

October 9, 2008

Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, October 9, 2008 beginning at 9:05 a.m. in the Public Hearing Room, CNSC Offices, 280, Slater Street, Ottawa, Ontario.

Present:

M. Binder, Chairman
A. Graham
M. McDill
C. Barnes
A. Harvey
R. Barriault
D. Tolgyesi

K. McGee, Assistant Secretary
J. Lavoie, Senior General Counsel
P. Reinhardt, Recording Secretary

CNSC staff advisors were:

G. Rzentkowski, P. Elder, K. Lafrenière, H. Rabski, P. Lahaie, L. Desaulniers and G. Crawford

Other contributors were:

- Ontario Power Generation: P. Tremblay
- Saskatchewan Research Council : J. Muldoon and W. Yuen
- Royal Military College of Canada: J. Fugère and K. Nielsen
- Ecole Polytechnique de Montréal : M. Marleau and G. Kennedy
- University of Alberta: A. Greenshaw and J. Duke
- Dalhousie University: R. Illson and R. Boyd
- GE Hitachi Nuclear Energy Canada Inc.: P. Mason and P. Desiri

Adoption of the Agenda

1. The revised agenda, CMD 08-M56.B, was adopted as presented.

Chair and Secretary

2. Mr. A. Graham, Member of the Commission, chaired the meeting up to item 4.3 of the agenda after which time he was replaced by Mr. M. Binder, President of the Commission. The Chairs of the meeting were assisted by K. McGee, Assistant Secretary of the Commission and P. Reinhardt, Recording Secretary.

Constitution

3. With the revised notice of meeting, CMD 08-M55.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 August 21, 2008, Commission Member Documents CMD 08-M55 to CMD 08-M60 and CMD 08-M62 to CMD 08-M70 were distributed to the Commission Members. These documents are further listed in Annex A of these minutes.

Agenda

5. Before the agenda was adopted, the Assistant Secretary of the Commission noted that four supplementary Commission Member Documents (CMDs) were added after the publication of the meeting agenda on September 25, 2008 (the following CMDs were added: 08-M56.A, 08-M56.B, 08-M65.1, 08-M70). They are listed on the updated agenda. The revised agenda, CMD 08-M56.B, was adopted as presented.

Minutes of the CNSC Meeting held August 21, 2008

6. The Commission Members approved the minutes of the August 21, 2008 Commission Meeting as outlined in CMD 08-M57 without modifications. The Chair noted that a Notice of Decision was published on the CNSC Web site on September 4 to announce the decisions made following the August 21 meeting regarding the approval of regulatory documents RD-52, for consultation, and RD-363, for publication, and the adoption of a new process for screening environmental assessments.

STATUS REPORTS

Status Report on Power Reactors

7. With reference to CMD 08-M60 on the Status Report on Power Reactors, CNSC staff presented two minor updates. First update was on the Darlington Nuclear Generating Station (NGS)-Unit 4 that had to shutdown on October 9, 2008 due to a problem with turbine controls. OPG added that it was investigating the incident and would provide input and feedback to the CNSC at an appropriate time.

8. The second update was on Bruce A NGS-Unit 4. CNSC staff reported that Bruce A NGS-Unit 4 heat transport leak rate was currently at 55 kilograms per hour (kg/h) compared to the normal or expected leak rate of 20 kg/h. CNSC staff informed the Commission that the leak was localized inside the reactor containment and that it was present since spring 2008 at the return to service of the unit following the planned outage. CNSC staff added that Bruce Power was monitoring the leak rate closely and noted that the regulatory limit for shutting down the unit was at 100 kg/h - well over the current rate of 55 kg/h.
9. The Commission asked CNSC staff for an update on the Point Lepreau refurbishment status.
10. CNSC staff reported that Point Lepreau refurbishment was on time and that New Brunswick Power Nuclear Corporation was confident that it would meet the milestones that were established.

INFORMATION ITEM

Ontario Power Generation Inc. (OPG): Update on the Significant Development Report: Pickering B Unit 7 Decrease in Gadolinium concentration while in over-poisoned guaranteed shutdown state

11. With reference to CMD 08-M70, OPG provided an overview of the Significant Development Report 2008-4, presented before the Commission at the May 14, 2008 Public Meeting.
12. OPG reported that it has submitted a report of its investigation into the cause of the event to CNSC staff. OPG's conclusion is that gadolinium oxalate, which is non-soluble, was formed in the moderator system, due to elevated carbon dioxide (CO₂) levels, and it had deposited on the internal surfaces of the calandria in the moderator system piping. OPG added that an elevated CO₂ level had been observed in Unit 7 in 2005 and that it had not interfered with the safe operation of Unit.
13. OPG reported that it was still monitoring the CO₂ level and that it was planning to replace that calandria tube during the 2010 planned outage activities.

