Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Thursday, August 27, 2009 beginning at 11:30 AM at the Town Park Recreation Centre, 62 McCaul Street, Port Hope, Ontario.

#### Present:

M. Binder, President

M. J. McDill

A. Graham

C.R. Barnes

A. Harvey

R.J. Barriault

D.D. Tolgyesi

M. Leblanc, Secretary

- L. Thiele, Senior Counsel
- S. Dimitrijevic, Recording Secretary

CNSC staff advisors were: P. Elder, G. Rzentkowski, A. Régimbald and H. Rabski

### Other contributors were:

- Atomic Energy of Canada Limited (AECL): H. MacDiarmid, B. Pilkington, R. Lesco, I. Muir and B. Shorter
- Bruce Power Inc. (Bruce Power): F. Saunders
- Ontario Power Generation Inc. (OPG): J. Lehman
- Cameco Corp. (Cameco): A. Oliver and R. Peters

# Adoption of the Agenda

1. The revised agenda, CMD 09-M30.B, was adopted as presented.

### Chair and Secretary

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

## Constitution

- 3. With the notice of meeting, CMD 09-M29 and the revised notice of meeting, CMD 09-M29.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 June 10 and 11, 2009, Commission Member Documents CMD 09-M29 to CMD 09-M36 were distributed to Members. These documents are further detailed in Annex A of these minutes.

## Minutes of the CNSC Meeting Held June 10 and 11, 2009

5. The Commission Members approved the minutes of the June 10 and 11, 2009 Commission Meeting as outlined in CMD 09-M31.

## **STATUS REPORTS**

## Significant Development Report (SDR) No. 2009-3

Early Notification of Operational Event/Condition: *Bruce Power - Crane accident at Bruce B Nuclear Generating Station* 

- 6. With reference to CMD 09-M33, CNSC staff presented information regarding the accident that had occurred on May 12, 2009, at the Bruce B Nuclear Generating Station (NGS). CNSC staff reported that the heavy hoist block of the east turbine deck crane had fallen to the floor from a height of about 60 feet.
- 7. CNSC staff reported that no one had been injured and no significant equipment damage had resulted from this accident.
- 8. CNSC staff stated that a manufacturing defect had caused malfunctioning of brake pads on the crane. CNSC staff added that the manufacturer had not advised Bruce Power of the manufacturing defect prior to this accident.
- 9. CNSC staff informed the Commission that the licensee was replacing brake pads on all its cranes with a similar brake design.
- 10. CNSC staff added that Bruce Power had informed the CANDU Owners Group and the World Association of Nuclear Operators on all facts concerning this event.
- 11. CNSC staff noted that Bruce Power had also notified the Ontario Ministry of Labour, and stated that no further actions were planned.
- 12. Bruce Power stated that it has a very detailed program of procedures to control hoisting activities. Bruce Power added that it has its own specialized crane maintenance crew for both the preventive and the corrective maintenance.
- 13. Responding to the Commission's question about their crane inspection program, Bruce Power explained that there is a large preventive component to crane maintenance. Bruce Power added that the program includes a time sequential inspection, which is documented. Bruce Power noted that the crane in question had been inspected a few months prior to the accident, and problems

with brakes had not been detected. Bruce Power restated that, although a few similar failures of this type of break pads had occurred, the manufacturer did not inform them of any manufacturing defects. As indicated in paragraph 9 above, Bruce Power is replacing brake pads on all of its cranes of similar design.

14. The Commission inquired if CNSC staff monitors maintenance activities. CNSC staff confirmed that it verifies whether Bruce Power is in conformance with the regulatory requirements, and noted that it recognizes the fact that operational health and safety is under jurisdiction of the Ministry of Labour. CNSC staff added that it arranges meetings with the inspectors from the Ministry of Labour, approximately twice a year, to share experiences and make sure that they have a common understanding on the issues related to this site.

