

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Wednesday, April 6, 2005 beginning at 8:30 a.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

C.R. Barnes

J. Dosman

A. Graham

M.J. McDill

M. Taylor

M.A. Leblanc, Secretary

J. Lavoie, General Counsel

P. Bourassa, Recording Secretary

CNSC staff advisers were: R. Jammal, P. Fundarek, R. Irwin, K. Bundy, I. Grant, T. Schaubel, B. Howden, G. Lamarre, P. Thompson, G. Crawford, M. Lemay, M. McKee, D. Howard, M. O'Brien, R. Ferch, R. Forbes and D. Chaput.

Other contributors were:

- Ontario Power Generation Inc.: M. Elliott, P. Spekkins, K. Nash and J. Van den Hengel,
- Atomic Energy of Canada Limited: P. Fehrenbach, D. Lecuyer, R. Lambert and B. Lang
- Cameco Corporation: H. Carisse
- McMaster University: C. Heysel
- Saskatchewan Labour: E. Becker
- Saskatchewan Environment: T. Moulding

Adoption of the Agenda

1. The revised agenda, CMD 05-M16.B, was adopted as presented.

Chair and Secretary

2. The President chaired the meeting of the Commission, assisted by M. A. Leblanc, Secretary and P. Bourassa, Recording Secretary.

Constitution

3. With the notice of meeting having been given and a quorum of Commission Members being present, the meeting was declared to be properly constituted.

4. Since the meeting of the Commission held March 23, 2005, Commission Member Documents CMD 05-M15 to CMD 05-M25 were distributed to Members. These documents are further detailed in Annex A of these minutes.

Minutes of the CNSC Meeting Held February 24, 2005

5. The Members approved the minutes of the February 24, 2005 Commission meeting (reference CMD 05-M17) without change.

Significant Development Report

6. Significant Development Report (SDR) no. 2005-03 (CMDs 05-M18, 05-M18.A and 05-M18.B) was submitted by CNSC staff. The following information was added orally during the meeting.
7. With reference to item 4.1.1 of CMD 05-M18 regarding a suspected overexposure of an industrial radiographer employed by AM Inspection Ltd., CNSC staff confirmed that the dose was actually received by the individual and not based solely on the dosimeter reading. The Commission requested that CNSC staff report to the Commission the results of staff's ongoing investigation of this incident in a follow-up SDR at a future Commission meeting. The follow-up SDR should include an explanation of discrepancies in the dose measurement and any compliance action taken. **ACTION**
8. Based on the type of reporting deficiencies involved in this event, the Commission requested staff to consider whether it may be necessary to issue a notice to, or take other appropriate regulatory steps with, similar licensees on the subject of the CNSC's radiation safety and reporting requirements. The Commission requests that staff inform the Commission of any steps taken in this regard at a future meeting of the Commission. **ACTION**
9. The Commission questioned what action is being taken given that this affected individual has exceeded the annual dose limit and is now approaching the five-year dose limit. In response, CNSC staff indicated that, in accordance with regulatory requirements, the licensee had removed the worker from any work likely to add to the dose. The worker subsequently left the company voluntarily and obtained employment in a non-radiological field.
10. With reference to item 4.1.2 of CMD 05-M18 regarding overexposure of a worker employed by *Laboratoires d'Essais*

- Mequaltech Inc.* (where the five-year dose limit was exceeded), CNSC staff reported that a warning letter was sent to the licensee on March 24 indicating that their dose control was not acceptable and that failure to comply with regulatory requirements would result in licensing action. CNSC staff also indicated that the worker has been authorized to go back to work with a prorated dose limit for the remainder of the dosimetry period.
11. The Commission sought assurances that the workers at the site are working in a safe environment. In response, CNSC staff stated that the licensee is implementing new safety measures, including action levels as requested in the warning letter. CNSC staff indicated they were pursuing their investigation which would include the evaluation of the design of the facility as well as work procedures.
 12. With reference to item 4.1.3 of CMD 05-M18 regarding a radioactive gauge that was seized in Prince Edward Island, CNSC staff noted that an investigation of the legal aspect is still underway. CNSC staff further added that its new sealed source tracking system will provide better tracking of such devices in the future.
 13. With reference to item 4.1.4 of CMD 05-M18 regarding a follow-up on issues related to Pickering NGS-B service water, the Commission sought assurances that the issues of service water supply capacity, service water surveillance and maintenance, and fire water supply capacity were being addressed. CNSC staff indicated that it is satisfied with the progress being made by Ontario Power Generation (OPG) to date in addressing those issues. OPG indicated that the service water currently meets normal and emergency requirements and remaining work would be completed by June 2006.
 14. With reference to item 4.1.7 of CMD 05-M18.B regarding a feeder elbow wall thinning at Pickering A Unit, the Commission sought assurances that the rest of the industry has been informed of this issue. The Commission was also informed that OPG is investigating the issue further. CNSC staff confirmed that all the nuclear power plant licensees were informed and that the results of OPG's investigation would be part of the on-going discussions with the industry.
 15. With reference to item 4.1.5 of CMD 05-M18, CNSC staff provided an update on the unauthorized disposal of sewage sludge into Waste Management Area (WMA) "C" at AECL's Chalk River Laboratories (CRL). As part of that update, CNSC staff presented an Incident Inspection Report 2005-IIT-01 prepared by a CNSC

