

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, September 12, 2002, beginning at 2:20 p.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

Present:

L.J. Keen, Chair

C.R. Barnes

J.A. Dosman

Y.M. Giroux

A.R. Graham

L.J. MacLachlan

M.J. McDill

M.A. Leblanc, Secretary

I. V. Gendron, Senior Counsel

C.N. Taylor, Recording Secretary

CNSC staff advisers were J. Blyth, B. Ecroyd, J. Douglas, C. Maloney, B. Pearson, S. Cook, P. Thompson, M. Taylor and K. Gillis.

Adoption of the Agenda

1. The agenda, CMD 02-M55.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 June 27, 2002, Commission Member Documents CMD 02-M54 to CMD 02-M66 had been distributed to Members. These documents are further detailed in Annex A of these minutes.

Minutes of the CNSC Meeting Held June 27, 2002

5. The Members approved the minutes of the June 27, 2002 meeting of the Commission (reference CMD 02-M56) without change.

DECISION

Significant Development Report

6. As noted in CMD 02-M57, there were no significant developments to report for the regular period of June 10 to August 22, 2002.
7. Significant Development Report (SDR) no. 2002-6 (CMD 02-M57.A) was submitted by staff on September 11, 2002. SDR 2002-6 provided the Commission with an update on an evolving situation concerning the reliability of financial guarantees for Bruce 'B' Nuclear Generating Station (NGS). Condition 11.3 of the Operating Licence for the Bruce B NGS requires that financial guarantees must be in place for the purpose of ensuring the facility is brought to, and maintained in, a safe shutdown state.
8. Staff reported that due to the recent financial difficulties of British Energy PLC, the majority shareholder of Bruce Power Inc., significant uncertainties have arisen about whether funds would be available if called upon for this purpose. Staff noted that Bruce Power Inc. is taking steps to reduce the uncertainty and that the British Government is assessing options for reinforcing the guarantees. However, staff stated that it remains unclear at this time if Bruce Power Inc. is in compliance with licence condition 11.3. Staff indicated that it would continue to closely monitor the situation, consider implications of these developments for other reactor operators, and provide the Commission with regular updates on progress and developments.
9. Staff recommended that the Commission defer questions on the matter described in the SDR until after Bruce Power Inc. presented its one-year status report later in the meeting (see paragraphs 16 to 34 below). The Commission decided to defer its questions as recommended by staff.

Status Report on Power Reactors

10. Staff summarized the status of all power reactors as documented in CMD 02-M58.
11. With reference to the status report on Darlington NGS, staff reported on the discovery of gaps in the steam barriers in several rooms that house safety-important equipment. Staff described the

process that was undertaken by OPG to fix the gaps in order of priority. OPG is investigating the cause of the gaps and the reason they had not been previously detected. Staff stated that it continues to monitor the situation and will take action as necessary.

12. In response to questions from the Members, staff and representatives from OPG provided a more detailed description of the gaps and the preliminary findings of OPG's investigation. CNSC staff and OPG noted that the gaps are generally not easily seen and are typically located in high and inaccessible areas such as near elevated pipe penetrations and between wall and ceiling structures. OPG indicated that it appears the gaps are the result of sealant materials not being installed during the original construction of the plant, rather than from any subsequent deterioration or removal of sealant materials. OPG reported that it is carrying out a root cause assessment.
13. The Members questioned staff as to what was being done at other stations to ensure similar problems do not exist elsewhere. Staff noted that the environmental qualification of equipment at the other stations depends less on steam barriers (i.e., relatively few rooms at the other stations require steam barriers). Staff reported that it is now specifically checking for gaps in the required steam barriers during its routine inspections at all nuclear generating stations. Furthermore, staff noted that all other station operators were promptly notified of the discovery at Darlington through the CANDU Operators Group.
14. Staff indicated its satisfaction with OPG's response to correct the gaps and that no reduction or curtailment of operations is considered by staff to be necessary at this time.
15. The Members requested that staff report back to the Commission on the extent of the problem at other stations and when the conclusions of OPG's root-cause analysis are available.

