Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held Wednesday, November 3, 2010 beginning at 9:00 a.m. at the Public Hearing Room, 14th floor, 280 Slater Street, Ottawa, Ontario.

Present:

M. Binder, President A. Graham A. Harvey R.J. Barriault D.D. Tolgyesi M. J. McDill

M. Leblanc, Secretary J. Lavoie, Senior General Counsel S. Dimitrijevic, Recording Secretary

CNSC staff advisors were: G. Rzentkowski, K. Lafrenière, T. Schaubel, P. Elder, F. Rinfret, P. Thompson, R. Lane, K. Scissons, S. Eaton, P. Webster, M. Rinker, R. Goulet, A. Régimbald, A. Alwani, Z. Bounagui and K. Murthy

Other contributors were:

- Saskatchewan Ministry of Environment: D. Kristoff and T. Moulding
- Cameco Corporation: A. Wong and J. Alonso
- TRIUMF Accelerators Inc: N. Lockyer, A. Trudel, J. Hanlon and S. Reeve

Constitution

- 1. With the notice of meeting, CMD 10-M56, having been properly given and a quorum of Commission Members being present, the meeting was declared to be properly constituted.
- Since the meeting of the Commission held September 30, 2010, Commission Member Documents CMD 10-M56 to CMD 10-M64 were distributed to Members. These documents are further detailed in Annex A of these minutes.

Adoption of the Agenda

3. The revised agenda, CMD 10-M57.A, was adopted as presented.

Chair and Secretary

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

Minutes of the CNSC Meeting Held September 30, 2010

- The Commission Members approved the minutes of the September 30, 2010 Commission Meeting as presented in CMD 10-M58.
- 6. The Commission requested additional information regarding the Bruce Power Unit 6 shutdown due to maintenance cooling system leak (Paragraph 7 of the minutes of the September 30, 2010 Commission Meeting). The Commission requested confirmation for the volume of the leak, and asked for the total volume of the cooling system. CNSC staff confirmed that the leak amounted to 39 metric tonnes and noted that the heat transport system at the Bruce Units contains up to about 260 metric tonnes, so that the leak represents about 15 % of the system volume. However, CNSC staff added that the fuel coolant had not represented a concern during the event, since the system has a large backup capacity and contains a lot of additional coolant in pressurizers, storage and detour transfer tanks. CNSC staff noted that the heat transport system is interconnected with the other units in the case that more heat transport water is needed.

STATUS REPORTS

Early Notification Reports (ENR)

7. There were no events reported since the meeting of the Commission held September 30, 2010.

Status Report on Power Reactors

- 8. With reference to CMD 10-M61, which includes the Status Report on Power Reactors, CNSC staff presented updates on the following:
 - For Gentilly-2: the station was operating at about 90 percent of full power due to refuelling restrictions caused by actions performed to eliminate air leakage and restore the containment safety function.
 - For Point Lepreau: CNSC staff informed the Commission on the progress with the refurbishment activities and reported that New Brunswick Power Nuclear had installed 308 calandria tubes. CNSC staff added that the total radiation dose for this operation was 75 mSv (millisieverts), notably lower than the planned dose which had been estimated at 300 mSv.

- 9. The Commission asked for the time that units 2 and 3 of the Pickering A station need to remain in safe storage before a complete decommissioning could take place. CNSC staff responded that, according to the estimations done, it would take 20 to 25 years for the radiation fields to decrease to the point that the exposure of workers is reduced sufficiently to allow decommissioning activities. CNSC staff added that the specific details of the decommissioning activities will be discussed within the end of life plan for Pickering A and Pickering B, which is a meeting item at the January 2011 Commission meeting.
- 10. CNSC staff noted that, although the safe storage of a nuclear reactor is not prescribed and the CNSC does not impose a timeline for it, there is the standard approach to assumptions upon which is based decommissioning plans and associated financial guarantees. According to this approach, the assumptions, including a potential delayed decommissioning, need to be justified.
- 11. The Commission asked for the status of Gentilly-1 and Douglas Point facilities. CNSC staff responded that both facilities are in safe storage, under waste licences issued by the Commission, and have approved decommissioning plans.
- 12. The Commission requested that CNSC staff prepare for the next meeting a briefing on the status of similar facilities with the long-term plans.
- 13. The Commission sought more information regarding the tritium from the reactors' operation at the Darlington site during the 114-day planned maintenance outage of the tritium removal facility. CNSC staff responded that, although licensed under the power reactor operating licence, the tritium removal facility is separated from the reactors and its status does not impact the operation of the station. The facility has various mechanisms, sufficient for the storage of excess tritium that could be marketed and exported.
- 14. The Commission asked for more details on the leakage and containment tightness at Gentilly-2, and asked for more details since the event has not been included in the Early Notification Report. CNSC staff responded that this was only a verbal update since the leakage was only recently discovered. CNSC staff provided more details on the valve system and malfunction of some of the valves resulting in the leak, and confirmed that it would report to the Commission as necessary.