Early Notification of Operational Event/Condition: *Ontario Power* Generation - Leak from the primary heat transport system of Unit 2 at Darlington Nuclear Generating Station A

- 15. CNSC staff verbally informed the Commission about a small leak from the primary heat transport system, discovered on August 22, 2009. CNSC staff reported that OPG conservatively had decided to take the unit out of service, in order to investigate the source of the leak. The leak had been traced to instrument tubing associated with a pressure transducer-transmitter in the inlet heater. The event did not cause risks to workers, the public or the environment.
- 16. CNSC staff noted that the tube failure mode and the method of repair were being assessed. CNSC staff added that it was monitoring these activities. CNSC staff further reported that, based on information received from OPG at the time of the meeting, the tubing had been already replaced.
- 17. Responding to the Commission's request to comment, OPG added that the cross-section of the tubes was small, typically 3/8 of an inch in diameter, so that the leak was very small. OPG added that the unit had been shut down well before any sort of administrative or regulatory limits had been reached.

Early Notification of Operational Event/Condition: *Ontario Power* Generation - Severed electrical cables at Darlington Nuclear Generating Station A, Unit 2

- 18. CNSC staff verbally informed the Commission on a "Stop Work Order" issued by an Ontario Ministry of Labour inspector on the contractor. The order has been issued on August 18, 2009, following the inspection resulting from OPG's report on two instances of damaged electrical cables.
- 19. CNSC staff reported that the immediate cause of the event has been the use of certain fittings that had been terminated by the Ministry. CNSC staff cited the inspector's report stating that, although the use of this kind of fitting had been terminated, a notification had not been sent to Professional Engineers Ontario; therefore, OPG had been unaware of the design changes. CNSC staff noted that OPG was preparing to replace the terminated fittings.
- 20. The Commission inquired on implications of the issued stop order. In response, OPG reiterated that it had taken all the necessary steps to stop work and secure the site even prior to receiving the "Stop Work Order", and stated that the implication of the order was that a short inspection of the vacuum building that was under way had to be stopped.
- 21. Responding to the Commission's inquiry, OPG clarified that both cables had been severed during the same event.

Early Notification Report: *Trow Associates Inc.- Vehicle accident involving the death of a driver and a radiation device* 

- 22. With reference to CMD 09-M33.A, CNSC staff informed the Commission that a motor vehicle accident involving the death of the driver took place on August 11, 2009. A package with a radiation device, which was on board of the vehicle during the accident, was damaged but the integrity of the device shielding was not affected. The device did not release contents or pose significant risk to other persons.
- 23. Reporting on the causes of the event, CNSC staff stated that initial evidence indicate that the driver had had a heart attack while driving, and that the vehicle had left the road.

- 24. CNSC staff indicated that the safety of the device was being assessed by a service provider before being returned to service.
- 25. CNSC staff stated that the licensee will submit the required written report on this incident by September 1, 2009. The report will be reviewed by CNSC staff and any issues needing follow-up will be communicated directly to the licensee.

Early Notification Report: *Cameco Corporation – Leak of hydrofluoric acid at Port Hope* 

- 26. CNSC staff informed the Commission on a small leak of anhydrous hydrofluoric acid (HF), which occurred on August 25, 2009. The leak has been noticed by operators during unloading of a railcar containing anhydrous HF. The unloading was performed under controlled conditions in the unloading room that was on emergency ventilation system with scrubbers.
- 27. CNSC reported that Cameco had initiated their standard procedures, activated the emergency response team and reported the event to the town and to the CNSC.
- 28. CNSC staff added that there has been no evidence of any releases outside of the unloading room.
- 29. Cameco provided more details related to the design and operation of the uranium hexafluoride (UF<sub>6</sub>) plant and described the event. Cameco emphasized that the event had no impact on employees, the public or the environment, but was illustrative of the good communication between the company, CNSC staff and the Municipality.
- 30. Cameco stated that trained personnel from the emergency team had taken immediate action to mitigate and control the leak, and that the unloading area had been immediately cleared. The mitigation actions included a wash down, neutralization of the area and testing to ensure that the HF had been neutralized. Cameco added that it had monitored for HF, but it had not found evidence of its presence outside of the building or in other areas of the building. Cameco also noted that analyses of urine samples, collected from operators in the plant, showed no abnormal fluoride concentrations.
- 31. Cameco added that a review of the UF<sub>6</sub> stack emissions had showed a peak of 221 grams of fluoride per hour, well under the daily action level of 330 grams of fluoride per hour.