ACTION

Mid-term Report on the Performance of Bruce NGS – B

16. Condition 11.2 of Power Reactor Operating Licence PROL 16.04/2003 required that Bruce Power Inc. (Bruce Power) report to the Commission on or before October 31, 2002, on the operation and performance of the Bruce NGS - B facility.

Operating Performance:

17. With reference to "Bruce B Mid-term Performance Report – August 2002" (attached to CMD 02-M59), Bruce Power highlighted a number of achievements during its first year as licensee for the facility.
18. Staff expressed its satisfaction with performance of Bruce Power during the reporting period. Staff referred to a number of actions and initiatives that have contributed to an overall improvement in the performance, reliability and safety of operations at the facility.
19. In response to a question from the Members about a reported increase in the corrective maintenance backlog during the past few months, Bruce Power stated that the number of maintenance items at each of the five units remains very low and that some non-essential work was likely deferred during the summer vacation period. Furthermore, Bruce Power noted that the unit 6 maintenance outage was being finished in July and that this could account for minor differences in the backlog between years.
20. With reference to the charts and graphs provided by Bruce Power in its report, the Members reminded Bruce Power to ensure that, in future, the units of measurement should be clearly indicated. Bruce Power noted this comment and clarified the information presented in the specific illustrations in question.
21. In response to further questions from the Members, Bruce Power clarified the difference between the reported industrial accident rate and the rate of lost-time accidents. Bruce Power stated that, in some instances, workers are able to return to work immediately following receipt of on-site first aid.
22. Bruce Power responded to questions from the Members on how and why different levels of achievement are awarded by the *International Accident Prevention Agency*. Bruce Power reported that it was awarded a "7" under this system which has a maximum score of "10".
23. Bruce Power elaborated on its program of daily general field inspections which requires management and supervisory staff to participate in observing workers in the field. Bruce Power considers that the practice has helped reinforce management standards and improve safety by identifying trends and training requirements.

24. In response to a question from the Members on the earthquake warning system, Bruce Power explained that, with the assistance of the Geological Survey of Canada, Bruce Power is made aware of all earthquakes in Canada within ten minutes, regardless of size. All such notifications are reported to the CNSC.

Operational Financial Assurances:

25. In its presentation to the Commission, Bruce Power also summarized its understanding of the recently reported financial difficulties of British Energy PLC and the effect these are having on Bruce Power's ability to address contingent shutdown liabilities in accordance with the conditions of the licence. Bruce Power stated that it is committed to working expeditiously to provide any assurance that the Commission might require and to continue to operate the facility safely. Bruce Power noted that the CNSC does not prohibit the use of alternative means of providing the required guarantees and that Bruce Power is presently examining such alternatives. Bruce Power expressed the view that its own strong financial position will assist in arriving at a satisfactory arrangement. Bruce Power further noted that the government of the United Kingdom has provided alternative support for British Energy's trading activities in both the United Kingdom and Canada. In addition, Bruce Power stated that Cameco's share of the financial guarantees to Bruce Power remains robust.
26. In response to questions from the Members on the status of the aforementioned financial assurances, staff expressed its view that, despite a rapidly evolving situation, compliance with the licence condition 11.3, regarding financial guarantees, remains uncertain. Staff indicated that it presently does not have confidence that the funds to cover the shutdown contingent liability would be available if called upon at this time.
27. The Members sought clarification on the type and form of the assurances provided. In response, staff explained that the guarantees are provided in the form of *letters of assurance* from British Energy PLC and Cameco Corporation. They are not in the form of cash, or a purchased financial instrument. Based on this response, the Members noted that, in the event of insolvency of the guarantor, a letter of assurance provides little in the way of real coverage.