14. OPG added that it was completing recovery activities and assessing the amount of remaining gadolinium deposited in the calandria to decide if it would proceed with start-up of the unit or with the chemical clean-up of the moderator system to remove any gadolinium-related deposits. OPG noted that CNSC approval would be required for the start-up of Unit 7.
15. OPG informed the Commission that the removed calandria tube had been sent to Atomic Energy of Canada Limited (AECL) for a detailed inspection. OPG confirmed that the preliminary results of the inspection in regards of the failure mechanism would be shared with CNSC and other CANDU operators. OPG concluded that the complete report, including the exact cause of failure, would be available by the end of this year.
16. CNSC staff reported it had monitored the progress of the recovery of Unit 7 very closely. CNSC staff added that two formal submissions describing the initial results on the root cause analysis and the planning for the recovery of the unit had been received from OPG. CNSC staff also confirmed that the approval to restart Unit 7 would require that OPG demonstrates that the plant is safe to operate.
17. The Commission asked OPG why the event was reported only in 2008, taking into account that an elevated CO₂ level was first observed in 2005.
18. OPG reported that CNSC staff had been notified of an elevated CO₂ problem and that an investigation had confirmed it had a very low impact on the moderator system. OPG added that the SDR report, in spring 2008, had been triggered by the appearance of oxalate, a very insoluble salt. OPG noted that, since 2005, a lot of discussion with experts and industry had taken place on the issue and that it had increased the surveillance of the Unit.
19. CNSC staff confirmed that, despite the issue, the gadolinium concentration in the moderator of Unit 7 always remained above the regulatory limit of 12 parts per million.
20. The Commission sought information on the criteria to be used to decide to start up the reactor. OPG answered that, in the presence of residual gadolinium, constraints and limits would be used to start the reactor at lower power to burn off the gadolinium and that the unit would be brought to full power as per regular procedures agreed on with CNSC for a safe return of the unit to service.

21. CNSC staff insisted that, although the gadolinium concentration problem was not a safety issue, the root cause analysis on the calandria tubes degradation presently underway at AECL would be completed soon.

INTERIM LICENSING REPORTS

Saskatchewan Research Council non-power SLOWPOKE-2- reactor facility located in Saskatoon, Saskatchewan

22. With reference to CMD 08-M62, CNSC staff updated the Commission with respect to Saskatchewan Research Council (SRC) non-power SLOWPOKE-2- reactor facility's performance and compliance with CNSC regulatory requirements during the period from July 1, 2003 to September 1, 2008. SRC currently holds a 10 year licence valid from July 1st, 2003 to June 30th, 2013.
23. CNSC staff presented to the Commission four more SLOWPOKE-2 reactor facility performance and compliance mid-term reports during the present meeting. It has to be noted that many questions posed by the Commission on any one of these facilities can also be attributed to all facilities and will not be repeated unless the Commission insisted on a particular issue for a given facility.
24. The Commission asked CNSC staff how a SLOWPOKE-2 reactor could operate safely without direct supervision of an operator. It also sought information on the personnel required for the safe operation and maintenance of that type of reactor.
25. CNSC staff explained that the SLOWPOKE-2 was a pool-type reactor, cooled by natural circulation and that in the event of overheating of the fuel, the reactor shuts down automatically. Therefore immediate contribution of an operator is not necessary to shut down the reactor. CNSC staff added that emergency procedures were in place at each facility, and that there was a remote shutdown button that could be operated by emergency workers in the event a certified operator could not be reached.
26. CNSC staff further informed the Commission that the operation and maintenance of a SLOWPOKE-2 reactor required an operator and an engineer or a technician certified by CNSC.