- 32. Cameco also stated that it had initiated a detailed investigation into the event. The initial investigation indicated that the release had been caused by residual anhydrous HF in the hoses, which were not completely purged after their previous use. To prevent reoccurrence of the event, new procedures to purge the hoses have been implemented. Cameco added that it had isolated and locked out the road container line, pending additional investigations.
- 33. The Commission asked if Cameco had a program set up with the fire department and with the emergency ambulance service to handle a cloud of HF in the event of such a release. Cameco responded that it had organized extensive trainings with emergency response personnel, fire department, local hospital and ambulance service, so that they are all familiar with HF and the protocols that need to be followed in such events.
- 34. The Commission sought more information on Cameco's policy with respect to informing the public on similar events. Cameco responded that a working group between CNSC and industry tries to identify the criteria by which the industry would be informing the public on incidents and to provide guidance in the future so that expectations of multiple stakeholders are met.
- 35. Cameco noted that this type of events is reported in quarterly reports to the municipal council. The Commission expressed its expectation that, in the process of public information, quarterly reports to the council be communicated to the public by way of immediate posting on the company's website. The Commission also reiterated the lesson learned from the recent NRU events that there is no leak that is small enough not to be reported. Cameco committed to providing more information regarding incidents at its facility on its website.
- 36. The Commission expects a follow-up report on this incident from CNSC staff.

ACTION By December 2009

# Status Report on Power Reactors

37. With reference to CMD 09-M34, which includes the Status Report on Power Reactors, CNSC staff presented updates on Nuclear Generating Stations (NGS).

38. CNSC staff reported that units 1 and 2 of Bruce A NGS were in refurbishment outage with planned restart in late and mid-2010, respectively. CNSC staff updated the Commission on the status of works and noted that the Commission Hearing for fuel reload would take place on October 1, 2009. CNSC staff also noted that the Operating Licence for Bruce A and B NGS expires on October 31, 2009.

by October 2009

39. During its oral presentation, CNSC staff informed the Commission that Unit 4 at Bruce NGS has tripped off-line due to a governor ground fault on the conventional side of the station. CNSC staff said that the outage control centre had been activated for what was expected to be a short duration forced outage.

# Updates on items from previous Commission proceedings

Atomic Energy of Canada Limited (AECL): Follow-up on heavy water leak at the National Research Universal (NRU) reactor, Chalk River Laboratories

- 40. With reference to CMD 09-M32, CMD 09-M32.1 and CMD 09-M32.1A, AECL and CNSC staff updated the Commission on the status of the work to return the NRU to service and provided details of the current activities.
- 41. AECL presented to the Commission a brief background of the event and showed a detailed description of the NRU and the leak location. The submission included a description of non-destructive examinations performed, causes for the event, repair strategy and other return-to-service activities.
- 42. CNSC staff informed the Commission on its oversight of the NRU repair activities and stated that CNSC site inspectors and Ottawa-based staff had been focused on the safe defueling of the reactor and on observing the assessment work. CNSC staff added that it closely follows work on the vessel repair and on the root cause investigation.
- 43. CNSC staff pointed out that a request to refuel the reactor would need an approval by the Commission and that AECL would have to submit a comprehensive safety case to support such a request. CNSC staff stated that, in order to ensure that the requirements for such safety case are clear and documented, it had developed with AECL a "NRU Restart Protocol", which is publically available on the CNSC's website.