28. With reference to the Members' past questions and concerns about the appropriate form of financial instrument needed (as raised during the licensing hearing for the Bruce NGS in April 2001), the Members questioned Bruce Power on whether it could draw the money today if it was needed. Bruce Power responded that although it cannot point to a specific fund or account, Bruce Power remains of the view that the obligation of British Energy is legally binding and that it remains in full force and effect. Bruce Power stated that companies do not create segregated funds to cover this type of contingent liability and that this is why a clear line of sight to cash funds cannot be expected.
29. When questioned further by the Members on whether funds would be available immediately if needed, Bruce Power stated that it fully expects that funds would be available, possibly from the government of the United Kingdom which is presently committed to meeting all of British Energy's obligations as they fall due. Bruce Power further stated that, in the meantime, it will continue to work expeditiously with CNSC staff to identify alternative instruments.
30. Noting that the financial protection currently being provided to British Energy by the government of the United Kingdom is short term (until September 27, 2002), the Commission expressed its dissatisfaction with the current remaining uncertainty. The Commission expressed its resolve to have that uncertainty corrected as quickly as possible.
31. Further on the matter of British Energy's financial problems, the Members sought clarification of what would happen in the event that British Energy became insolvent. Bruce Power stated that this would trigger actions under the lease agreement with Ontario Power Generation (OPG), including the possible recovery of the assets by OPG.
32. The Members, remarking that the bottom line for Canadians is an assurance that the facilities can be brought to and maintained in a secure and safe shutdown condition, questioned staff as to whether OPG would be able to carry out that work in the event Bruce Power is unable to do so. Staff confirmed that OPG would resume control of the site in such circumstances, but, citing the non-transferability of licences as an example, staff expressed uncertainty about the regulatory mechanism that would be involved to allow this. In response to a follow-up question from the Members, staff indicated that it is working to clarify the regulatory process that would be involved in the event OPG needs to take control of the facility.

33. In its closing remarks on the issue of the financial assurances, staff stated that, in staff's view, Bruce Power has, and can be expected to continue to operate the facility safely. Staff therefore is of the opinion that the likelihood of requiring the contingency funds is very low. Staff stated that it will nevertheless continue to actively pursue satisfactory resolution of the uncertainties described above.
34. The Members reiterated their high level of interest in the matter of the financial assurances and requested staff to keep the Commission informed about any significant developments as they occur. Staff need not wait until the next regularly scheduled meetings of the Commission to provide this information to the Commission.

ACTION

Pickering NGS-A Return to Service

35. In its decision (dated November 5, 2001) to amend the licence for the Pickering A facility to allow the return to service, the Commission required that OPG provide status reports to the Commission every six months, or prior to the restart of any unit, until all four of the reactor units were in operation. The last status report was presented by OPG on May 23, 2002.
36. The President announced that the status report on the planned return to service of the Pickering A reactors has been postponed to the November 14, 2002 Commission Meeting.

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

37. With reference to CMD 02-M60, staff provided the Members with the fifth 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.
38. Staff reported that 4 of the 11 prerequisites are complete (no prerequisites were completed since staff presented its last status report to the Commission on June 27, 2002). Staff reported that all but one of the remaining prerequisites have been delayed due to resource constraints and the identification of additional actions to be completed.

39. Staff reported that regular meetings between AECL and CNSC staff are taking place and that a detailed plan has been developed to address the remaining actions and resourcing issues. Staff expressed the view that, despite the delays, AECL's progress on addressing the prerequisites has been satisfactory.
40. Staff stated that it now anticipates the restart of low power commissioning at MAPLE 1 in late October 2002, and commencement of fuel loading at MAPLE 2 in late November 2002.
41. Staff reported that it continues to meet with AECL on a weekly basis to discuss technical issues and on a monthly basis to address project management issues. Both CNSC staff and AECL, despite being disappointed with the rate of progress, expressed satisfaction with the quality of the communications between CNSC and AECL and the clarity of the remaining issues and expectations.
42. The Members noted that several of the reported delays were attributable to resource constraints within CNSC staff and questioned if this has now been corrected. In response, staff noted that resources were a problem at both CNSC and AECL, and expressed its satisfaction that the necessary CNSC resources are now in place to address the remaining issues.
43. The Members sought information on the operation of the emergency shutoff rod system and in particular how its speed of engagement compares to CANDU power reactor shutdown systems. Following a brief discussion, the Members agreed to accept a brief written response from staff on this matter at a later date prior to the next status report. The Members noted that any such information provided to the Commission is also available to the public on request.
44. Staff will provide a further update status report at the Commission meeting on November 14, 2002.