ACTION by January 2011 15. Responding to the Commission's question about a possibility for contamination of the environment, CNSC staff explained that there was no such possibility because there had been no leak from any circuit. Rather, all the containment valves had been closed because certain ones had been found not to be airtight during testing. This was a conservative measure, taken in order to assure the leaktightness of the containment envelope. CNSC staff added that the event could cause the station shut down, due to refuelling restrictions.

Mid-Term Status Reports

Cameco Corporation (Cameco): Annual Update on Beaverlodge Decommissioned Mine/Mill Site

- 16. With reference to CMD 10-M62, CMD 10-M62.1 and CMD 10-M62.1A, CNSC staff and Cameco Corporation presented an annual update on the compliance activities and work progress at the decommissioned Beaverlodge mine and mill site, located in the north western part of Saskatchewan. The nearest community is Uranium City with a population of less than 100 people. The site was operated by Eldorado Nuclear Limited until its decommissioning in 1985. Cameco assumed a role as the licensee in 1988, managing the ongoing transitional monitoring program. All activities related to the decommissioned site are funded through Canada Eldor Incorporated, a federal government Crown corporation. In 2005, CNSC staff identified concerns regarding the health of the downstream ecosystem and Cameco was requested to complete additional studies to verify these concerns and was instructed to conduct an analysis of remedial options that could speed up the rates of natural recovery.
- 17. The end goal for the Beaverlodge properties is to illustrate to the Commission, the joint regulatory group, the public and Aboriginals that the environmental impacts at the site are stable. Once the properties meet these criteria, Cameco would propose to the Commission to exempt properties from CNSC licensing and apply to the province to accept these properties into their Institutional Control Program. CNSC staff added that Cameco and the Joint Regulatory Group (JRG), comprised of Saskatchewan Ministry of Environment (MOE), CNSC, Environment Canada, and Fisheries and Oceans Canada, meet quarterly to discuss the evolution of the detailed plan, including any outstanding items.

- 18. Representative of Cameco informed the Commission about specific actions and activities to keep community members informed. Cameco added that most of the properties are currently in the stage of assessing and collecting additional information to support the decision-making process. The information is derived from data gathered through ongoing monitoring activities, such as site inspections and sample collection, special studies commissioned during previous licence periods and studies designed to fill information gaps identified as part of the management plan. This information is incorporated into a quantitative model to better characterize the sources of contamination and their impact on the surrounding environment.
- 19. Representative of Cameco reported that, during the annual JRG inspection of the decommissioned Beaverlodge properties in June, four action notices and three recommendations were given. All action notices have been addressed and work completed, and a final report detailing the rehabilitation work was submitted to the JRG in September 2010.
- 20. A representative of Cameco also reported that it continues to engage and involve local community members and aboriginal groups in the maintenance and monitoring of the Beaverlodge licensed facilities. Cameco organized the annual meeting with local stakeholders at Uranium City, updated the Athabasca Working Group on activities at the Beaverlodge site, organized a public meeting with the Environmental Quality Committee (EQC) and the country food study meeting. In addition, Cameco provides reports and the results of technical studies to community members. Cameco stated that it ensures that local First Nation and Métis representatives are invited to community meetings where information regarding projects, activities or studies is provided.
- 21. With respect to public safety, a representative of Cameco reported that it had posted warning signs at the entry of each property outlining the risks associated with the property, and that MOE staff had erected warning signs at Beaverlodge Lake and Martin Lake regarding the food advisory on fish consumption.
- 22. CNSC staff informed the Commission that Cameco had developed a management framework and work plan to help reach Cameco's goal for eventual site release into the provincial institutional control program. CNSC staff added that they were monitoring progress with the implementation of Cameco's work plan, and that in the past 12 months, Cameco has made consistent progress in implementing the plan. Based on this information, CNSC staff concluded that Cameco is working diligently to fulfill their commitment to the Commission, to the public and Aboriginals.

