Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Wednesday, December 13, 2006 beginning at 2:09 p.m. in the Public Hearing Room, CNSC Offices, 280 Slater Street, Ottawa, Ontario.

### Present:

L.J. Keen, Chair

A. Graham

J. Dosman

A. Harvey

C.R. Barnes

M.J. McDill

M.A. Leblanc, Secretary

J. Lavoie, General Counsel

S. Dimitrijevic, Recording Secretary

CNSC staff advisers were: B. Howden, K. Scissons, I. Grant, D. Desjardins, I. Gingras, M. Santini, B. Pearson, E. Langlois, D. Newland, M. Couture, G. Crawford, P. Wong, R. Maxwell, S. Shim, D. Howard, J. Mecke, R. Jammal, C. Clement, K. Bundy, M. Dallaire and A. Thibert.

### Other contributors were:

- Cameco Corporation (Cameco): T. Rogers, B. Schmitke, D. Neuberger, J. Jarrell and L. Mooney
- Saskatchewan Labour: E. Becker (teleconference)
- Bruce Power Inc. (Bruce Power): R. Nixon and F. Saunders
- Atomic Energy of Canada Limited (AECL): B. McGee, R. Cullen, K. Hedges, D. Taylor, K. Wittann, V. Snell, L. Lupton, K. Singh and D. Garrick

## Adoption of the Agenda

1. The revised agenda, CMD 06-M56.B, was adopted as presented.

### Chair and Secretary

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

### Constitution

3. With the notice of meeting, CMD 06-M55, 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 October 5, 2006, Commission Member Documents CMD 06-M55 to CMD 06-M65 were distributed to Members. These documents are further detailed in Annex A of these minutes.

# Minutes of the CNSC Meeting Held October 5, 2006

- 5. The Commission Members approved the minutes of the October 5, 2006 Commission meeting without modifications.
- 6. The Commission inquired on Item 18, whether an update on the significant development report regarding AECL's Fissile Solution Storage Facility (FISST) will be presented in the future.
- 7. The CNSC staff stated that they will update the Commission on that particular issue when further substantial information is available.

**ACTION** 

## **STATUS REPORTS**

## Significant Development Report

8. The Commission considered the Significant Development Report (SDR) no. 2006-9, submitted by CNSC staff as documents CMD 06-M58 and CMD 06-M58.A.

### Cigar Lake Project Water Inflow Event

9. With reference to section 4.1.1 in CMD 06-M58 regarding Cigar Lake Project water inflow event that occurred on October 22, 2006, CNSC staff indicated it will provide the Commission with a full analysis of this event once it receives information on the root cause and before the project returns to any level of mining at the site.

**ACTION** 

- 10. Cameco provided a brief summary of the event, illustrated by a slide presentation, and informed the Commission about the immediate actions taken to implement remedial measures. The presentation encompassed details about the attempts to stop the flooding and about the eventual evacuation of the mine.
- 11. Cameco stated that there were no injuries and no environmental impacts as a result of this incident. The maximum individual dose received by the workers was well below 1 millisievert (mSv). Cameco also stated that the radiation protection code of practice had been followed and a strong radiation protection presence had been maintained underground. Cameco noted that it would provide an update to the CNSC after completion of a root cause analysis.

- 12. Cameco provided a description of current work on hydraulic isolation of the failed area from the rest of the underground work. Cameco expects no significant radiation issues and a very limited risk of environmental impact as a result of this work.
- 13. CNSC staff confirmed their acceptance of the first phase plan and stated that the phased approach, as far as remediation from surface, was within the scope of the existing licence. The subsequent phases have not yet been proposed or discussed and should the proposed activities require a licence amendment, the matter will be brought to the Commission for approval.
- 14. The Commission inquired on the progress of the preliminary work and on Cameco's plans and ability to treat the large amount of water. Cameco responded that the drilling and plug emplacement would take two to four months. The plans for de-watering were not completed yet and would be included in the second submission to the CNSC.
- 15. The Commission also inquired about the dimensions of the flooding. It was noted that the entire mine was under water, including the area under the ore body.
- 16. The Commission sought information on the type of drilling performed by Cameco to determine the composition of the rocks prior to beginning major work. Cameco responded that in this particular case, it had drilled thirteen probe holes and three geotechnical holes. The rock strength had been analysed to determine what kind of ground support would be required for that area.
- 17. The Commission further inquired on the causes of this event in spite of the preliminary drilling of probe holes and geotechnical holes and subsequent analyses of the obtained results. Cameco responded that in such sort of circumstances there is usually a number of contributing factors, and that it would be difficult at this time to point at a single one as the cause of the event. An independent investigative team was commissioned to call together internationally recognized experts in geotechnical science, mining, geology and mechanical engineering to analyse all the circumstances surrounding this event.
- 18. In order to get a better insight in the accuracy of graphical presentations and to establish the level of Cameco's understanding of local hydrological conditions, the Commission asked specific questions with regard to the geology and hydrology of the site,