ACTION

ACTION

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

45. With reference to CMD 02-M61, staff provided the Members with the fifth 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.

46. Staff reported that 3 of the 6 prerequisites are complete (none has been completed since the last status report to the Commission on June 27, 2002). Staff reported that the remaining items are generally on schedule and that a more detailed plan is in place to help manage the allocation of CNSC and AECL resources to the remaining tasks.
47. Staff reported that regular meetings between AECL and CNSC staff continue to be held at both the working and managerial levels and that there remains a good mutual understanding of the issues and requirements for completion of the prerequisites.
48. Staff will provide a further update status report at the Commission meeting on November 14, 2002.

ACTION

Shield Source Incorporated – Status Report on Environmental Monitoring Program

49. With reference to CMD 02-M62, staff provided a status report on Shield Source Incorporated's (SSI) radiological environmental monitoring program (REMP). At the time the REMP was discussed at the Commission meeting held on August 9, 2001, staff made a commitment to report to the Commission on the remaining issues related to the REMP.
50. Staff concluded that SSI's proposed programs are acceptable and that SSI is in compliance with regulatory requirements. Staff noted that planned actions by SSI (to be completed by November 15, 2002) will help prevent the recurrence of problems, such as sample cross-contamination.
51. The Members expressed their surprise that quality control problems appear to persist in the handling of samples (leading to the reported sample contamination). Staff responded that it is also concerned with this problem and reported that it has formally requested SSI to better supervise the quality control at the contracted laboratory doing the work. Staff added that the problem has affected only a small number of samples and that the overall results of the program are not significantly affected – staff concluded that the SSI operation is being well managed in regard to environmental effects.

52. The Members requested staff to provide it with a status report on the remaining corrective actions taken by SSI. The report is to be provided at the earliest appropriate time following the November 15, 2002 deadline for implementing the corrective measures. The Members expressed their desire to have a SSI representative present when that report is presented to the Commission.

ACTION

New Staff Approach to Recommending Licence Periods – Results of Consultations

53. With reference to CMD 02-M63, staff reported to the Commission on the results of its consultations with stakeholders on the proposed new staff approach to recommending licence periods. The proposed new approach was first presented to the Commission at the Commission meeting of March 1, 2002 (CMD 02-M12). At that meeting, the Members requested staff to carryout stakeholder consultations and report back to the Commission at a future date.
54. Staff described the consultation process and its results. Staff reported a poor response rate to the information packages posted on the CNSC web site and mailed to approximately 350 stakeholders. The stakeholders consisted of licensees, non-government organizations, government departments, and international organizations. Only 7 responses were received, of which only one expressed opposition to the approach.
55. Staff concluded that the new approach to recommending licence periods (CMD 02-M12 and 02-M12.A) is generally seen by responders as an improvement over previous practices. Staff indicated that the suggestions from the responders for further improving the approach will be retained for future consideration. Staff recommended that more experience with the current approach is needed before further changes are considered.
56. The President emphasized that the purpose of the approach is to guide staff in formulating recommendations on licence length in a consistent manner; the Commission retains full discretion when making decisions on the length of licence terms.
57. When CMDs 02-M12 and 02-M12.A were first presented, the Commission had requested staff to also provide recommendations on how stakeholders could express their views to the Commission at the time when mid-term reports are made. Staff will provide its advice in this aspect at a future Commission meeting.

