

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, January 25, 2007 beginning at 9:00 a.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

J. Dosman  
A. Harvey  
C.R. Barnes  
M.J. McDill

K. McGee, Commission Assistant Secretary  
J. Lavoie, General Counsel  
S. Gingras, Recording Secretary

CNSC staff advisers were: B. Howden, K. Scissons, I. Grant, T. Schaubel, S. Munger, K. Lafrenière, F. Ashley and D. Wismer

Other contributors were:

- Areva Resources Canada Inc.: R. Pollock
- Ontario Power Generation Inc.: P. Tremblay and J. Coleby
- Cameco Corporation: T. Rogers, J. Jarrell, S. Grant, G. Haywood, D. Neuburger, and G. Hein

#### Adoption of the Agenda

1. The revised agenda, CMD 07-M2.A, was adopted as presented.

#### Chair and Secretary

2. The President chaired the meeting of the Commission, assisted by K. McGee, Commission Assistant Secretary and S. Gingras, Recording Secretary.

#### Constitution

3. With the notice of meeting, CMD 07-M1.A, having been properly 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 December 13, 2006, Commission Member Documents CMD 07-M1 to CMD 07-M6.1A were distributed to Members. These documents are further detailed in Annex A of these minutes.

#### Minutes of the CNSC Meeting Held December 13, 2006

5. The Commission Members approved the minutes of the December 13, 2006 Commission meeting without modifications.
6. The Commission noted that the update on Pickering A from the last Commission meeting was available and would be discussed during the status update on power reactors.
7. With reference to item 9 of the minutes, the Commission enquired as to when a briefing to the Commission on the root cause analysis of the Cigar Lake inflow event would be available. CNSC staff answered that no definite time was scheduled for reporting to the Commission on this topic, but that the Secretariat would be informed and the Commission updated when more information is available.

#### STATUS REPORTS

##### Significant Development Report

8. The Commission considered the Significant Development Report (SDR) no. 2007-1, submitted by CNSC staff as documents CMD 07-M4 and CMD 07-M4.A.
9. With reference to item 4.1.1 on the follow-up to Significant Development Report (CMD 06-M33) on the unauthorized discharge from backfilled tailings management areas at the Cluff Lake Project, CNSC staff summarized the results of a root cause analysis performed by AREVA on this event.
10. The Commission expressed the view that the SDR did not provide sufficient information on any developments since the presentation of a previous SDR on this issue during the June 29, 2006 meeting. In response to this comment, CNSC staff offered to provide further documentation associated with the event.

11. The Commission requests CNSC staff to provide them with copies of the root cause analysis report on the event, as well as any correspondence on this SDR, as soon as possible.
12. With reference to item 4.1.2 on the multi-unit forced outage at the Pickering Nuclear Generating Station A and B, OPG provided a summary of the event. OPG concluded from its investigation that damage on one of the demineralised ion-exchange columns was the source of the event.
13. The Commission requested more information on the estimated length of time the ion-exchange column was not operational. OPG answered that the column was in service over the period from December 15 to 18, 2006, and that it believes the resin escaped during that period. OPG added that an inspection of the vessel confirmed that approximately 2000 litres of mixed (acid cation and base anion) resin was lost, and that approximately 25 per cent of the resin was recovered.
14. The Commission further enquired about any potential consequences to the environment as a result of this incident. OPG answered that, since the resin is an inert substance, there was minimal risk to the environment. OPG noted that there was more concern for the steam generators, since the resin degrades at high temperatures and produces sulphates. CNSC staff confirmed that there was no unreasonable risk to the environment resulting from the incident, and added that representatives from the Ontario Ministry of the Environment also agreed with CNSC staff's conclusion.
15. CNSC staff provided more details on an incident that took place at the Gentilly-2 reactor early in the morning of January 25, 2007. Emergency shutdown system 1 was manually activated on the shift supervisor's recommendation when a computer problem was detected. The reactor regulating system indicated an erratic power error. CNSC staff added that the reactor was in poison outage for at least 36 hours, and that the situation was being closely monitored.
16. The Commission asked whether reactor safety had been impacted. CNSC staff responded that there was no undue risk at that time.
17. In response to a question from the Commission regarding whether the problem was recurrent, CNSC staff stated that this problem occurs occasionally and that such incidents also occur in other reactors of the same type.