- drilling and sampling technique. Cameco responded that a number of questions would be addressed during the ongoing investigation. Cameco offered to provide more detailed cross-sectional drawing and a complete review.
- 19. Commenting on the fault zone around the ore body with faults ending above the water inflow area, the Commission expressed concern as to whether the mine was developed without adequate geologic, geotechnical and hydrological knowledge, and that similar events may put workers in considerable jeopardy. Cameco acknowledged the existence of the faults in the zone and stated that the lessons learned from the McArthur River operation have been applied here.
- 20. The Commission also questioned the relatively modest pumping capacity of the system at Cigar Lake. Cameco noted that large surface storage ponds were constructed and a larger pumping capacity was planned as a part of the previously approved construction package. CNSC staff added that the licensee had made the commitment to increase the pumping capacity, as had been suggested by CNSC staff, but had decided to implement this at a later date, before going into production. CNSC staff was of the opinion that the risks taken in the development of this project were taken by the operator within the approved procedures and programs, associated with the licensed activity.
- 21. The Commission further inquired about Cameco's preparedness for emergency evacuation under unforeseen events. Cameco responded that there is an independently-powered emergency hoist and a rescue protocol in place at the mine site.
- 22. Concerned with the health and safety of the workers, the Commission sought further information on health issues caused by the conditions during the evacuation, potential injuries and postevent counselling. In response, Cameco stated that there were no reports of hypothermia or reported injuries as a result of the incident. With respect to the post-event counselling, a debriefing and counselling was offered to the miners in sessions with their Human Resources superintendent. CNSC staff affirmed that Cameco had demonstrated that the safety of the workers was the licensee's paramount objective at all times during this event.
- 23. The Commission sought information on the views of Saskatchewan Labour regarding adequacy of the protection of the health and safety of the workers in the attempted remediation and subsequent evacuation of the mine. Saskatchewan Labour responded that it had been kept informed throughout the event of the various steps taken

- by Cameco to ensure the safety of the workers. Saskatchewan Labour added that it was not aware of any reports of injuries or lost time accidents.
- 24. With respect to the low-radium content of the water in the mine, the Commission inquired about potential increase in concentration over a few months period and about the influence of such a possibility on the dewatering operation. Cameco responded that it will have to treat the water and would not release water that does not meet the discharge objectives.
- 25. The Commission commented that in order to mine such a complex deposit it would be essential that the team of specialists involve geologists, hydrogeologists, mine engineers and experts in rock mechanics, local geology, hydrogeology and stratigraphy.
- 26. The Commission sought comments from both the CNSC staff and Cameco, with regard to communications between all involved parties in this event. The CNSC staff indicated that the communication had been adequate and noted that it had been working with Saskatchewan Labour and Saskatchewan Environment. Although the event had unfolded rapidly, it had been well informed and updated. Cameco stated that, having learned from the McArthur River event, it had informed the regulators as soon as possible.
- 27. In conclusion, the Commission expressed its concerns regarding this water flooding event and, in view of other prospective mining operations, noted the importance of maintaining the balance between the efficiency and speed of operations, and health, safety and environmental issues.

#### Unit 8 Bruce Power NGS B – Contamination on Material

- 28. With reference to section 4.1.2 in CMD 06-M58 regarding contamination found on material released under the Unconditional Transfer Permit in the Unit 8 Bruce Power Nuclear Generating Station B, CNSC staff stated that the release of 125 nanocuries (nCi), reported by the licensee, represents a quantity well below regulatory exemption quantities.
- 29. Bruce Power presented a summary of the actions taken after this event.
- 30. The Commission inquired about similar events in the past and about monitoring measures and devices. It was established that, due to the low activity, the material involved in the present event had

not been registered at the plant, but at its destination. The Commission further asked whether other shipments of the similar material also go to the sites equipped with monitors capable of registering this level of radioactivity. Bruce Power responded affirmatively.