- 23. CNSC staff further informed the Commission that, in order to fulfill the step-by-step working plan for filling specific information gaps, Cameco had completed three and initiated another 10 studies. Final reports are expected for eight of these studies in the first quarter of 2011. The results from these studies will feed the quantitative site model which is an important tool for the JRP and will be used to provide quantified justifications regarding the potential implementation of remedial options. CNSC staff said that they would provide an update to the Commission on the results of these studies in the 2011 Annual Update.
- 24. The Commission inquired on the stability of existing pit walls and potential need for their reshaping, and on the hydrogeology of the site. Cameco responded that they expect a report with recommendations following the assessment performed last summer by an external consultant, and that the preliminary results of the assessment indicate that there were no immediate risks to the public.
- 25. The Commission sought more information on criteria for releasing the facility into the Institutional Control Program (ICP). A representative of Cameco responded that there were no set criteria, and that they intend to develop them using the studies and the analysis to be done with the geotechnical experts. These criteria would be approved by the MOE. CNSC staff added that one of the pits had already been released into the ICP by the Commission as well as the province. CNSC staff noted that there are Canadian standards for slope stability in dam safety and that the stability of the pits would be assessed against those standards.
- 26. The Commission asked about storage sites for the material removed during decommissioning of the tailings lines. CNSC staff responded that they have established a disposal location at the site, in one of the former pits.
- 27. The Commission asked for the time needed for the very limited natural vegetation to grow back on the Fay area site. CNSC staff responded that they had seen a substantial increase in the amount of vegetation growing there naturally, despite the low level of nutrients in the waste rock covering the area.
- 28. The Commission asked about actions taken to increase attendance at public information sessions. CNSC staff noted that the attendance represented 15 % of the population of Uranium City and that there is a core group of people that is interested. CNSC staff added that they are looking at different options in order to attract a bigger audience.

ACTION by November 2011

- 29. The Commission asked about methods used to mitigate potential human health risks. CNSC staff responded that signage was installed giving advice on fish consumption. Direct communication with the residents was also conducted, which proved to be effective in this small community.
- 30. The Commission sought more information on the results of the food study based on analyses of the samples collected and provided by local people. CNSC staff responded that the samples had been collected during the summer, and that the analyses were not completed. CNSC staff added that, when the information become available along with the study results from 2011, the regional health authority would be engaged to explain the results to the community.
- 31. The Commission inquired on the rate of recovery for this project and on the options for improving the recovery. CNSC staff responded that the initial expectations were that a natural recovery would take about 100 years. After additional studies done by Cameco, a slower recovery is expected, and a full natural recovery was estimated to occur after 200 to 300 years. The reasons for such a long recovery time might be the mining technique applied at the time of exploitation, unacceptable nowadays, which had included depositing the tailings directly into the lakes. CNSC staff said that the objective of current activities was to explore options for potential improvements, that they still have two years to do necessary studies and reach the conclusion, and that it would be premature to speak about possible options.
- 32. The Commission asked if the tailings in Fookes Lake, Marie Lake and Beaverlodge Lake are covered and if they still are contributing to a loading of contaminants into the lakes. Cameco responded that all the tailings above the water line are covered with material, rocks and sand, but the tailings in the lakes are covered by water and contribute to the loading. The Commission then asked if any of 13 initiated or completed studies deal with minimizing this contribution to loading by covering the tailings in question. A representative of Cameco responded that none of the studies deals with this issue.
- 33. The Commission further asked what kind and how much testing on contamination had been done 10km, 20km, or 50km downstream. A representative of Cameco informed the Commission on the far field monitoring conducted before this licence period down the stream to Athabasca Lake and stated that the monitoring program associated with Beaverlodge includes those far field stations now. A representative of Cameco also pointed out that consultation needs to be done with other entities that own property that

contributes to contamination downstream. Responding to the Commission's question on who coordinates these activities, CNSC staff noted that the far field receiving environment includes other key departments and other partners, with MOE playing the important role, so that a collaborative approach, mainly through the JRG plays an important role. A representative from the MOE confirmed that local health authorities and the public in the area participate in the process and are well informed.