27. The Commission was concerned on the low level of compliance activities carried out by CNSC staff at all the SLOWPOKE-2 reactor facilities during the 2003 to 2006 period.
28. CNSC staff reported that, before 2006, inspections were based on event reports submitted to CNSC staff and that concerns about the operation of the facilities were almost non-existent. In 2006, CNSC staff noted that the programs required by the Commission, at the time of the renewal of the licences in 2003, were not in place at the SLOWPOKE-2 facilities. CNSC staff then decided to establish a more systematic compliance program for the SLOWPOKE-2 reactors in general, including annual inspections at each facility.
29. The Commission raised concern that initiatives and improvements to be undertaken by the licensees in certain areas, including systematic approach to training (SAT) and Quality Assurance (QA), were still outstanding. CNSC staff explained that the expectations had been based on the level of risk of such reactors and that the documents required were adapted to the level of risk associated with SLOWPOKE-2 facilities.
30. In this regard, the Commission inquired if SRC was compliant with its licence. CNSC staff reported that SRC was compliant but was not meeting the expectations of the Commission set out in the *Record of Proceedings, including Reasons for Decision (Record of Proceedings)* at the issuance of the licence. SRC responded that it would meet the CNSC's expectations before the end of the year.
31. The Commission insisted on the fact that, at the issuance of the 10-year licences in 2003, it was clearly outlined in the *Records of Proceedings* that the licensees would have to submit to CNSC staff a QA program, a SAT program and a report on the ageing of the reactor components. The Commission added that, despite the low risk associated with the SLOWPOKE-2 reactors, these commitments should have been respected in a timely manner. The Commission also expressed the view that the period between 2003 and 2006 was improperly followed by CNSC staff.

32. In this regard, the Commission requested that the concerned licensees present status reports on the implementation of corrective actions in the areas of training and QA, and on the ageing management of components and systems and succession planning for workers at the facilities. The Commission requested that these reports be presented in approximately one year at a public meeting of the Commission. The Commission expects that the licensees will have submitted the required documents for CNSC staff's review and will have revised them as needed in time to report at the Commission public meeting. The Commission also expects that CNCS staff will verify the implementation of the corrective actions during its inspections of the facilities.
33. With respect to worker safety, SRC noted that it had a program for monitoring staff exposure and other types of contamination and that no problem or issues at the facility were observed to this date.
34. The Commission further asked about the turnover of the staff operating the reactor. CNSC staff answered that the current operators were all certified and experienced staff and that turnover had been very low. CNSC staff added that the licensee still needs to develop a solid training program to ensure the on-going training of current staff, the training of the next generation of workers and the training for staff up for recertification in 2011.
35. The Commission sought some information on SRC financial guarantee. CNSC staff reported that the total amount for the decommissioning was \$1.8 million and that it was in the instrument of an investment account, including an initial deposit of \$500,000, to be followed by five annual payments of \$260,000. CNSC staff added that a statement demonstrating that the payment was up-to-date was sent by SRC annually.
36. The Commission sought further information with respect to ageing management of components and systems at the SRC facility. CNSC staff noted the importance of maintaining spare parts for the SLOWPOKE-2 reactors and that, in this regard, the need for licensees to address the issue systematically and have a documented inventory of spare parts.

ACTION

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37. SRC confirmed to the Commission that it has submitted to the CNSC a detailed assessment of every component of the reactor and of auxiliary systems, with suggestions in case of failure. In summary, SRC added that each and every item of the reactor, including the control rod, the motor, and console, had been addressed in its report to CNSC.
38. At this point in time in the meeting, Mr. A. Graham was replaced with President M. Binder to chair the rest of the meeting.

Royal Military College of Canada non-power SLOWPOKE-2- reactor facility located in Kingston, Ontario

39. With reference to CMD 08-M63, CNSC staff updated the Commission with respect to Royal Military College of Canada (RMC) non-power SLOWPOKE-2 reactor facility's performance and compliance with CNSC regulatory requirements . The report covers the period from July 1, 2003 to September 1, 2008. RMC currently holds a 10 year licence valid from July 1st, 2003 to June 30th, 2013.
40. RMC confirmed to the Commission that it was aware of the issues that had been raised since the beginning of the meeting in regards of the commitments agreed on at the issuance of the 10 year licence, and that it desired to be compliant and meet these commitments.
41. The Commission sought more information from RMC on its strategy for dealing with potential component obsolescence. RMC answered it had sent to CNSC staff a detailed response with respect to the reactor ageing components including all the items that had been replaced. RMC added that it had in place a long-term maintenance plan to upgrade the control system hardware and software with 2011 as a target date.
42. CNSC staff confirmed that RMC had submitted a detailed report on the assessment of ageing component of the reactor that it was satisfactory although more information was needed on specific items.
43. With respect to RMC's training program, CNSC staff noted that it had reviewed the initial document and found it was incomplete. CNSC staff has clarified with RMC its expectations for the training program and offered to work with it to establish an adequate program.