- 31. Underlying the principle of encouraging people to report accidents, the Commission was interested whether the measure of refusal to re-qualify the individual could have been regarded as a punitive one and could it affect the working culture of the staff. The Bruce Power responded that there exist clear, known expectations in its qualification process to assess the competency of its staff. CNSC staff believed that the comments of the licensee regarding the qualification process were correct and appropriate.
- 32. The Commission asked if there was a protocol to scan the items leaving the site and about other means to prevent the occurrence of similar events. Bruce Power responded that it had defined the procedure and the equipment to be used. In this case the equipment had not been used appropriately and the error had occurred during the final checks before packing.

# Sectorial Alert in Gentilly-2

33. With reference to the CMD 06-M58.A regarding sectorial alert at Gentilly-2, the submitted information was reviewed by the Commission.

# Status Report on Power Reactors

- 34. With reference to CMD 06-M59 which includes the Status Report on Power Reactors, CNSC staff did not have any additional information or updates.
- 35. The Commission inquired, with regard to Pickering A, whether the generator cooling issues have been solved. CNSC staff responded that the update will be prepared as soon as the relevant CNSC staff is consulted. The Commission will be updated during the next meeting.

ACTION

# Mid-Term Status Reports

- 36. Mid-Term Status Reports on AECL's MAPLE Reactors and New Processing Facility (NPF) were presented together, since these two installations share similar programs. The licensee's reports and CNSC Staff information were submitted as CMDs 06-M62, 06-M62.1, 06-M63, 06-M63.1 and 06-M63.A.
- 37. With reference to CMD 06-M62, CNSC staff presented its midterm report on AECL's MAPLE reactors. The presentation included a summary of the activities carried out since the licence was issued, the status of improvements to those regulatory programs that had not fully met the regulatory requirements at the time of the licence renewal, other relevant information and CNSC staff's conclusions regarding AECL's operating performance for the MAPLE reactors.
- 38. CNSC staff noted that, during the monitoring, specific attention was given to two areas. The first one included monitoring progress in licensee actions to address weaknesses in the implementation of programs concerning operation performance, performance assurance and environmental protection, and the second one encompassed evaluation of progress made in commissioning and in resolving the issues outstanding at the time of the licence renewal. CNSC staff also carried out inspections to verify the results of a root cause assessment of the shortcomings of the original submission of the safety case developed to support 2 kilowatt (kW) operation of the MAPLE-1 reactor and to observe the performance of key safety related activities. In addition, a number of desktop reviews were carried out in response to AECL requests for approval under licence conditions.
- 39. CNSC staff indicated that AECL's application for approval to operate at 5 megawatts (MW) was still under review.
- 40. CNSC staff concluded that, except for certain deficiencies or non-conformances identified in CMD 06-M62, AECL had operated the MAPLE reactors in compliance with regulatory requirements.
- 41. CNSC staff indicated that although AECL had completed the majority of actions from the Continuous Improvement Program, there were still signs that the measures taken may not have been fully effective. Consequently, CNSC staff concluded that the implementation of the programs and the operating performance safety area should continue to be treated as "below requirements".