- 34. The Commission sought more information on the period between 1985, the time when the mine was decommissioned, and 2005, when CNSC raised concerns about the health of the ecosystem, and asked if the local people was aware of the situation and risks related to consuming local food, including not only fish but also game, fruits and berries. A representative of Cameco responded that the people that lived in the Uranium City area were well aware of the historic and legacy activities that had impacted the Beaverlodge and Martin Lake areas, didn't take fish from Beaverlodge Lake and used drinking water from alternative systems, instead from the lake. CNSC staff noted that samples taken from moose, fish and caribou had been collected and analysed since the beginning of the decommissioning and that there is no indication of risk of contaminated food consumption or health concerns. CNSC staff added that the current study should give a comprehensive overview and provide assurance that the health of the local population is protected.
- 35. The Commission suggested that the next annual report include specific data, such as levels of radium and uranium contamination, plumes of contaminants that migrate downstream, and other information relevant for releasing the site to institutional control.

TRIUMF Accelerators Inc. (TAI): Mid-Term Status Report

- 36. With reference to CMD 10-M63 and CMD 10-M63.1, CNSC staff and representatives of TAI presented a mid-term report on the safety and regulatory performance of TAI since the licence renewal in 2007.
- 37. CNSC staff reported that the current licence covers the operation of one Class IB accelerator facility, six Class II accelerator facilities and the possession and use of a range of nuclear substances that are primarily associated with accelerator operations. The licence has been amended three times since its renewal in 2007 to authorize modifications to the facility and its operation.

- 38. CNSC staff pointed out that several issues had not been completely resolved at the time of licence renewal, but that TAI had now addressed all of them. CNSC staff also assessed all of the safety and control areas. Summarizing their presentation, CNSC staff stated that they were satisfied that TAI complies with all regulatory requirements.
- 39. The Commission sought more details on the training process and asked about the examination procedure at the end of the training sessions. The TAI representative responded that basic radiation protection training is offered on line, which also has a practical portion that includes instruction and evaluation on using radiation monitors, putting on personal protective equipment, and crossing radiation boundaries. Safety training plans are individualized depending on the type of work a person would perform. If a person fails the final test, radiation protection technicians provide remedial instructions. The training applies to full-time employees, students, contractors and visitors.
- 40. Responding to the Commission's question on safety culture, the TAI representative said that the basic safety training is mandatory for all persons who are granted access to the facility and added that, in order to ensure that safety is being followed and safety rules are being applied, TAI has the Accident Prevention Committee that meets on a monthly basis, conducts site inspections, documents deficiencies and proposes corrective actions.
- 41. The Commission sought more information on the emission monitoring around the facility. The TAI representative responded that the monitoring is done in accordance with their modeling for derived release limits and that their emission detector is located to monitor potential releases in the direction of the closest populated area.
- 42. The Commission asked about the worst case scenario that could follow a human error, an accident or equipment failure. CNSC staff responded that the risk is limited to the inside of the facility where a lethal dose could be reached only within the radiation area. The TAI representative added that their access control system ensures that a beam cannot be delivered if the area is open for access, and that the area is searched and locked up before a beam can be delivered.
- 43. The Commission noted that an aggressive expansion of the facility may affect the preliminary decommissioning plan and the associated financial guarantees, and suggested that CNSC staff and TAI closely collaborate at preparing for the next licensing period so that the licensee does have the ability to get the appropriate financial guarantees in place.

- 44. The Commission asked if the fire protection program had been fully incorporated by October 2010, as expected. CNSC staff responded that TAI had submitted the full set of procedures, that CNSC staff specialists were reviewing these procedures for completeness, and that a preliminary review shows that the program meets the requirements.
- 45. The Commission sought more information about conventional health and safety and frequency of accidents. The TAI representative responded that all injuries that require first aid are registered, traced and noted that most of the injuries are minor. The TAI representative said that the frequency of injuries varies from month to month, but on the average, there were between five and ten injuries per quarter. Commenting on the increased number of injuries during 2009 and 2010, the TAI representative said that 80 percent of the injuries had occurred to the staff that runs and maintains the TAI's residence for the visitors, which is not related to the operation of the facility.
- 46. The Commission inquired about radioactive material storage management. The TAI representative responded that the facility produces a small volume of activated material, and that some of the material that remains after refurbishing a beam line, mostly parts of magnets, has to be stored at the facility before it is shipped away. The spent production targets from the ISAC accelerator are stored in the storage built as part of the ISAC facility where they remain stored for two or three years before they are shipped to Chalk River for permanent storage. TAI representative added that a similar storage is included in the designs for their new facility ARIEL.
- 47. The Commission congratulated TAI for the improvements made since the licence renewal in 2007 and expressed its satisfaction with the follow-up work done by CNSC staff.
- 48. The Commission considered the submitted security assessment in a closed session.