44. With respect to RMC's QA program, CNSC staff noted that it had only been able to do a first review of the submitted documentation and that it had also found it incomplete. CNSC staff has notified RMC and will do a complete review once additional information is submitted from RMC.
45. The Commission asked RMC for a confirmation that it would be in compliance, have the necessary documentation and the necessary resources to meet the requirements, the expectations and the conditions the CNSC expected to be in place within the next six month period. RMC confirmed to the Commission that it would do so and would make sure that the necessary resources are in place and that CNSC requirements are met.
46. The Commission sought an update on RMC's financial guarantee. CNSC staff reported that RMC's financial guarantee was in the form of a letter from the Deputy Minister of the Department of National Defence (DND) confirming that all costs associated with the decommissioning of the facility would be borne by DND as long as the SLOWPOKE-2 facility remains the property of the Crown.
47. The Commission suggested that all the SLOWPOKE-2 facilities form a group to deal with common problems and share operational experience. CNSC staff reported that there was a meeting planned with all the facilities where this type of initiative would be discussed.

Ecole Polytechnique de Montréal non-power SLOWPOKE-2- reactor facility located in Montréal, Québec

48. With reference to CMD 08-M64, CNSC staff updated the Commission with respect to Ecole Polytechnique de Montréal SLOWPOKE-2 reactor facility's performance and compliance with CNSC regulatory requirements. The report covers the period from July 1, 2003 to September 1, 2008. Ecole Polytechnique de Montréal (la Polytechnique) currently holds a 10 year licence valid from July 1st, 2003 to June 30th, 2013.
49. After submission of the mid-term report prepared by the CNSC staff, the École Polytechnique de Montréal ("the Polytechnique") noted that, when the licence was renewed in 2003, the CNSC was satisfied with the quality management system in place at the facility, despite the absence of detailed documentation explaining the program.

50. The Commission asked CNSC staff whether the reactor component aging report submitted by the Polytechnique was satisfactory. CNSC staff indicated that it was, adding, however, that supplementary information had been requested and submitted by the licensee. CNSC staff advised the Commission that it would wait until the information was received from all the SLOWPOKE-2s before confirming whether the supplementary information provided by the Polytechnique was satisfactory.
51. The Commission subsequently expressed doubts as to the effectiveness of communication between CNSC staff and licensees where documents required revision. CNSC staff assured the Commission that the reactor component aging management strategy should be in place prior to licence renewal in 2013 and that sufficient time remained to work with licensees on the required documents.
52. The Polytechnique's representative confirmed with the Commission that, if the Polytechnique received the CNSC staff comments on the document submitted soon, it would be in a position to produce the above-mentioned strategy by year-end 2009.
53. The Commission requested information on the status of the Polytechnique's financial guarantee. CNSC staff responded that the financial guarantee had been established in the form of a letter of credit for \$800,000, followed by a series of annual payments as follows: the first for \$50,000 and the rest for \$25,000 over 25 years, totalling the \$1.8 million dollars required.
54. The Commission asked the Polytechnique how the reactor was maintained and who was responsible for its maintenance. The Polytechnique representative replied that a team of technicians capable of making the repairs was available for the systems around the reactor, while an accredited engineer employed by Atomic Energy of Canada Limited had to be called in for repairs inside the reactor. Typically, he was called in every two or three years to make a change to the reactor.

55. The Commission asked for information on the SLOWPOKE-2 reactor's operation rate. The Polytechnique representative replied that the reactor could not operate seven days a week, as it required a two-day rest period per week. He added that the reactor operated seven or eight hours a day and sometimes at night.
56. The Commission asked CNSC staff to compare the SLOWPOKE-2 reactor's use with that of other Canadian reactors. CNSC staff replied that the RMC reactor was used every day, while the SRC reactor appeared to be the least used, at approximately two hours weekly. CNSC staff added that it would have to check in the annual report for information on the other facilities.
57. The Commission asked whether the report by the Polytechnique covered all the requirements. CNSC staff confirmed that a report on reactor component aging had been submitted and reviewed, adding that the Polytechnique had also submitted an acceptable operator training program and that considerable effort had been expended to ensure that the program met the requirements of a systems approach to training. Finally, CNSC staff noted that the Polytechnique's report on the quality assurance program was currently under review.