- 42. With regard to the performance assurance safety area and particularly quality assurance, CNSC staff was of the opinion that a substantial progress had been made and that any of the residual issues would not pose an unreasonable risk to the up-coming commissioning activities.
- 43. CNSC staff added that for the Dedicated Isotope Facilities Operations Quality Assurance Audit performed in 2005, there were still a number of actions that should be completed before the audit could be closed. However, CNSC staff was cautiously satisfied with the progress showed so far and expects AECL to be able to complete the remaining improvements within 2007.
- 44. CNSC staff informed the Commission with regard to the previously given "C" rating in the area of implementation of the Environmental Protection Program. As a result of follow-up activities the rating had been upgraded to a "B" level indicating that AECL currently meets regulatory requirements.
- 45. Referring to the concerns of the Commission Members expressed in the past regarding the effectiveness of communication between the CNSC and the licensee, CNSC staff informed the Commission that the two had enhanced their communication level.
- 46. With regard to the commissioning activities, CNSC staff said that AECL had made considerable progress in resolving weaknesses in Non-Nuclear Commissioning Program.
- 47. CNSC staff informed the Commission about the actual status of the two MAPLE reactors. AECL was granted the approval to operate the MAPLE-1 at 2kW power and test runs were conducted during the months of July and August of 2006. At present, the MAPLE-1 is shut down to complete activities identified as "prerequisites for 5MW operation" and the MAPLE-2 remains in a guaranteed shutdown state.
- 48. In conclusion, CNSC staff said that AECL had operated the MAPLE reactors in overall compliance with the CNSC regulatory requirements and performance expectations and that the continued operation of the MAPLE reactor should not pose an unreasonable risk to the health and safety of the equipment, persons, the environment and national security.
- 49. With reference to CMDs 06-M63 and 06-M63.A, CNSC staff has presented its Mid-Term Report on the Status of the New Processing Facility (NPF) at AECL's Chalk River Laboratories. The report included some background information and a summary of the

status with respect to inactive and active commissioning. The original intentions for the duration of this licence period were to complete the inactive work of various NPF systems, to perform the active commissioning of the facility, have the facility declared in service and start routine production of medical radioisotopes. However, CNSC staff stated that AECL was still performing inactive work on NPF systems to address the findings of the "The NPF Inactive Integrated Testing" performed in 2003 and to improve the operability of the facility.

- 50. With respect to the active commissioning of the NPF, CNSC staff reminded the Commission that the start of NPF active commissioning depends on the MAPLE reactor operating at powers sufficiently high to adequately irradiate targets. AECL was still making plans to start active commissioning during the current licence period, but the target date for this activity had been set for October 2007. The other activities planned for this licence period would now occur after November 2007 and thus after the next licence renewal.
- 51. CNSC staff concluded that the radiological risks associated with the NPF were negligible and the doses to workers and to the public, as well as releases to the environment were all well below regulatory limits. CNSC staff also concluded that AECL had been making adequate provisions for the protection of the environment, health and safety, security and Canada's international obligations.
- 52. With reference to CMDs 06-M62.1 and 06-M63.1, regarding the Status Report for MAPLE Reactors and New Processing Facility, AECL provided a single presentation focused on update on the Dedicated Isotope Facility (DIF). The presentation encompassed an update on ownership issues and project schedule, operating improvements, technical progress and communication with CNSC.
- 53. AECL informed the Commission that, following contractual agreement finalized between MDS Nordion and AECL in February 2006, AECL had become the sole owner and operator of the DIF. AECL also informed the Commission on organisational changes made in both AECL and MDS Nordion, including new lines of reporting.
- 54. With regard to operational improvements, AECL said that it had implemented a comprehensive System Performance Monitoring Program and a Corrective Action Program named Improvement Action Program. The Continuous Improvement Plan and Project Improvement Plan were implemented to improve the areas of human performance, engineering work process, safety analysis and

plant configuration control.

- 55. AECL stated that, as part of the readiness for the 5MW testing, all major safety related systems had met safety design requirements. The outstanding non-conformances and the field work preventive maintenance program completeness had been reviewed to ensure readiness of the MAPLE-1 reactor for 5MW operation. AECL expressed confidence with respect to solving the issue of the positive power coefficient of reactivity and repeated that testing of the MAPLE-1 reactor at 5MW power level would allow AECL to confirm its hypothesis and develop engineered solution to mitigate the issue.
- 56. With respect to the NPF, AECL stated that there was a significant amount of work that needs to be completed in order to ensure the successful commissioning of the facility. The DIF team and the project team were working closely together to ensure the completion of the outstanding works safely and as scheduled, and to allow the beginning of active commissioning in October 2007.
- 57. In conclusion the AECL stated that it was making steady progress against all regulatory commitments and requirements and that it would continue to resolve technical issues, and intends to complete nuclear commissioning and meet its obligations for isotope production and supply.
- 58. After the presentations by CNSC staff and AECL on MAPLE and the NPF, the floor was open for questions from the Commission Members. The Commission asked AECL to comment on the Continuous Improvement Program and on the use of an inappropriate revision of the criticality safety document referenced in CMD 06-M62. The AECL responded that the revision number for one of the two documents referenced in the AECL's operational limits and conditions was not the latest one. To correct that, AECL had issued the correct-later version of the Criticality Safety Document and had put in place a process in document controls to prevent this kind of errors in the future. Giving more details about the process itself upon request by the Commission, AECL explained the internal procedure and close collaboration with CNSC staff in the approval of the documents for internal use within AECL. CNSC staff explained the CNSC's role in the process.
- 59. The Commission asked further regarding AECL's resolution of two important issues such as 5MW test and the positive Power Coefficient of Reactivity (PCR). AECL responded that it would be able to inform the Commission on the outcome following the test program, approximately in mid-2007.

