier study of cancer incidence.
28. Staff reported that the study found some increase in Port Hope in mortality from circulatory diseases and indicated that such diseases are generally associated with smoking, poor diet and lack of exercise, rather than low-level radiation exposures. The study also identified other increases and decreases in various other diseases in comparison to the rest of Ontario.
29. In response to a question from the Members, staff clarified that the observed higher rates of circulatory disease were found in both Port Hope and the larger surrounding Northumberland County.
30. Staff noted that the study was descriptive, rather than analytic, which means that the determinates, or factors linked to, or associated with, the risk of disease were not examined.
31. The Members questioned staff as to whether the 95% confidence interval used in the study was appropriate. Staff responded that a 95% confidence interval is standard for epidemiological studies of this type. Staff further reported that the study was completed by internationally respected researchers in the field of cancer surveillance, and that a peer review by internationally respected, independent, university-based, epidemiologists found the study to be scientifically sound.
32. Staff concluded that, given the industrial history of Port Hope, it may be useful to periodically monitor cancer incidence and general mortality using routinely gathered statistics. Given the results of the present study, staff did not recommend analytic studies at this time.
33. In response to questions from the Members about what would be done next, staff responded that any follow-up would be the responsibility of the Province and local health unit who must provide regular health assessments of their communities. Staff indicated that the CNSC would not be acting on the study results,

or conducting follow-up health studies until the policy on CNSC research in this area is determined.

34. As for the publication and dissemination of the study, the Members asked staff how this would be done. Staff indicated that municipal and local health officials were provided copies of the report prior to its formal release and that local interest groups have been provided copies. CNSC staff does not intend to hold public meetings or presentations on the study, but would be willing to participate in such events if requested.

#### CNSC Regulatory Transition Plan

35. With reference to CMD 02-M48, staff provided a status report on the *CNSC's Regulatory Transition Plan*. The plan was initiated with the coming into force of the *Nuclear Safety and Control Act* in May 2000 and originally documented in CMD 00-M19.
36. Staff reported that, since May 2000, the Commission has made some additions and amendments to the Transition Plan, and that several of the initial exemptions have now expired. Staff noted that a small number of the transitional exemptions will remain in effect until 2006.
37. The Members sought clarification as to when the transition period would end. Staff expressed the view that Transition Plan will stop when the last item on the current updated version is complete (including any extensions that the Commission may decide to approve in the future). Staff expressed the view that any new exemptions would form part of the normal process of regulatory change and would not be added to the Transition Plan.
38. Staff will provide another status report on the Transition Plan in one year.

**ACTION**

#### **Closing of Public Meeting**

39. The public portion of the meeting concluded at 4:14 p.m. and the meeting continued in-camera.

#### In-Camera

#### Nuclear Security: Review of CNSC Order 01-1

40. Paragraph 4 of the CNSC Order 01-1 states that the Commission will review the provisions and operation of the Order within 9

months of making the Order. With reference to CMD 02-M49 and CMD 02-M49.A, staff presented the Members with update information on CNSC Order 01-1 (issued October 19, 2001) and made recommendations for revisions.

41. The Commission agreed with staff's recommendation that CNSC Order 01-1 remain in place and that it be reviewed again by the Commission in nine months.

**DECISION**

42. The Commission agreed with staff's recommendation to make specific exclusions to CNSC Order 01-1.

**DECISION**

43. The Commission agreed with staff's recommendation to amend paragraph 2 of CNSC Order 01-1 (persons authorized for the purposes of the Order) to replace the Executive Director, Office of International Affairs with the Director General, Directorate of Assessment and Analysis; to replace the Executive Director, Office of Regulatory Affairs with the Vice-President, Operations Branch; and to remove the Secretary of the Commission.

**DECISION**

44. With reference to the staff's recommendation in CMD 02-M49.A, the Commission decided to make the proposed change to CNSC Order 01-1.

**DECISION**

45. The parties affected by CNSC Order 01-1 will be notified in writing of the above-noted decisions of the Commission. The Order is a public document; however, the Annex contains prescribed information (subject to the requirements of sections 21 to 23 of the *General Nuclear Safety and Control Regulations*) and therefore the Annex is not a public document.

**ACTION**

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*Chair*

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*Recording Secretary*

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*Secretary*

## ANNEX A

CMD	DATE	File No
02-M40 Notice of Meeting	2002-05-21	(1-3-1-5)
02-M41 Agenda of the meeting of the Canadian Nuclear Safety Commission to be held in the Public Hearing Room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Thursday June 27, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for that day.	2002-06-12	(1-3-1-5)
02-M41.A Update - Agenda of the meeting of the Canadian Nuclear Safety Commission to be held in the Public Hearing Room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Thursday June 27, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for that day.	2002-06-24	(1-3-1-5)
02-M42 Minutes of the Meeting of the Canadian Nuclear Safety Commission held May 22 and 23, 2002	2002-06-11	(1-3-1-5)
02-M43 Significant Development Report no. 2002-5	2002-06-10	(1-3-1-5)
02-M43.A Significant Development Report no. 2002-5 - Update	2002-06-20	(1-3-1-5)
02-M43.A1 Significant Development Report no. 2002-5 - Oral Presentation by Cameco Corporation	2002-06-27	(1-3-1-7)
02-M44 Status Report on Power Reactors	2002-06-10	(1-3-1-5)
02-M44.A Status Report on Power Reactors	2002-06-19	(1-3-1-5)
02-M45 Status Report on Atomic Energy of Canada Limited: Approval to Restart Commissioning of the MAPLE 1 and 2 Reactors	2002-06-11	(26-1-62-0-0)
02-M46 Status Report on Atomic Energy of Canada Limited: Approval to Commence Active Commissioning of the New Processing	2002-06-11	(24-1-3-0)
02-M47 Cancer and General Mortality in Port Hope, 1956-1997	2002-06-10	(34-7-536-1)



02-M48                    2002-06-10    (1-1-19-0)  
The Canadian Nuclear Safety Commission's Regulatory Transition Plan

02-M49                    2002-06-07    (1-11-21-3)  
Nuclear Security: Review of CNSC Order 01-1

02-M49.A                2002-06-07    (1-11-21-3)  
Nuclear Security: Review of CNSC Order 01-1 - Supplementary Information