University of Alberta non-power SLOWPOKE-2 reactor facility located in Edmonton, Alberta

58. With reference to CMD 08-M65.1 and CMD 08-M65, University of Alberta (U of A) representatives and CNSC staff updated the Commission with respect to U of A SLOWPOKE-2 reactor facility's performance and compliance with CNSC regulatory requirements. The report covers the period from July 1, 2003 to September 1, 2008. U of A currently holds a 10 year licence valid from July 1st, 2003 to June 30th, 2013.
59. The Commission noted that up to now the licensee had not resubmitted any certification requests for the operation and the maintenance of the reactor.
60. U of A answered that it had not needed to do maintenance to the reactor but that certification requests had been sent and were currently being reviewed by CNSC staff.

61. The Commission further asked U of A if it would be able to meet the commitments agreed on at their licence renewal within the next six months. The U of A answered that it will be putting all its efforts into developing the required documentation to meet CNSC requirements.
62. The Commission sought information on U of A's financial guarantee. CNSC staff informed the Commission that the financial guarantee was in the form of a strip bond held in an escrow fund. The book value was of \$856,000 on November 26, 2004. This financial guarantee needed to be reviewed and CNSC staff will follow-up with the Commission. **ACTION**
63. The Commission sought information on the training needs of the people who had access to the reactor. U of A responded that it had a graded system: first, the licensed operators certified by the CNSC, secondly, the authorized users. The authorized user's responsibilities were described in the reactor operating manual approved by CNSC. These users were trained on site. The representatives of U of A added that no one in the facility was allowed to handle radioactive materials without having first successfully completed the university's radiation safety program given by the Department of the Office of Environmental Health and Safety.
64. CNSC staff added to reassure the Commission that it was required in the licence that, at all times, a certified operator be present when someone enters the reactor room.
65. The Commission sought further information regarding the safety of a SLOWPOKE-2 reactor and its longevity. CNSC staff expressed the view that the design of the reactor was intrinsically safe; however, there was a need to have an adequate maintenance program in place for maintaining and replacing parts for the long-term operational life of these reactors.

Dalhousie University non-power SLOWPOKE-2 reactor facility located in Halifax, Nova Scotia

66. With reference to CMD 08-M66, CNSC staff updated the Commission with respect to Dalhousie University SLOWPOKE-2 reactor facility's performance and compliance with CNSC regulatory requirements. The report covers the period from July 1, 2003 to September 1, 2008. Dalhousie University (Dalhousie) currently holds a 10 year licence valid from July 1st, 2003 to June 30th, 2013.

67. Dalhousie explained its decommissioning plan to the Commission, noting that six years ago, it was decided that the SLOWPOKE-2 nuclear reactor be decommissioned by the end of 2008. A detailed decommissioning plan was filed with CNSC in 2004 and some funds were to be committed to send the highly enriched uranium back to the United States. The decommissioning process was suspended in 2006, but Dalhousie now wants to move forward and proceed with the decommissioning and the environmental assessment (EA).
68. In response to the Commission's question, Dalhousie confirmed it would start the decommissioning as soon as possible and that the plan was to have the decommissioning process completed within two years.
69. The Commission asked CNSC staff about the timeframe for having the EA guidelines approved. CNSC staff responded that, with the new streamlined EA process, the guidelines could be ready before the end of 2008. CNSC staff added that this was based on the consideration that Dalhousie would provide CNSC staff with all the necessary information for the environmental assessment.
70. The Commission asked for information on Dalhousie's financial guarantee. CNSC staff responded that its financial guarantee was in the form of a resolution from the Board of Governors to commit the funds. The guarantee was completed with a Memorandum of Understanding between the Province of Nova Scotia and the Nova Scotia Universities for a value of \$1.9 million. CNSC staff added that it was waiting for the confirmation from Dalhousie that the funds were still committed.
71. The Commission asked CNSC staff if the requirements for the QA program and the SAT program were still present for Dalhousie as it was planning to decommission. CNSC staff answered that Dalhousie was not required to submit a QA program for its operating licence but QA procedures and methodology would also have to be in place for the decommissioning and that these requirements would be incorporated in the decommissioning licence. CNSC staff noted that there would be a need to have well-trained operating and maintenance staff during the decommissioning phase.