- 60. The Commission commented on the three safety areas rated below requirements "C", noting that only one of them was elevated to meeting requirements (rated "B"). AECL responded that it believed the progress had been reasonably good but there would still be place for improvements and changes, as part of a cycle of continuous improvements.
- 61. The Commission noted previous prolongations and delays in realisation of the program, inquired further about the milestone timeline and asked how realistic the presented schedule was. CNSC staff limited its comment on its observation that AECL has given itself enough time for testing and that, if tests prove successful, the timeline was reasonable. In response to the same question, AECL expressed its confidence in the schedule and remarked that it was progressing step by step to ensure that the operation of the facility was safe and appropriate. AECL added that it was applying the experience from successful overseas projects and that experienced staff had been appointed to the project in order to achieve the milestones and to meet the schedule.
- 62. With regard to safety, the Commission inquired about the reactor containment and about similar reactors without containment in the industrialized world. AECL responded that the licensing basis for MAPLE reactor included the confinement built to retain radionuclides but not to contain high pressure. CNSC staff reemphasized that the reactor has no containment, but a confinement system. CNSC staff added that the discovery of the positive PCR had put a greater stress on the shutdown system. CNSC staff said that AECL had proposed a number of design changes and was doing safety analysis to demonstrate that with those changes, a confinement concept is robust enough to handle any of the initiating events that might arise.
- 63. The Commission asked if AECL was confident enough to give guarantees that the design changes had been tested and proven in other reactors around the world. AECL explained that the changes that were done in order to compensate for the positive PCR were not fundamental changes to the reactor design, but a change to the speed at which the control rods system operates and that the speed of the rod operation had been tested. The Commission further inquired upon the power level at which the tests had been done and where had the tests been performed. AECL responded that the reactor behaviour had been simulated in a full-scale simulator built at Chalk River and validated and approved to serve as a basis for the design changes.

- 64. The Commission inquired about three independent organizations involved in resolving the PCR issue and whether they were backing this approach with full knowledge of how it had been used in other places. In response AECL explained the issue with PCR and described the involvement of the Idaho National Laboratory, the Brookhaven National Laboratory and of the INVAP in the analysis of the discrepancy between modeled and measured PCR values. The results of these analyses suggested that there was an unmodeled phenomenon related to the flow patterns and bowing of the highly enriched targets. The mentioned organizations had supported the test program that has been submitted to CNSC.
- 65. The Commission expressed concerns with regard to a large number of still unresolved safety issues and asked whether AECL had a reactor that could be managed safely and whether AECL intended to try to run this reactor with a positive PCR. AECL responded that the focus of AECL was a safety case associated with the 5MW testing and elimination of the PCR issue.
- 66. The Commission asked if AECL was fully confident in that it could operate the reactor during the 5MW tests in a safe manner. AECL responded that it was confident that the 5MW test program was safe and appropriate.
- 67. The Commission then asked CNSC staff if it had the required information to be able to confidently assess the safety of this reactor operating at stated power level. With respect to the specific test, CNSC staff responded that the approval process was still going on, that progress had been made and that when all the issues have been resolved, the approval would be given with confidence that the reactor can be operated safely within the given constraints. With respect to the long-term operation, CNSC had accepted the safety case with a negative PCR and having at hand the case of positive PCR implies decision making based on risk. In the view of CNSC staff, a positive PCR would be very difficult to accept.
- 68. The Commission sought clarification with respect to the rating in the environmental protection safety area of the MAPLE reactor. CNSC staff responded that the original rating, which indicated that the program met requirements (rated "B") while its implementation did not meet requirements (rated "C"), was based on the 2005 inspection. From that point, a number of actions had been raised and a number of action items given to AECL to implement. They had all been successfully completed demonstrating thus the improvement in implementation. Consequently, the grade "C" was elevated to "B".