- 44. In its oral presentation, AECL included additional information on the following:
  - technical and organizational causal factors;
  - information on planned repair activities, focus and scope of extended activities; and
  - schedule for the recovery of the reactor and its return to service.
- 45. The Commission asked what was the effect of this event on the functioning of the research community in Canada, and what it would take to replace the NRU reactor. In response, AECL stated that there has been a serious impact beyond the isotope production in areas such as neutron diffraction experiments and materials and fuel research and development. AECL added that, according to its estimate, a new multipurpose facility, similar to the NRU, could cost about \$ 1.5 billion, and that it would take eight to ten years to build.
- 46. The Commission further asked if the corrosion could have been predicted. AECL responded that the information that could have led to recognizing this corrosion had not been available to the people involved in the condition assessment during the previous inspections.
- 47. The Commission inquired into chemical mechanisms involved in the corrosion of the reactor vessel and on particular pattern of this corrosion in some locations versus other locations. AECL described the corrosion pattern and stated that it was limited to a fairly narrow vertical band which goes around about 220 degrees of the circumference of the vessel. AECL added that the corrosion patterns were characterized by a general thinning in the region with increased moisture and by deeper penetrations in the vessel wall. AECL also added that the first priority would be to establish a complete CO<sub>2</sub> blanket and to remove corrosion products, and then to progress on reducing or eliminating water leakage into the J-Rod annulus.
- 48. The Commission further inquired into consequences of the leak and tritium release, and asked if the analyses of the groundwater wells for tritium, in July and August, had shown concentrations above the action levels. AECL responded that it did not have the data prepared for the meeting, and pointed out that, although the airborne tritium levels exceeded the action level, the total exposure to a most affected member of the public would still be more than 1000 times below the regulatory limit. The Commission reiterated that, due to preoccupation with public information, it should be repeatedly pointed out that action levels represent only a small percentage of regulatory levels, and were introduced as administrative indicators of some kind of irregularity that require investigation.

- 49. The Commission pointed out that some material prepared for the members of the Commission has not been presented during the meeting and asked when will this material, containing mainly explanations of remote examination and remote repair of a complicated part of the reactor installation, be presented to the public. AECL referred to time restraint related to the public meeting and responded that all relevant information is available to the public at the AECL's website that has been set up specifically for the NRU outage.
- 50. AECL added that it was pondering the timing to organize a kind of virtual open house, and was considering to make the Chalk River facility available for appropriate visits and demonstrations of the tools, the mock-up facility and the techniques, designed to give people confidence that it was heading towards a successful conclusion to the project.
- 51. The Commission sought more information on other degradation mechanisms related to radiation damage, and asked about any evidence of radiation embrittlement. AECL responded that there had been radiation ageing of the vessel wall, but that they hadn't come to the final conclusion. AECL noted that it had a draft corrosion report that was being reviewed by external experts and that, depending on the results of those reviews, if necessary, it would remove a sample of material from the base of the vessel in order to confirm the corrosion mechanism.
- 52. Asked by the Commission to comment on the radiation embrittlement, CNSC staff stated that, although the AECL's corrosion report was still in the draft stage, it had noticed signs of intergranular attack. However, CNSC staff added that such effects could originate from other causes, and that it expects the corrosion report to include explanation on potential origins of material degradation and reasons for certain locations to be more affected than others.
- 53. The Commission further inquired into reasons for non-uniform corrosion, specifying potential influence of moisture, water, air, or residual stress from manufacturing. CNSC staff responded that, after comparing with the original reactor vessel which had been replaced after 17 years of service, it had noticed that the alloy used to make the replacement vessel had been modified to make it less susceptible to the type of pitting the original one had suffered. CNSC staff added that the corrosion report should include all potential reasons and recommendations with respect to the current localized, non-uniform corrosion. AECL agreed with the CNSC staff's answer.