ACTION

Revised Cost Recovery Program and CNSC Fees Regulations

58. With reference to CMD 02-M64, staff reviewed the progress made to date and the steps remaining in the program for revising the CNSC's cost recovery program and Fees Regulations.
59. Staff described the consultation activities that were carried out in the program development. Staff noted that the licensees were generally supportive of the initiative and offered a number of constructive suggestions for improvement.
60. Staff also noted that draft regulations for cost recovery are being prepared for pre-publication in the Canada Gazette, Part 1, later in 2002. The draft regulations are expected to come before the Commission for approval in early 2003.
61. In response to a question on how the fees are calculated to account for inflation, staff stated that it is proposed to calculate the fees based on actual costs and therefore the amounts will automatically account for inflation as time passes.

Kiggavik-Sissons Project – Follow-up on Licence Revocation

62. Staff presented CMD 02-M65 which contains a summary of what was done to meet the stated expectations of the Commission following the Commission's decision to revoke the Mining Facility Removal Licence for the Kiggavik-Sissons Project from COGEMA Resources Inc. in May 2002 (*Record of Proceedings, Including Reasons for Decision* dated May 16, 2002).
63. Staff reported that since CMD 02-M65 was prepared, two members of the Kivalliq Inuit Association (KIA) had completed the CNSC Radiation Instrument Course and that staff was in the process of preparing copies of the CNSC project files for the KIA and Indian and Northern Affairs Canada (INAC).
64. In response to a question from the Members on the future regulatory regime for the project, staff stated that the future work (i.e., after the revocation of the CNSC licence comes into effect on September 20, 2002) will be done under the terms of the surface leases issued by the KIA and INAC.
65. Based on the results of the site visit, staff confirmed its opinion that the site does not pose a significant risk to the health and safety of persons or the environment.

Closing of Public Meeting

66. The public meeting concluded at 5:22 p.m.

Chair

Recording Secretary

Secretary

ANNEX A

CMD	DATE	File No
02-M54 Notice of Meeting	2002-08-09	(1-3-1-5)
02-M55 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, September 12, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for that day.	2002-08-28	(1-3-1-5)
02-M55.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, September 12, 2002. The meeting will begin after the closing of the Public Hearings which are scheduled for that day.	2002-09-11	(1-3-1-5)
02-M56 Minutes of the Meeting of the Canadian Nuclear Safety Commission held June 27, 2002	2002-08-27	(1-3-1-5)
02-M57 Significant Development Report no 2002-6	2002-08-26	(1-3-1-5)
02-M57.A Significant Development Report no 2002-6 - Supplementary Information	2002-09-11	(1-3-1-5)
02-M58 Status Report on Power Reactors	2002-08-23	(1-3-1-5)
02-M59 Bruce Power: Mid-Term Report on the Performance of the Bruce Nuclear Generating Station B - Presentation by Bruce Power	2002-08-27	(1-3-1-7)
02-M59.A Bruce Power: Mid-Term Report on the Performance of the Bruce Nuclear Generating Station B - Presentation by Bruce Power - Supplementary Information	2002-09-11	(1-3-1-7)
02-M60 Atomic Energy of Canada Limited: Status Report on Approval to Restart Commissioning of the MAPLE 1 and 2 Reactors	2002-08-27	(26-1-62-0-0)
02-M61 Atomic Energy of Canada Limited: Status Report on Approval to Commence Active Commissioning of the New Processing Facility	2002-08-26	(24-1-3-0)

02-M62 2002-08-27 (42-1-2-0)
Shield Source Incorporated: Status Report on Environmental Monitoring Program

02-M63 2002-08-27 (1-1-19-0)
New Staff Approach to Recommending Licence Periods

02-M64 2002-08-27 (20-1-17-2)
Development of Revised Cost Recovery Program and CNSC Fees Regulations

02-M65 2002-08-27 (22-C4-123-1)
COGEMA Resources Inc.: Follow-up related to the Revocation of the Kiggavik-Sissons Project Mining Facility Removal Licence

02-M66 2002-08-27 (1-3-1-7)
Ontario Power Generation: Pickering NGS-A Return to Service - Oral presentation by Ontario Power Generation

02-M66.1 2002-09-05 (1-3-1-7)
Ontario Power Generation: Pickering NGS-A Return to Service - Informatin from Canadian Nuclear Safety Commission Staff