ACTION

18. The Commission expects CNSC staff to present an updated report on this incident at the next Commission meeting. The Commission also requests the presence of representatives from Hydro-Québec for this item agenda.

ACTION

#### Status Report on Power Reactors

19. With reference to the CMD 07-M5 on the Status Report on Power Reactors, CNSC staff did not have any additional information or updates.
20. As requested by the Commission at the last meeting, CNSC staff provided a verbal update on the generator cooling issues at Pickering A. CNSC staff also noted that the problem had been resolved.

#### Mid-Term Status Reports

21. With reference to CMD 07-M6, CNSC staff presented its mid-term status report for the McArthur River operation. CNSC staff provided a summary of follow-up items identified during the 2004 licence renewal hearings, as well as a summary of the results of CNSC staff's regulatory program assessments. CNSC staff is of the view that the continued operation of the facility does not pose an unreasonable risk to the health and safety of persons, the environment and national security.
22. As described in more details in CMD 07-M6.1 and CMD 07-M6.1A, Cameco Corporation presented a verbal summary of the key activities at McArthur since the renewal of the licence. Cameco also explained the planned activities and the key areas planned for the period to the renewal licensing hearings in 2008.
23. The Commission requested more information from Cameco on reasons why it was having difficulties achieving satisfactory performance in the quality assurance area. Cameco answered that quality assurance programs were implemented at each site; however, the CNSC requires the implementation of a corporate program. Cameco further noted that the transition from a site program to a corporate program involved several challenges and was taking time. CNSC staff described its compliance activities performed to verify Cameco's progress and stated that it considered the licensee's progress to be acceptable.

24. The Commission expects CNSC staff's planned 2007 report on the assessment of Cameco's quality assurance program to be made available to the Commission for the next licensing hearing.
25. The Commission sought further information on how Cameco is addressing the issue of the determination of localized groundwater pressures and potential flows. Cameco noted that it had hired a third party consultant who developed a groundwater model, as part of the required work to modify the mine development risk process. Cameco also explained that areas of low and high risk development have been characterized. Furthermore, Cameco stated that, when mining is planned in high risk areas, it submits details of the planned work to CNSC staff and performs an internal risk assessment. CNSC staff commented that it was satisfied that the risks are being controlled by the phased approach applied by Cameco.
26. The Commission expressed concerns on the capability of the mine water treatment system to withstand a water inflow event similar to the 2003 event. In response, Cameco provided a thorough description of the contingency water treatment system, noting that this system would have the capacity to treat half of the inflow water, while the remaining water would go through the conventional treatment system.
27. In response to the Commission's further questioning on this matter, Cameco explained that it would apply the lessons learned from the recent water inflow event at Cigar Lake, and that it was still evaluating how to implement improvements beyond what was implemented following the 2003 inflow event.
28. The Commission asked for more information on the importance of the inadequate reduction of molybdenum and selenium in water released from the water treatment plant. CNSC staff answered that, while the consequences to the environment are predicted only within the next 30 to 50 years, corrections to the system need to be done. The planned upgraded system would filter not only molybdenum and selenium, but also uranium and other metals such as cadmium which also present potential risks. Cameco also provided a detailed description of the interim measures currently implemented, as well as future improvements to the water treatment system, in order to resolve the issue. CNSC staff noted that it was satisfied with Cameco's proposed processes to improve the system.