- 69. The Commission expressed concerns about the amount of work that remains to be completed in a short time until the next licence renewal application. The Commission added that it was looking for an understanding that the project has to move forward as a "complete package" in its whole complexity even though the different technical foci exist in various areas and need to be addressed. The Commission recognized the efforts associated with the work done in the areas of simulations, safety analyses and preparation for up-coming testing, pointing out at the same time the uncertainty involved with the future activities and overall progress.
- 70. The Commission also emphasized the importance of maintaining high criteria and level of requirements as a means of achieving a high quality of operations.
- 71. The Commission expressed the view that it did not have a clear idea of what would be the situation at the end of this licence period and asked AECL to comment. AECL reemphasized its understanding of the accountability for safe operation and obligation towards regulators and towards the stakeholders. AECL also expressed their commitment to the highest ratings and to excellence in operations.

### **INFORMATION ITEMS**

<u>Canada's Participation at the Joint Convention on the Safety of Spent Fuel</u>

Management and on the Safety of Radioactive Waste Management

72. With reference to CMD 06-M64, CNSC staff provided information to the Commission on Canada's participation at the Second Review Meeting of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management held at the IAEA Headquarters in Vienna, May 15 to 24, 2006. The presentation included a report on Canada's participation, feedback from peer review and outlines for the path forward. In the conclusion, CNSC staff reaffirmed Canada's commitment to the objectives of the Joint Convention and Canada's full compliance with the requirements of the Convention. CNSC staff emphasized that the benefits of participation were proportional to the amount of effort and that the Joint Convention represents a valuable forum for benchmarking. CNSC staff also noted that the work on preparation of the Canadian document clearly showed that Canada's nuclear industry, government and regulators can work together on safety issues.

- 73. The Commission complimented the CNSC team for the work done and for a comprehensive report and sought more information on some subjects presented in the extensive Canadian presentation. Staff was asked about the accuracy of the presented results. CNSC staff responded that all of the presented results had been gathered directly from the licensees who operated the facilities and were accurate as of December 31<sup>st</sup>, 2004.
- 74. The Commission remarked that an impression could be left by the report that Canada had solved the problem of intermediate and low-level waste and that high-level waste problem still waits for the real solution, and asked about the approach of other delegations. CNSC staff responded that a positive approach had been a general tendency, noted that there had been a lot of discussions on public concerns, and concluded that many countries do not invite public to participate in the regulatory process. CNSC staff added that Canada realistically presented all aspects of the regulatory process at the Convention.
- 75. CNSC staff commented on the positive feedback on Canada's efforts from the contracting partners within our country group. CNSC staff emphasized the need to include more information on public concern and to further promote the transparency of the regulatory process. CNSC staff also mentioned the international dimension of the concerns expressed at the Convention regarding long-term disposal management.
- 76. The Commission suggested a broader approach to problems covered in the report referring to the issues for which Canada had been criticised in the past, such as classification system, approach to waste management and others, and things had not been improved since. The Commission suggested that an analysis be conducted of what needs to be done in order to make progress in terms of international standards, regulatory approach or to fill gaps in the regulatory framework.
- 77. The Commission inquired into the possibility to achieve progress in the aforementioned areas and to come forth with substantive solutions that could be presented at a future meeting. CNSC staff expressed confidence that progress could be made and mentioned that waste classification could be completed in approximately one year. CNSC staff offered to provide a briefing to the Commission on a technical basis, proposing a strategic approach to identify and resolve some of the outstanding issues.

ACTION

78. The Commission asked the CNSC staff to evaluate the position of Canada compared to the other participating countries. The CNSC staff responded that it would be difficult to make a direct comparison with other countries, because of diversified approaches and different programs. Looking from the perspective of the programs that exist in Canada, many countries are far behind, but in other aspects some countries are ahead. Taking all aspects into account, CNSC staff estimated that Canada is among the top third of the countries.