72. The Commission asked CNSC staff to ensure that Dalhousie understood well all the requirements for the decommissioning process. CNSC staff responded that it would work in collaboration with Dalhousie in this regard. Dalhousie confirmed that it was totally committed to comply with CNSC requirements for the decommissioning process.
73. Considering the remaining outstanding items noted throughout the presentations on the mid-term reports of the SLOWPOKE-2 reactor facilities, the Commission concludes that it is not satisfied with the performance of the licensees during the first half of their licence term with respect to following through on their commitments. The Commission reiterates that CNSC licensees are responsible to comply with the regulatory requirements and meet CNSC expectations. Although the outstanding issues do not cause unreasonable risk to the health and safety of persons and the protection of the environment, the Commission expects that the licensees' performance will improve during the remaining licence period.

GE-Hitachi Nuclear Energy Canada Inc. Class I B Nuclear Facility located in Peterborough, Ontario

74. With reference to CMD 08-M67, CNSC staff updated the Commission with respect to GE-Hitachi Nuclear Energy Canada Inc. (GE-Hitachi) Class I B Nuclear Facility's performance and compliance with CNSC regulatory requirements. The report covers the period from January 1, 2006 to July 31, 2008.
75. The Commission asked CNSC staff to comment on GE-Hitachi's Public Information Program. CNSC staff reported that GE Hitachi has set up a new Web site since its company's name change and needed to review the material available on its site for the public. CNSC staff confirmed that the required changes were made and found satisfactory.
76. In response to the Commission's enquiry, GE-Hitachi reported that its production rate has been 800 tonnes per year, lower than the limit set in its licence.
77. The Commission asked GE-Hitachi how often it was performing emergency preparedness and response exercises. GE-Hitachi reported that drills were conducted at the facility at each quarter.

78. The Commission wanted to be informed on whether the location of the GE-Hitachi Peterborough facility had been considered in relation to other surrounding facilities whose potential accidents could impact the GE-Hitachi plant.
79. CNSC staff responded that it was not aware of any recent revision to the safety documentation to take into account incidents like the propane fire that occurred in Toronto in August 2008. GE- Hitachi noted that the Peterborough site included only GE businesses in the vicinity: a nuclear facility and a GE motor site. GE-Hitachi added that the two businesses had a common communication system and that the two emergency plans were very well integrated and tested regularly with participation from the Peterborough Fire Department.
80. The Commission sought more information from CNSC staff in regards to the third-party assessment that was conducted to assess GE-Hitachi fire safety program. CNSC staff reported that during that third-party review, the fire safety assessment had been broken down so that a given area would be assessed during each year of the five-year licence period. CNSC staff added that although the whole scope of the program would have been covered over a five-year period, it has requested that the report cover the whole scope of the fire safety requirements every year.
81. The Commission asked when GE-Hitachi would provide its Fire Hazard Analysis as required by the licence. CNSC staff answered that it was expected to be in place and meet CNSC requirements and expectations by the end of December 2008.
82. The Commission asked GE-Hitachi when it was planning to have the environmental assessment report completed for the enriched uranium processing project. GE-Hitachi answered that its deadline was the end of the year 2008.
83. The Commission asked GE-Hitachi how the local public was advised on its project to process enriched uranium. GE-Hitachi answered that the project had been advertized in the newspaper and that a successful public information meeting had been held for the community. It also added that newsletters had been sent locally and that an open house was held at the facility for local community leaders and interested parties. GE-Hitachi noted that the project had been very well received by the community.

84. The Commission expressed some concerns on the fact that GE-Hitachi had not respected the one kilometre (1 km) limit in the Public Information Program (PIP) of its 2005 licence for the distribution of information around the facility.
85. GE-Hitachi answered that the half kilometre area chosen to distribute information seemed to represent a well-defined neighbourhood around the facility. It added that the current PIP would be updated for the next licence period. CNSC staff noted that no objections or real concerns were received on that matter from members of the public.
86. The Commission noted that to be compliant with its licence issued in 2005, GE-Hitachi would have had to use the 1 km outlined in the Appendix C of the licence or, if it wanted to change the limit to half a kilometre, it would have to ask for an amendment to its licence.
87. The Commission asked to be updated on GE-Hitachi's quality assurance (QA) and systematic approach to training (SAT) programs at the Peterborough facility.
88. CNSC noted that GE-Hitachi has a very extensive QA program including procedures and instructions for every activity that makes it difficult to get only an overview of the program. CNSC staff added that this year, it has asked GE to write an overarching manual that describes all their safety processes and procedures. The program that GE is currently working on should be fully implemented with an adequate QA manual by June 2009. CNSC staff noted that the training program is not covered within the mid-term report.
89. The Commission sought more information on GE-Hitachi's health and safety program. GE-Hitachi answered that the injury rate, in all three GE locations, was zero this year and that no occupational illness had been identified. GE-Hitachi confirmed that its occupational health and safety program, at both facilities in Peterborough and Toronto, included 21 elements in the health and safety area and was regularly audited internally by other GE qualified staff from other locations.
90. The Commission asked GE-Hitachi about its employee information program. GE-Hitachi reported that it conducted regular communication sessions for all the employees informing them of the financial performance of the company, its strategic plan, market-related activities and providing them environmental health and safety information.