- 54. Asked by the Commission about its repair strategy, AECL explained that the strategy involves removal of the corrosion products from the external wall of the vessel, elimination of corrosion conditions so that it does not continue to be an active mechanism, cleaning of deposit build-ups from the internal wall and replacement of the lost material by applying the additional weld material on the internal wall of the vessel.
- 55. The Commission asked if such, or a similar, repair had been done before. AECL responded that weld build-up as a repair technique is not a new but a well established technology, and that the biggest challenge would be to deliver the equipment to the repair site. For that purpose, AECL had chosen a vendor experienced in remote welding and building remote welding repair equipment. AECL added that the unique character of this repair stems from aged and radiation hardened material of the vessel; therefore, the welding process to be used should be qualified for this material by testing its samples.
- 56. The Commission sought more information on results of water analyses, mentioned in the AECL's report, which had shown the presence of some products of aluminum decomposition in nitric acid. AECL responded that it had revisited its water chemistry records and had identified indications that could have signalled the occurrence of corrosion in the reactor vessel annulus. However, in the condition assessment that had been done, that had not been followed through.
- 57. The Commission asked if this information had been available to CNSC staff at the time of the 2004 inspection. CNSC staff responded that it had reviewed the report, but had not looked to see if AECL had missed some evidence that should have been included in that report.
- 58. The Commission pointed out to lessons learned from this case, and emphasized that attention should be paid to the chemistry of water, as well as to other relevant parameters. AECL noted that it had filled a position of station chemist for the NRU only in 2007. AECL added that the funding for the Isotope Supply Reliability Program had provided a very significant source of funds for AECL to make improvements such as implementation of a broad plant life management program and system health monitoring. These improvements include annual extended shutdowns, for a period of about four weeks every year, which would allow more extensive inspections than those done in the past. The improvements have been facilitated by direct communication with other isotope producing reactors, which did not occur on a regular basis in the past.

- 59. The Commission asked if the repairs would affect characteristics or the performance of the reactor. AECL answered that there would be no significant impact on the operating characteristics of the reactor, since the vessel is a fixed structure and not an active component of the reactor.
- 60. The Commission inquired into expected life-time for a reactor vessel in general and potential predictions with respect to NRU end of life. AECL responded that there is no hard limit to the life of the energy reactor vessel. AECL stated that it was planning to appear before the Commission for licence renewal in 2011 with a solid fitness for service case for the NRU vessel, and that it will be looking at all of the NRU systems, structures and components in order to assess their condition for the next licence interval. AECL added that it expects to come back again in 2016 with evidence that the vessel and the rest of the NRU are fit for service.
- 61. AECL expressed its expectations that the repair to be implemented now would qualify the NRU to operate until 2021.
- 62. The Commission inquired into the cost of a new reactor vessel. AECL estimated that it would take about three years to purchase and install a new vessel, at a cost of more than \$ 100 million. AECL reiterated that the Isotopes Supply Reliability Program has provided the funding to make all of the improvements necessary to put ageing programs in place, to do inspections, to do an integrated safety review, and to be able to prepare the facility for licence renewal in 2011 with a solid case for continued operation.
- 63. The Commission sought more information on AECL's legal commitments to MDS Nordion for the supply of isotopes in the time of shutdown. AECL responded that it did not have a contractual obligation to supply some minimum quantity or any specific element.
- 64. The Commission sought assurance that other critical systems would also be assessed in order to prevent potential unplanned outages shortly after the NRU is returned to service. AECL restated that funding for the Isotope Supply Reliability Program has enabled broad improvements to the NRU and associated facilities in order to bring them up to a high-level of reliability. AECL added that there will be a period of continued effort required in order to put the programs in place and have them fully implemented and functional.

- 65. The Commission sought more details considering the problem of corrosion and asked if the existence of the corroded coupons had been known in 2004, referring to illustrations presented in the AECL's report. AECL responded that the coupon presented in the illustration had been removed from the vessel in the early 1990-ies and placed in storage. It was retrieved from the storage, taken out to hot cells and analysed later.
- 66. AECL could not answer to the Commission's question whether the authors of the report from 2004 had been aware of these stored coupons. The Commission requested a full explanation related to the stored coupons for the next meeting, and asked about positioning of the control coupons in the repaired vessel and their periodical inspections. AECL committed to presenting a complete history of the control coupons.