ACTION

29. In response to a question from the Commission regarding a fatal injury incident in October 2006, Cameco noted that another method for removing the ice was selected and used after this incident; therefore, another job hazard analysis was performed because of this change. Cameco also explained that it was completing a job hazard analysis checklist. Cameco further noted that its safety department was taking a greater role in the job analysis from a quality standpoint.
30. The Commission enquired about CNSC staff's follow-up activities regarding the October 2006 fatality incident. CNSC staff explained that it expressed its concerns to Cameco regarding the number of incidents involving short-term contractors, and asked Cameco to look at its overall safety programs.
31. CNSC staff indicated that it would notify the Commission of any significant development on this issue.
32. The Commission enquired on the role of Saskatchewan Labour in this issue. CNSC staff noted that Saskatchewan Labour was in clear communication with CNSC staff in a concerted effort to improve the occupational health and safety at the facility. CNSC staff further noted that Saskatchewan Labour was also doing its own investigation of the event and will be reporting the results to CNSC staff.
33. In response to further questioning from the Commission on the relationship between CNSC staff and Saskatchewan Labour, CNSC staff explained that the inspections onsite are performed by Saskatchewan Labour on CNSC staff's behalf, and that CNSC staff predominantly relies on Saskatchewan Labour on issues relating to conventional health and safety. However, CNSC staff added that a level of knowledge and qualifications allow them to identify radiological or non-radiological work hazards while doing inspections onsite. CNSC staff also indicated that the responsibility for the health and safety of workers lies with the licensee.
34. The Commission commented that a clear definition of the relationship between Saskatchewan Labour and CNSC staff would be useful to better determine how the oversight of activities onsite is performed. The Commission would welcome a briefing on this relationship in the future, likely as part of an update for the CNSC/Saskatchewan Memorandum of Understanding.

ACTION

35. The Commission requested comments from Cameco about the “C” ratings on fire protection. Cameco answered that satisfying all CNSC’s requirements had been an issue for all mine sites, but that a meeting with CNSC staff allowed them to better understand the requirements for this area. Cameco added that it hired a consultant to help on fire protection, and that this issue is a priority.
36. The Commission commented that mid-term reports are a useful tool to provide updates on issues relating to a licensee, but that it was important to note that the documentation need not be as lengthy and detailed as those submitted for a licensing hearing.

Closure of the Public Meeting

37. The public meeting closed at 11:02 a.m.

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*Chair*

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*Recording Secretary*

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Secretary

## APPENDIX A

CMD	DATE	File No
07-M1	2006-12-21	(1-3-1-5)
Notice of meeting held on Thursday, January 25, 2007 in Ottawa		
07-M1.A	2007-01-10	(1-3-1-5)
Revised Notice of meeting held on Thursday, January 25, 2007 in Ottawa		
07-M2	2007-01-10	(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 Thursday, January 25, 2007		
07-M2.A	2007-01-18	(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 Thursday, January 25, 2007 – Supplementary Information		
07-M3	2007-01-19	(1-3-1-5)
Approval of minutes of Commission meeting held December 13, 2006		
07-M4	2007-01-04	(1-3-1-5)
Significant Development Report no. 2007-1 for the period of December 12, 2006 to January 4, 2007		
07-M4.A	2007-01-17	(1-3-1-5)
Significant Development Report no. 2007-1 for the period of January 5, 2007 to January 17, 2007 – Supplementary Information		
07-M5	2007-01-09	(1-3-1-5)
Status Report on Power Reactors for the period of November 28, 2006 to January 8, 2007		
07-M6	2007-01-09	(22-C5-126-1)
Mid-term Status Report for the McArthur River Operation – Oral presentation by CNSC staff		
07-M6.A	2007-01-09	(1-11-36-0)
Mid-term Status Report for the McArthur River Operation – Oral presentation by CNSC staff – Contain prescribed security information and is not publicly available		

07-M6.1 2007-01-05 (1-3-1-7)

Mid-term Status Report for the McArthur River Operation – Oral presentation by Cameco Corporation

07-M6.1A 2007-01-17 (1-3-1-7)

Mid-term Status Report for the McArthur River Operation – Oral presentation by Cameco Corporation – Supplementary Information