## Closure of the Public Meeting

79. The public portion of the meeting closed at 5:43 p.m.

### **DECISION ITEMS**

<u>Information and Recommendations from CNSC Staff regarding Request to</u> Revoke Exemption from a Regulatory Dose Limit

- 80. The Commission moved in closed session with CNSC staff to discuss the application by AECL to revoke the exemption from the extremity dose limit as set out in CMD 06-M61.
- 81. Following its deliberation on the matter, the Commission revoked the exemption.

**DECISION** 

<u>Information and Recommendations from CNSC Staff regarding Exemption of Licensees from the Radiation Protection Regulations in Respect to Doses of Radiation Received by Non-occupational Caregivers</u>

- 82. The Commission moved in closed session with CNSC staff to discuss the submission by CNSC staff as set out in CMDs 06-M60 and 06-M60.A.
- 83. Following its deliberation on the matter, the Commission decided to accept the recommendation of CNSC staff as presented in CMD 06-M60.A to exempt licensees from the Radiation Protection Regulations in respect to doses received by non-occupational caregivers.

**DECISION** 

- 84. The Commission moved in closed session with CNSC staff to discuss proposed amendments to the *Class II Nuclear Facilities* and *Prescribed Equipment Regulations* and *Nuclear Substances* and *Radiation Devices regulations*, as set out in CMD 06-M65.
- 85. CNSC staff presented to the Commission updates to the proposed amendments and informed the Commission about the timeline for completion of the regulating process, which includes public consultation during the publication of the proposed amendments in the Canada Gazette.
- 86. The portion of the meeting closed to public ended at 6:50 p.m.

Chair	Recording Secretar
	Secretary

### APPENDIX A

CMD DATE File No

06-M55 2006-11-10 (1-3-1-5)

Notice of meeting held on Wednesday, December 13, 2006 in Ottawa

06-M56 2006-12-01 (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, December 13, 2006

06-M56.A 2006-12-07 (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, December 13, 2006 – Supplementary Information

06-M56.B 2006-12-12 (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, December 13, 2006 – Supplementary Information

06-M57 2006-12-07 (1-3-1-5)

Approval of minutes of Commission meeting held October 5, 2006

06-M58 2006-11-30 (1-3-1-5)

Significant Development Report no. 2006-9 for the period of October 27, 2006 to November 30, 2006

06-M58.A 2006-12-11 (1-3-1-5)

Significant Development Report no. 2006-9 for the period of December 1, 2006 to December 11, 2006 – Supplementary Information

06-M59 2006-11-28 (1-3-1-5)

Status Report on Power Reactors for the period of September 19, 2006 to November 28, 2006

06-M60 2006-11-27 (1-3-1-5)

Exemption from the Radiation Protection Regulations in Respect to Dose of Radiation Received by Non-occupational Caregivers

06-M60.A 2006-12-07 (1-3-1-5)

Exemption from the Radiation Protection Regulations in Respect to Dose of Radiation Received by Non-occupational Caregivers – Supplementary Informations

06-M61 2006-11-24 (24-1-0-4-0/36-1-1-3)

Request to Revoke Exemption from a Regulatory Dose Limit – Contains protected information and is not publicly available

06-M62 2006-11-30 (26-1-62-0-0)

Mid-Term Status Report on Atomic Energy of Canada Limited's MAPLE Reactors – Oral presentation by CNSC staff

06-M62.1 2006-11-28 (1-3-1-7)

Mid-Term Status Report on Atomic Energy of Canada Limited's MAPLE Reactors – Oral presentation by Atomic Energy of Canada Limited

06-M63 2006-11-30 (24-1-3-0)

Mid-Term Status Report for the New Processing Facility at Atomic Energy of Canada Limited's Chalk River Laboratories

06-M63.A 2006-12-12 (24-1-3-0)

Mid-Term Status Report for the New Processing Facility at Atomic Energy of Canada Limited's Chalk River Laboratories – Supplementary Information

06-M63.1 2006-11-28 (1-3-1-7)

Mid-Term Status Report for the New Processing Facility at Atomic Energy of Canada Limited's Chalk River Laboratories – Oral presentation by Atomic Energy of Canada Limited

06-M64 2006-11-28 (25-1-2-8-2)

Canada's Participation at the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management

06-M65 2006-11-29 (20-1-18-4/20-1-18-6)

Amendments to the CNSC Class II Nuclear Facilities and Prescribed Equipment Regulations and Nuclear Substances and Radiation Devices regulations