by December 2009

- 67. AECL added that the conditions that had affected these coupons were different than the conditions at the vessel wall, and that the material properties found in these coupons had been significantly different than the material properties found in the section of the gutter strip that had been removed from the vessel. AECL noted that the decision whether to put new coupons in the reactor would depend on the ability to replicate the conditions that the repaired section of the vessel would be subjected to, beyond the fact that periodic inspection of the repair would be done.
- 68. Asked by the Commission to comment on the control coupons, CNSC staff stated that it expects AECL to submit its corrosion report for a full technical assessment.
- 69. The Commission inquired on the condition of the leaking reflector. AECL confirmed that light water leaking from the reflector had been the main source of the moisture contributing to the corrosion, and stated that it had found potential repair strategies for the leaking reflector, but noted that the elimination of air would be its first priority. AECL also noted that the reflector could be accessed more easily and could be repaired during a regular scheduled maintenance outage.
- 70. The Commission noted that AECL is expected to submit its midterm review for the Chalk River facilities (including the NRU) in December 2009, shortly before the planned return to service of the NRU, and asked what could be expected with respect to the NRU fitness to operate and preparation for the licence renewal. AECL responded that it is undertaking extensive activities related to the NRU return to service, as well as other commitments around preparation for licence renewal in 2011, and that it expects significant advances by December.

by
December
2009

Nomad Inspection Services, Spencer Manufacturing and MDS Nordion: Results of investigation into the overexposure of a member of the public during transport

- 71. With reference to CMD 09-M36, CNSC staff updated the Commission on the actions related to the event that had occurred in December 2008, when a radiation device not properly prepared for transport resulted in a possible overexposure of members of the public. CNSC initiated an investigation in order to determine what caused the radioactive source in the device to move to the exposed position.
- 72. The submitted document contained a detailed description of the transport package and the device. It also contained the conclusions of the investigation on the incident related to the possible overexposure of transport workers.
- 73. From the investigation, CNSC staff concluded that the screw retaining the source within the source holder may have not been properly tightened by MDS Nordion when the radiation source was last replaced and that it had unscrewed due to the vibration while in use and during transport. The movement of this screw prevented the Nomad Inspections Services operators from inserting the mortised dead lock safety barrier before it had been prepared for transport.
- 74. Informing the Commission on the actions arising as a result of the incident, CNSC staff stated that Nomad Inspections Services had initiated numerous changes to their procedures and training programs to ensure that such an incident does not re-occur in the future.
- 75. CNSC staff added that Spencer Manufacturing had revised their procedure for transporting this type of exposure device and will now open the package and verify the presence of the mortised dead lock prior to any shipments.
- 76. CNSC stated that it had requested MDS Nordion to undertake and submit a root cause analysis to determine the reason why the retaining screw may have become loose. CNSC staff added that, after reviewing the analysis, it had requested that MDS Nordion revise their criteria for conducting root cause analyses site-wide to include transport and device incidents.

- 77. CNSC staff informed the Commission that it had requested that the device manufacturer recall all devices in service in Canada to ensure that the retaining screw is installed in accordance with the revised procedure. CNSC staff added that it was evaluating regulatory options for future enforcement.
- 78. The Commission asked CNSC staff for an update on the current condition of two drivers. CNSC staff responded that the drivers had been contacted and been told that there were no known health consequences as a result of receiving that dose. CNSC staff added that it had offered to visit the company and address any issue, and noted that the company seemed to be satisfied at that point.
- 79. The Commission expressed concerns that Nomad Inspection Services had initiated changes to its procedures and training program, but no that it seemed that further actions related to prevention of repeated human errors had been taken. CNSC staff responded that the licensee had made some significant modifications based on the lessons learned from this event. CNSC staff added that it will perform compliance inspections and field verifications to ensure that the new measures are implemented and that the new procedures, put in place by the licensee, are respected.
- 80. The Commission sought more information on the lines, noticeable on some of the submitted photographs of the damaged device, that could look like incipient cracks. CNSC staff responded that if cracks were discovered during regular services of the device, the service provider would replace the damaged part. The Commission requested that CNSC staff prepare information on the method of inspection and present it at a future Meeting of the Commission.

by
December
2009

81. The Commission expressed its satisfaction with the precision and detailed presentation of the event, and asked what were the options available to the Commission in terms of taking enforcement action in similar events. CNSC staff explained a gradual approach that includes examination of procedures, order the licensee to fix a procedure and relocation or suspension of the licence until the safety of the operation is restored.