INFORMATION ITEMS

Technical Briefing on Setting Radiation Protection Requirements on the Basis of Sound Science: the Role of Epidemiology

- 49. With reference to CMD 10-M64, CNSC staff presented a document on the role of epidemiology in setting radiation protection requirements. The presentation included the following:
 - the main types of epidemiology studies important for understanding radiation risks;
 - summaries of the CNSC's assessments of the past and present health effects of radium and uranium refinement and processing, radon risk among uranium miners, and health studies of people living near nuclear facilities; and

- the role of national and international expert committees for reviewing radiation research and make radiation protection recommendations for workers and the public.
- 50. The Commission noted that presentations like this one contribute to a better understanding of the scientific basis of radiation protection requirements, and suggested that this review, as well as the results of other studies relevant to health issues and safety concerns, be presented to the general public in a clear and understandable way. CNSC staff responded that a lot of this information is already available through the CNSC website and pointed out to the examples of the Port Hope Synthesis Report, which includes all of the epidemiological studies that were done around Port Hope, Ontario, and the Tritium Synthesis Report, which also includes several reports – one of them being on the health issues and dosimetry of tritium.
- 51. The Commission inquired on the study by the International Agency for Research on Cancer (IARC) on relative risk for cancer for nuclear energy workers, which suggested higher risk for Canadian workers. The Commission also questioned the sample that didn't include Ontario Hydro workers and asked about missing important historic dose data for AECL workers, which was the dominant group in the Canadian cohort taken as the sample in this study. Commenting on the results of the IARC study, CNSC staff informed the Commission that they have initiated a detailed reanalysis of the Canadian nuclear workers' mortality findings. The new analysis includes the Ontario Hydro workers are at any higher risk than others carrying out similar work. The complete results of this new analysis are expected by the end of 2010.
- 52. The Commission also inquired whether, in light of the results showing steady decreasing trends of the workers' exposure levels, it could be concluded that the current radiation protection programs are appropriate and safe. CNSC staff responded that the programs are more efficient since the exposure levels have significantly decreased since the 1950-ies and 1960-ies, with the effects approaching their limits of detectability. Consequently, the conduct of epidemiological studies with conclusive results becomes more difficult; the correlation between the low-dose exposure and cancer is difficult to establish, since the same effects caused by other factors, such as exposure to residential radon or smoking habits, are becoming more pronounced. The Commission suggested that such a conclusion, emphasizing the effectiveness of the current radiation protection programs based on numerous scientific studies, should be clearly presented to the public.

- 53. Commenting on the data on childhood leukaemia clustering around three nuclear facilities, the Commission asked how conclusive were the results of the conducted studies and what needs to be done for a better understanding of the causes of childhood leukaemia. CNSC staff responded that there are no conclusive results, that disease clustering occurs for many different diseases, and that clustering of childhood leukaemia also occurs where there are no nuclear facilities. CNSC staff added that analytical studies should take a wider approach to the causes of childhood leukaemia, not focusing on the fact that these three clusters exist. The Commission suggested that a comprehensive report to the public be prepared in a convenient form taking into account all aspects of the issue, including information on clusters occurring in other non-nuclear areas and including updates on the results of the most recent studies as they become available, as well as the data available from Health Canada.
- 54. Following the suggestion by the Commission, CNSC staff stated that, since the presented document contains material of interest for Hydro Québec and neighboring communities, they will prepare and translate an updated document that would also include results and conclusions from the study by the "Conseil régional de la santé publique de la région de Trois-Rivières", prior to Day 2 of the Gentilly-2 licence renewal hearing.
- 55. The Commission inquired on technical difficulties in analyzing and interpreting available data even when the sample is large enough or when enough time was available for the effects to develop. CNSC staff responded that the data are reliable for the effects of larger doses. However, the effects of lower doses, usually smaller than 100 mSv, are hard to distinguish from the effects of natural, background radiation, and a more frequent occurrence of cancer compared to general population is not expected. CNSC staff also noted that the natural radiation may vary notably even along small distances, which makes a statistical study of related health effects more complex. An additional difficulty stems from the fact that the study of health effects of radiation could be done almost exclusively relying on accidents rather than on planned exposures.
- 56. The Commission sought more information on membership, functioning and decision making in international bodies responsible for this kind of studies and related recommendations. CNSC staff explained the methods of work of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), where CNSC has two representatives, and described the process of discussion of scientific data, preparation and acceptance of reports and other documents.