- Independent Inspection Team (IIT). The report includes a detailed analysis and identification of root causes of the event.
16. In regard to the findings in the IIT report concerning CNSC regulatory oversight of the CRL, CNSC staff noted past regulatory deficiencies and described the improvements to be implemented by CNSC staff. Those improvements include a review of the CNSC's and other environmental regulatory requirements for the CRL and correction of any identified gaps.
 17. In response to the findings in the IIT Report, and subsequent to discussions with AECL, CNSC staff outlined the following corrective actions to be undertaken by AECL: 1) develop a long-term strategy for contaminated sewage waste to be presented to CNSC staff in a Report by September 30, 2005; 2) upgrade the current sewage treatment plant to meet regulatory requirements; and 3) identify the source(s) of radioactivity in the CRL sewage sludge.
 18. AECL further noted that, as an interim solution and with the approval of the CNSC, the sewage sludge is now being de-watered and placed in containers on site.
 19. AECL also reported that Mr. G. Archinoff was appointed to the newly created position of Chief Regulatory Officer at AECL. AECL stated that the position will provide better internal oversight of compliance with regulatory requirements.
 20. In response to the Commission's questions on the contamination characteristics of the sludge, CNSC staff explained that, based on the data available, and in the absence of any declaration from the Ministry of the Environment of Ontario (MOE) under its Regulation 347 to indicate otherwise, the sludge continues to be viewed as radioactive and hazardous. Therefore, the sludge may not be placed in an unlined sand trench or be disposed off site in an unlicensed radioactive waste facility. On this matter, AECL expressed the view that the International Atomic Energy Agency (IAEA) standards series and guidelines should be used to determine if the sludge is to be treated as radiological or non-radiological, while the MOE Regulation 347 should be used to identify its hazardous components.
 21. The Commission sought assurances that the current disposal methods would meet the MOE requirements. In response, AECL noted that its past practices, up until November 2004, would not meet current MOE requirements. AECL explained that a long-term disposal proposal will be presented to the MOE for review.

22. In response to the Commission's concern about the risk that the sludge disposed of in WMA "C" may pose to the public, CNSC staff confirmed that, based on available information, the material poses no significant risk to the public or the workers on site. In explaining its statement on the relative safety significance of this practice compared to others at the site, the CNSC staff clarified that the contaminants from the sludge did not significantly increase the contamination level already present in WMA "C".
23. In response to questioning on the segregation of wastewater, AECL described the current drainage system on site and indicated that the wastewater from the laundry was the only known source of radioactive waste currently being discharged to the sanitary sewer. AECL explained that the laundry wastewater cannot be treated with the other radioactive liquid waste at the Active Liquid Waste Treatment Centre due to the surfactant present in the waste. CNSC staff confirmed that the surfactants in the laundry effluent would interfere with the operation of the evaporators at the active Liquid Waste Treatment Centre.
24. Reflecting on the various factors that contributed to this event, the Commission questioned if there are issues concerning the effectiveness of the regulatory working relationship between AECL and CNSC staff. Both AECL and CNSC staff assured the Commission that they are, and will continue to be, engaged in frequent discussions on licensing matters and that there is full cooperation.
25. The Commission expressed its concern that AECL had continued to practice an unauthorized waste disposal method.
26. The Commission sought further clarification on the issue of non-compliance. CNSC staff stated that AECL was non-compliant regarding two of their operating licence conditions: 1) the liquid state of the waste contravened the waste acceptance criteria; and 2) the radiological and hazardous properties of the waste contravened the environmental management system which refers to the Environment Canada guidelines "An Approach for Assessing and Managing Wastewater Effluent Quality for Federal Facilities."
27. The Commission reminded AECL that, as the licensee, it is fully responsible for the safety of the site and is expected to demonstrate its adherence to and understanding of all regulatory requirements, practices and standards.