91. The Commission asked about potential water contamination at the GE-Hitachi facility. GE-Hitachi responded that there were no soil samplings or water monitoring for radioactive contamination at the Peterborough facility. GE-Hitachi added that GE Canada was doing some industrial soil sampling around the site and that no uranium contamination had been observed. It also added that these environmental monitoring results are submitted to the Ontario Ministry of Environment and the surrounding municipalities.

GE-Hitachi Nuclear Energy Canada Inc. Class I B Nuclear Facility located in Toronto, Ontario

92. With reference to CMD 08-M68, CNSC staff updated the Commission with respect to Toronto GE-Hitachi Nuclear Energy Canada Inc. (GE-Hitachi) Class I B Nuclear Facility's performance and compliance with CNSC regulatory requirements. The report covers the period from January 1, 2006 to July 31, 2008.
93. The Commission asked GE-Hitachi why the uranium releases at the Toronto facility had risen gradually in the last three years. GE-Hitachi explained that there had been an increase in the production volume by approximately 100 tonnes per year since 2005. It added that it might also be linked to the fact that, at the end of 2005, a new scrubbing process had been implemented at the facility to clean the parts to the point where they can be disposed of in the regular waste. GE-Hitachi added that this process had increased the perceived amount of uranium in the sewer. GE-Hitachi noted that it had recently implemented the Six Sigma Program to reduce discharge to the sewer, and that to date, a 33% reduction of uranium releases had been recorded in the first two months of 2008.
94. The Commission sought more information on the trends of uranium emission at the facility. CNSC staff answered that, as GE-Hitachi discharges were low, fairly large variations could be detected from period to period. CNSC staff added that the releases of uranium were not constant but by batches, related to the activity at the plant, and, for this reason, easier to control. CNSC staff noted that it had no concerns with GE-Hitachi's releases and that for the year 2007, the 1.9 kilogram releases were far from the regulatory derived release limit (D.R.L.) limit of 500 kilograms per year. CNSC staff added that it was satisfied that GE-Hitachi was fully respecting the ALARA principle (As Low As Reasonably Achievable).

95. The Commission asked GE-Hitachi if the two issues regarding the Fire Protection Program and the Public Information Program at the Peterborough facility were the same for the Toronto facility. GE-Hitachi confirmed that these issues were common to the two facilities.
96. The Commission asked if the lessons learned from the emergency preparedness and response training exercise conducted in May in Toronto could be applied to the exercise to be conducted in Peterborough. GE-Hitachi confirmed that they would be exported to Peterborough. CNSC staff added that the May exercise was a successful exercise. Comments back from CNSC specialists reported that improvements should be made in the management and control of the future exercises.
97. Regarding the potential surrounding hazards in the area of the Toronto facility, GE-Hitachi responded that there were no industrial threats or risks in the area with the exception of the CP rail track that runs alongside one of the properties.

INFORMATION ITEMS

SRB Technologies (Canada) Inc. (SRBT): SRBT Status on meeting its financial commitments

98. With reference to CMD 08-M69, CNSC staff updated the Commission on the status of SRB Technologies (Canada) Inc.'s (SRBT) financial commitments to CNSC from August 21, 2008 to September 23, 2008.
99. CNSC staff informed the Commission that SRBT was currently meeting its CNSC financial commitments. CNSC staff added that SRBT paid the invoice sent to them on August 13, 2008 within the 30 days required by the *Canadian Nuclear Safety Commission Cost recovery Fees Regulations*¹. An annual fee adjustment due September 30, 2008 was also paid entirely on September 22, 2008.

¹

Canadian Nuclear Safety Commission Cost Recovery Fees Regulations, S.O.R./2003-212.