ACTION by end of January 2011

- 57. The Commission sought more information on the influence of distance from the facility on the exposure of the public and the statement that the distance is not a proxy. CNSC staff explained that the members of the public are exposed to radiation from nuclear facilities not only through air; other factors equally contribute to the exposure, so that the distance could not be taken as a proxy. In addition, the boundaries of exclusion zones surrounding nuclear facilities are chosen in such a way that radiation exposure beyond these lines does not exceed natural radiation and does not change further with the distance.
- 58. The Commission asked if it would be possible to analyze effects of radiation in the various types of industries. CNSC staff responded that, generally, today's workers occupational exposures from radiation are very low, and that industries other than those dealing with radioactive material are not regulated and monitored. However, there is good information on individual radiation exposures within the nuclear industry in Canada, and CNSC provides on its website the information on occupational exposures for different groups of workers in the Canadian nuclear industry.
- 59. The Commission sought more information on how appropriate was the use of the linear-no-threshold (LNT) model in projecting risks of cancer as a result of radiation exposure. CNSC staff noted that the model could be used as the most conservative approach, although it overestimates risks at low doses. CNSC staff added that the CNSC uses the LNT for regulatory purposes, as it points to the dose limits and also the principles of ALARA to try to have practices and activities that have doses as low as reasonably achievable.
- 60. CNSC staff committed to prepare a written report on the use of the LNT model and its place within the CNSC's regulatory process.

ACTION by end of February 2011

Closure of the Public Meeting

61. The meeting closed at 3:43 pm.

Recording Secretary/

Secretary

DEC 1 6 2010

Date

DEC 1 6 2010

Date

APPENDIX A

CMD DATE File No

10-M56 2010-10-08 (Edocs 3618370) Notice of Meeting of November 3, 2010

10-M57 2010-10-20 (Edocs 3622354)

Agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Wednesday, November 3, 2010, at the Public Hearing Room, 280 Slater Street, Ottawa, Ontario.

10-M57.A 2010-10-28 (Edocs 3626462) Updated agenda of the meeting of the Canadian Nuclear Safety Commission to be held on Wednesday, November 3, 2010, at the Public Hearing Room, 280 Slater Street, Ottawa, Ontario.

10-M582010-10-28(Edocs 3626418)Approval of Minutes of Commission Meeting held September 30, 2010

10-M592010-10-19(Edocs 3622077)Early Notification Reports: No new events to report

10-M612010-10-27(Edocs 3625833)Status Report on Power Reactors units as of October 27, 2010

10-M62 2010-10-18 (Edocs 3617962) Cameco Corporation: Annual Update on Beaverlodge Decommissioned Mine/Mill Site – Oral presentation by CNSC staff

10-M62.1 2010-10-14 (Edocs 3620128) Cameco Corporation: Annual Update on Beaverlodge Decommissioned Mine/Mill Site – Oral presentation by Cameco Corporation

10-M62.1A 2010-10-27 (Edocs 3622154) Cameco Corporation: Annual Update on Beaverlodge Decommissioned Mine/Mill Site – Oral presentation by Cameco Corporation – Supplementary Information

10-M63 2010-10-19 (Edocs 3578070) TRIUMF Accelerators Inc.: Mid-Term Status Report – Oral presentation by CNSC staff

10-M63.A 2010-10-19 (Edocs 3600584) TRIUMF Accelerators Inc.: Mid-Term Status Report – Contains prescribed security information and is not publicly available 10-M63.1 2010-10-15 (Edocs 3621395)

TRIUMF Accelerators Inc.: Mid-Term Status Report – Oral presentation by TRIUMF Accelerators Inc.

10-M63.1A 2010-10-27 (Edocs 3622214) TRIUMF Accelerators Inc.: Mid-Term Status Report – Oral presentation by TRIUMF Accelerators Inc. – Supplementary Information

10-M642010-10-22(Edocs 3602562)Technical Briefing from CNSC Staff: Setting radiation protection requirements on the
bases of sound science: the role of epidemiology – Oral presentation by CNSC staff