28. The Commission requested that CNSC staff and AECL provide the Commission with an update on this event after AECL has submitted its long-term sewage sludge waste management plan (scheduled for submission to CNSC staff on or before September 30, 2005). **ACTION**
29. The Commission requested that CNSC staff report to the Commission in early 2006 on its review of the regulatory requirements for AECL. The CNSC staff is to include in the report any AECL review of its compliance with current regulatory requirements including those carried out under the responsibility of the new Chief Regulatory Officer. **ACTION**
30. With reference to item 4.1.6 of CMD 05-M18.A regarding incidents at Cameco's Port Hope Nuclear Fuel Facility, the Commission inquired about the extent to which the Port Hope Fire Department was involved in responding to the reported fire. Cameco stated that the Fire Department had responded to their post, coming through the facility's gate and up to the adjacent building to wait for further instructions, but no further action had been required.
31. In response to follow-up questions from the Commission, CNSC staff expressed its satisfaction with Cameco's response to the small fire and indicated the event was still under review for long-term preventive actions.

Status Report on Power Reactors

32. With reference to the Status Report on Power Reactors (CMD 05-M19), CNSC staff provided the following information that was added orally during the meeting.
- Pickering A Unit 4 is currently in a shutdown state as a result of thinning feeder elbow wall (described in item 4.1.7 of CMD 05-M18.B – Significant Development Report – refer to paragraph 14 above).

Annual Report on Decommissioning Plans and the Financial Guarantee for Nuclear Facilities owned by Ontario Power Generation Inc. (OPG)

33. With reference to CMD 05-M20, CNSC staff provided a summary of the second annual report provided by OPG on the status of its financial guarantee for decommissioning. Annual reports on this matter were requested by the Commission in its *Record of Proceedings, Including Reasons for Decision* of May 14, 2003.

34. In response to the Commission's questions on how new projects or changes to the existing facilities, if authorized, would affect the decommissioning plan and financial guarantee. CNSC staff confirmed that a review and any appropriate adjustments would be required in each instance. CNSC also noted that a planned general review of the decommissioning plans and financial guarantee is to be completed by June 30, 2007.
35. CNSC staff and OPG also assured the Commission that fluctuations in the commodity prices, such as oil, are taken into account in the periodic revisions of the decommissioning cost estimates.

Mid-Term Report on McMaster University's Class IA Nuclear Reactor Facility in Hamilton, Ontario

36. With reference to CMD 05-M21 and 05-M21.A, staff provided a mid-term licensing report on McMaster University's Class IA nuclear reactor facility. Staff concluded that McMaster University has operated the licensed facility in compliance with CNSC regulatory requirements and the continued operation of the facility does not pose an unreasonable risk to health, safety, the environment and national security.
37. Noting that CNSC staff has removed reference to a configuration control program from the licence, the Commission sought assurances that any changes made to the facility would be done in a controlled manner. In response, CNSC staff stated that configuration control remains in the licensee's Quality Assurance program and that the safety implications of any changes to the operations of the plant would be considered. McMaster University stated that the facility is well documented and its configuration is adequately controlled.
38. The Commission sought further information on the current staffing program at the facility. CNSC staff confirmed that sufficient qualified staff is in place to assure adequate safe operation of the facility and that the certifications of McMaster employees was renewed in February 2005. McMaster University added that additional staffing and training is no longer a pressing issue although its continuous improvement remains a subject of on-going discussions with CNSC staff.
39. In response to the Commission's question regarding the control system component replacement, McMaster indicated that the delivery of the components is scheduled for December 2005, with installation planned for 2006.

40. The Commission sought assurances that McMaster University has been able to fulfill its commitment to the decommissioning financial guarantee. In response, CNSC staff stated that it is satisfied that the related licence condition will be met. McMaster University is continuing to contribute towards the financial guarantee. CNSC staff added that funds are currently in place to complete the safe shutdown and radiological aspects of the facility decommissioning.

Update on the Implementation of the Administrative Agreement between the CNSC, Saskatchewan Environment (SE) and Saskatchewan Labour (SL)

41. With reference to CMD 05-M22, CNSC staff, SE and SL gave a joint presentation on the implementation of the Administrative Agreement for the regulation of Saskatchewan uranium mines and mills. The Commission questioned whether the licensees had also been asked for their views of the implementation.
42. The Commission sought assurances that the responsibilities under the *Nuclear Control and Safety Act* (NSCA) remain with the Commission. CNSC staff confirmed that the Commission will remain responsible with all the authorities to execute its mandate. SE added that the provincial regulatory bodies also remain responsible for the execution of their respective mandates and the enforcement of their regulations.
43. The Commission expressed its support of this initiative and acknowledged future challenges, specifically the harmonization of the licensing process and how it will fit in the overall CNSC regulatory regime. The Commission requested that CNSC staff examine possible benefits of a future role with Environment Canada and Fisheries and Oceans Canada in this area.

Revision of Designated Officer List to Respond to Operational Needs and Changes at the CNSC

44. CNSC staff recommended that the Commission's make the designations described by title of office in the Designated Officers List in CMD 05-M23 with the following two additional changes: 1) the Director, Non-Proliferation and International Relations Division is changed to Director, Non-Proliferation and Export Controls and 2) the Point-Lepreau/ Gentilly-2 Regulatory Program Division is changed Gentilly-2/ Point-Lepreau Regulatory Program Division.