Closure of the Public Meeting

100. The meeting closed at 3:10 p.m.



~~President~~ Secretary



Recording Secretary



Secretary President

APPENDIX A

CMD	DATE	File No
08-M55	2008-09-09	(6.02.01)
Notice of Meeting of August 21, 2008		
08-M55.A	2008-09-25	(6.02.01)
Revised Notice of Meeting of August 21, 2008		
08-M56	2008-09-25	(6.02.02)
Agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Thursday, October 9, 2008, in the Public Hearing Room, 14 th Floor, 280 Slater Street, Ottawa (Ontario)		
08-M57	2008-09-29	(6.02.03)
Approval of Minutes of Commission Meeting held August 21, 2008		
08-M60	2008-09-23	(6.02.04)
Status Report on Power Reactors for September 23, 2008		
08-M62	2008-09-25	(6.02.04)
Saskatchewan Research Council: Interim Licensing Report on Saskatchewan Research Council non-power SLOWPOKE-2 reactor facility located in Saskatoon, Saskatchewan		
08-M62.A	2008-09-30	(6.02.04)
Saskatchewan Research Council: Interim Licensing Report on Saskatchewan Research Council non-power SLOWPOKE-2 reactor facility located in Saskatoon, Saskatchewan – Contains prescribed security information and is not publicly available		
08-M63	2008-09-25	(6.02.04)
Royal Military College of Canada: Interim Licensing Report on Royal Military College of Canada non-power SLOWPOKE-2 reactor facility located in Kingston, Ontario		
08-M63.A	2008-09-30	(6.02.04)
Royal Military College of Canada: Interim Licensing Report on Royal Military College of Canada non-power SLOWPOKE-2 reactor facility located in Kingston, Ontario – Contains prescribed security information and is not publicly available		
08-M64	2008-09-25	(6.02.04)
École Polytechnique de Montréal: Interim Licensing Report on École Polytechnique de Montréal non-power SLOWPOKE-2 reactor facility located in Montreal, Québec		
08-M64.A	2008-09-30	(6.02.04)
École Polytechnique de Montréal: Interim Licensing Report on École Polytechnique de Montréal non-power SLOWPOKE-2 reactor facility located in Montreal, Québec – Contains prescribed security information and is not publicly available		

08-M65 2008-09-25 (6.02.04)

University of Alberta: Interim Licensing Report on University of Alberta non-power SLOWPOKE-2 reactor facility located in Edmonton, Alberta

08-M65.A 2008-09-30 (6.02.04)

University of Alberta: Interim Licensing Report on University of Alberta non-power SLOWPOKE-2 reactor facility located in Edmonton, Alberta – Contains prescribed security information and is not publicly available

08-M66 2008-09-25 (6.02.04)

Dalhousie University: Interim Licensing Report on Dalhousie University non-power SLOWPOKE-2 reactor facility located in Halifax, Nova-Scotia

08-M66.A 2008-09-30 (6.02.04)

Dalhousie University: Interim Licensing Report on Dalhousie University non-power SLOWPOKE-2 reactor facility located in Halifax, Nova-Scotia – Contains prescribed security information and is not publicly available

08-M67 2008-09-25 (6.02.04)

GE Hitachi Nuclear Energy Canada Inc.: Interim Licensing Report on GE Hitachi Nuclear Energy Canada Inc. Class IB Nuclear Facility in Peterborough, Ontario

08-M67.A 2008-09-30 (6.02.04)

GE Hitachi Nuclear Energy Canada Inc.: Interim Licensing Report on GE Hitachi Nuclear Energy Canada Inc. Class IB Nuclear Facility in Peterborough, Ontario – Contains prescribed security information and is not publicly available

08-M68 2008-09-25 (6.02.04)

GE Hitachi Nuclear Energy Canada Inc.: Interim Licensing Report on GE Hitachi Nuclear Energy Canada Inc. Class IB Nuclear Facility in Toronto, Ontario

08-M68.A 2008-09-30 (6.02.04)

GE Hitachi Nuclear Energy Canada Inc.: Interim Licensing Report on GE Hitachi Nuclear Energy Canada Inc. Class IB Nuclear Facility in Toronto, Ontario – Contains prescribed security information and is not publicly available

08-M69 2008-09-24 (6.02.04)

SRB Technologies (Canada) Inc. (SRBT): SRBT Status meeting its financial commitments for the period of August 21 to September 23, 2008

08-M70 2008-10-06 (6.02.04)

Ontario Power Generation Inc.: Update on the SDR 2008-4, presented at the May 14, 2008 Commission Meeting: Unit 7 Decrease in Gadolinium concentration while in over-poisoned guaranteed shutdown state – Oral presentation by Ontario Power Generation Inc.