SRB Technologies (Canada) Inc. (SRBT): SRBT Status on meeting its financial commitments for the period of May 27 to August 7, 2009.

82. With reference to CMD 09-M36, CNSC staff informed the Commission that SRBT had not been required to make any payments since the last update, and that there was no fee balance owing for the 2008/2009 fiscal year.

Regulatory Documents RD-321, Technical and Performance Guidelines for Physical Protection Systems and Devices at High-Security Site and RD-361, Technical and Performance Criteria for Explosive Substance Detection, X-ray Imaging, and Metal Detection Devices at High-Security Sites

- 83. With reference to CMD 09-M35, CNSC staff submitted to the Commission its recommendations in a confidential document, which has been considered in a closed session.
- 84. After considering the recommendations submitted by CNSC staff, the Commission approves Regulatory Documents RD-321, Technical and Performance Guidelines for Physical Protection Systems and Devices at High-Security Site and RD-361, Technical and Performance Criteria for Explosive Substance Detection, X-ray Imaging, and Metal Detection Devices at High-Security Sites, for limited external consultation.

**DECISION** 

# Closure of the Public Meeting

85. The public portion of the meeting closed at 3:19 p.m.

Recording Secretary

Secretary

Nov. 10.2009.

Date

10/11/09

Date

#### APPENDIX A

CMD DATE File No 09-M29 2009-07-23 (6.02.01) Notice of Meeting of August 27, 2009

09-M29.A 2009-08-17 (6.02.01) Revised Notice of Meeting of August 27, 2009

09-M30 2009-08-13 (6.02.02)

Agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Thursday, August 27, 2009, at the Town Park Recreation Centre, 62 McPaul Street, Port Hope, Ontario

09-M30.A 2009-08-20 (6.02.02)

Updated agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Thursday, August 27, 2009, at the Town Park Recreation Centre, 62 McPaul Street, Port Hope, Ontario

09-M30.B 2009-08-24 (6.02.02)

Updated agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Thursday, August 27, 2009, at the Town Park Recreation Centre, 62 McPaul Street, Port Hope, Ontario

09-M31 2009-08-11 (6.02.03)

Approval of Minutes of Commission Meeting held June 10 and 11, 2009

09-M32 2009-08-13 (6.02.04)

Updates in items from previous Commission proceedings

09-M32.1 2009-08-11 (6.02.04)

Updates in items from previous Commission proceedings – Atomic Energy of Canada Limited – Heavy Water Leak at the NRU Reactor, Chalk River Laboratories – Oral presentation from Atomic Energy of Canada Limited

09-M32.1A 2009-08-19 (6.02.04)

Updates in items from previous Commission proceedings – Atomic Energy of Canada Limited – Heavy Water Leak at the NRU Reactor, Chalk River Laboratories – Oral presentation from Atomic Energy of Canada Limited – Supplementary Information

09-M33 2009-08-11 (6.02.04)

Significant Development Report No. 2009-3 for the period of May 15 to August 11, 2009

09-M33.A 2009-08-24 (6.02.04)

Significant Development Report No. 2009-3 for the period of August 12 to 24, 2009

09-M34 2009-08-11 (6.02.04) Status Report on Power Reactors Units as of August 11, 2009

09-M35 2009-08-10 (1.03.02)

Regulatory Documents RD-321 Technical and Performance Guidelines for Physical Protection Systems a Devices at High-Security Site and RD-361 Technical and Performance Criteria for Explosive Substance Detection X-ray Imaging, and Metal Detection Devices at High-Security Sites – Contains protected information and is not publicly available

09-M36 2009-08-11 (6.02.04)

Nomad Inspection Services, Spencer Manufacturing and MDS Nordion: Results of investigation into the overexposure of a member of the public during transport and

SRB Technologies (Canada) Inc.: SRBT Status on meeting its financial commitments for the period of May 27 to August 7, 2009