45. The Commission approved the designation of authority as set out in CMD 05-M23 with the above-noted changes described by staff. With this approval, CMD 05-M23, as modified, replaces CMD 03-M51 and CMD 03-M55.

DECISION

46. The Commission authorizes the Secretary of the Commission to issue the Designated Officers' Certificates accordingly.

ACTION

Mid-term Report on TRIUMF's Class IB Particle Accelerator Facility in Vancouver, British-Columbia

47. This item has been rescheduled for a future Commission Meeting to be held in May or June 2005.

Closure of the Public Meeting

The public portion of the meeting closed at 2:32 p.m.

The Commission moved in closed session to discuss security measures at Hydro-Québec Gentilly-2 site as set out in CMD 05-M25 and CMD 05-M25.1. During the meeting on this item, Hydro Québec sought an amendment of its operating licence. As such, the proceedings were completed as a licensing hearing in accordance with the CNSC *Rules of Procedure* and a separate *Record of Proceeding, including Reasons for Decision* was prepared. Due to the protected nature of the information presented during the hearing, the Record of Proceedings is not a public document.

Chair

Recording Secretary

Secretary

ANNEX A

CMD	DATE	File No
05-M15	2005-03-07	(1-3-1-5)
Notice of meeting held on Wednesday, April 6, 2005 in Ottawa		
05-M16	2005-03-23	(1-3-1-5)
Agenda of the meeting of the Canadian Nuclear Safety Commission (CNSC) held in the public hearing room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Wednesday, April 6, 2005		
05-M16.A	2005-03-31	(1-3-1-5)
Updated agenda of the meeting of the Canadian Nuclear Safety Commission (CNSC) held in the public hearing room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Wednesday, April 6, 2005 – Supplementary Information		
05-M16.B	2005-04-05	(1-3-1-5)
Updated agenda of the meeting of the Canadian Nuclear Safety Commission (CNSC) held in the public hearing room, 14th floor, 280 Slater Street, Ottawa, Ontario, on Wednesday, April 6, 2005 – Supplementary Information		
05-M17	2005-03-22	(1-3-1-5)
Approval of minutes of Commission meeting held February 24, 2005		
05-M18	2005-03-21	(1-3-1-5)
Significant Development Report no. 2005-3 for the period of February 2, 2005 to March 17, 2005		
05-M18.A	2005-03-30	(1-3-1-5)
Significant Development Report no. 2005-3 for the period of February 2, 2005 to March 17, 2005 – Supplementary Information		
05-M18.B	2005-04-05	(1-3-1-5)
Significant Development Report no. 2005-3 for the period of February 2, 2005 to March 17, 2005 – Supplementary Information		
05-M19	2005-03-21	(1-3-1-5)
Status report on power reactors for the period of February 7, 2005 to March 18, 2005		
05-M20	2005-03-22	(26-1-0-0-0, 37-0-0-0)
Annual Report on Decommissioning Plans and the Financial Guarantee for Nuclear Facilities owned by Ontario Power Generation Inc.		

05-M21 2005-03-22 (26-1-1-1-0)

Mid-Term Report on McMaster University's Class IA Nuclear Reactor Facility in Hamilton, Ontario

05-M21.A 2005-03-22 (26-1-1-0-0)

Mid-Term Report on McMaster University's Class IA Nuclear Reactor Facility in Hamilton, Ontario (Contains prescribed security information and is not publicly available)

05-M22 2005-04-22 (22-7)

Update on the implementation of the Administrative Agreement between the Canadian Nuclear Safety Commission, Saskatchewan Environment and Saskatchewan Labour

05-M23 2005-03-21 (1-3-1-5)

Need to replace CMD 03-M51 to respond to operational needs and changes at the CNSC

05-M24 2005-03-22 (29-1-1-0-0)

Mid-Term Report on TRIUMF's Class IB Particle Accelerator Facility in Vancouver, British Columbia

05-M24.A 2005-03-21 (29-1-1-0-0)

Mid-Term Report on TRIUMF's Class IB Particle Accelerator Facility in Vancouver, British Columbia (Contains prescribed security information and is not publicly available)

05-M24.B 2005-03-30 (29-1-1-0-0)

Mid-Term Report on TRIUMF's Class IB Particle Accelerator Facility in Vancouver, British Columbia – Supplementary Information

05-M25 2005-03-30 (1-11-27-6)

Gentilly-2 security measures S-298 standard implementation (Contains prescribed security information and is not publicly available)

05-M25.1 2005-03-30 (1-3-1-7)

Gentilly-2 security measures S-298 standard implementation (Contains prescribed security information and is not publicly available)