Minutes of the Canadian Nuclear Safety Commission (CNSC) Meeting held on March 3, 2020



Minutes of the Canadian Nuclear Safety Commission (CNSC) meeting held Tuesday, March 3, 2020 beginning at 5:40 p.m. at the Casa Do Alentejo Community Centre, located at 1130 Dupont Street, Toronto, Ontario.

Present:

- R. Velshi, President
- T. Berube
- S. Demeter
- M. Lacroix
- S. McKinnon
- M. Leblanc, Secretary
- L. Thiele, Senior General Counsel
- W. Khan, Recording Secretary (via remote participation)

CNSC staff advisors were: H. Tadros, and G. Frappier and J. Stevenson (via remote participation)

Other contributors were (via remote participation):

- Bruce Power: M. Burton
- Ontario Power Generation: R. Geofroy, R. Aroda and L. Morton

Constitution

- 1. With the notice of meeting Commission member document (CMD) 20-M1.A having been properly distributed and all permanent Commission members being present, the meeting was declared to be properly constituted.
- 2. Since the Commission meeting held December 11 12, 2019, CMD 20-M1 to CMD 20-M3 and CMD 20-M5 were distributed to members. These documents are further detailed in Appendix A of these minutes.

Adoption of the Agenda

3. The agenda, CMD 20-M2, was adopted as presented.

Chair and Secretary

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

Minutes of the Commission Meeting Held November 6 - 7, 2019

5. The Commission noted that it had secretarially approved the minutes of the November 6-7, 2019 Commission meeting, as presented in CMD 20-M3.

Minutes of the CNSC Meeting Held December 11 – 12, 2019

6. The Commission noted that the December 11 – 12, 2019
Commission meeting minutes would be approved secretarially at a later date.

STATUS REPORT ON POWER REACTORS

- 7. With reference to CMD 20-M5, which includes the Status Report on Power Reactors, CNSC staff presented the following updates:
 - With respect to the heavy water spill at the Bruce Power Nuclear Generating Station (NGS), CNSC staff stated that the cleanup of the spill did not result in doses to workers and that there was no impact to the public or on the environment;
 - The Pickering NGS Unit 7 was at 98% of full power following the completion of the Grayloc fitting repairs and postmaintenance testing;
 - The investigation report and corrective actions taken by the Ontario Ministry of the Solicitor General regarding the false emergency alert issued on January 12, 2020 in reference to the Pickering NGS have been posted on the Ontario Ministry of the Solicitor General's website. This topic will be discussed in greater detail at the June 17-18 Commission meeting.
- 8. The Commission enquired as to whether Bruce Power had identified the origin and cause of the heavy water spill at the Bruce NGS. CNSC staff responded that the origin of the spill was the primary heat transport circuit, which is a pressurized system. The Bruce Power representative stated that the event occurred during post-maintenance testing of a flow injection valve and that, although it occurred in the primary heat transport circuit, the system was drained when this event occurred. The Commission

- also asked if such events occur frequently. The Bruce Power representative responded that the frequency of such an event was low and that the event occurrence was not due to an equipment failure, but rather to a clearance order error.
- 9. The Commission requested information about the tritium exceedance during the heavy water spill. A Bruce Power representative explained that the maximum concentration referred to tritium vapour in air. CNSC staff added that the allowable tritium concentration was 1 Maximum Permissible Concentration in air (MPC_a) and that the tritium concentration at the source of the spill was 10 MPC_a, whereas it was approximately 5 MPC_a near the Zone 2 boundary and 2 MPC_a between Unit 0 and Unit 2.
- 10. In considering the heavy water spill event at the Bruce NGS, the Commission requested details pertaining to the timing of and the number of personnel required for the response during such an event. A Bruce Power representative responded that, if there was a small emergency on-site, such as a spill, a station emergency would be declared and the Emergency Response Centre (ERC) in the Control Room would be activated. On the number of personnel for a response, the Bruce Power representative stated that the ERC consists of approximately five people, with the Shift Manager in charge. The Bruce Power representative added that, if there was a bigger emergency at the NGS, the Emergency Response Organization (ERO) would have to be activated and that such an event would involve an additional ten workers who would come into the ERC, with the Duty Commander taking control of the event.
- 11. The Commission asked if the Bruce NGS Unit 8 Class IV power transformer was back in service. A Bruce Power representative responded that the transformer was in place and that Bruce Power was in the process of reconnecting it to the grid. The Bruce Power representative added there was some electrical damage to some components on the inside station during the power surge and that the transformer would be back in service in April 2020.
- 12. With respect to the Pickering NGS Unit 7 shutdown, the Commission requested clarification regarding the term "planned unbudgeted outage." The Ontario Power Generation (OPG) representative responded that a "planned unbudgeted outage" meant that the outage was planned and co-ordinated with the Independent Electricity Systems Operator (IESO) but it was not included in OPG's business plan.
- 13. The Commission asked if the leakage from the primary side at the Pickering NGS Unit 7 resulted in the release of radioactive materials. The OPG representative responded that the leakage was

contained within the reactor containment and that there was no release of radioactive materials to the environment.

- 14. With respect to the planned maintenance outages at the Bruce NGS Unit 4 and the Pickering NGS Unit 1, the Commission requested details regarding the scope of the outages. A Bruce Power representative responded that the major aspect of the Unit 4 maintenance outage involved moving the garter springs in the pressure tubes into a more optimized position to avoid contact between the pressure tubes and the calandria tubes. An OPG representative responded that the Pickering NGS Unit 1 maintenance was of a similar nature to that at the Bruce NGS, involving pressure tube-related inspections and channel repositioning.
- 15. Following a Saugeen Ojibway Nation's (SON) referendum vote to reject the construction of OPG's proposed Deep Geological Repository (DGR) on its traditional territory, the Commission asked when it could anticipate that OPG would request to withdraw its DGR licence application. CNSC staff responded that, although a formal letter had not yet been submitted, CNSC staff had been advised that OPG was preparing a letter withdrawing its application and that CNSC staff expected the letter to be submitted in May 2020. CNSC staff also provided the Commission with an update on OPG's financial guarantee for its facilities, which includes the DGR project, and how the financial guarantee would change with the withdrawal of its DGR application.

Closure of the Public Meeting

The public meeting closed at 6:00 p.m.

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	April 27, 2020
Recording Secretary	Date
MI	April 27, 2020
Secretary	Date

¹ https://www.opg.com/media_release/opg-committed-to-lasting-solutions-for-nuclear-waste/

APPENDIX A

CMD	Date	e-Docs No.	
20-M1	February 10, 2020	6117092	
Notice of Commission Meeting			
20-M1.A	February 12, 2020	6119250	
Revised Notice of Commission Meeting			
20-M2	February 20, 2020	6242026	
Agenda of the Meeting of the Canadian Nuclear Safety Commission (CNSC) to be held			
on Tuesday, March 3, 2020, at Casa Do Alentejo Community Centre, 1130 Dupont			
Street, Toronto			
20-M3	January 29, 2020	6239022	
Draft Minutes of November 6-7, 2019 Commission Meeting			
20-M5	February 26, 2020	6245925	
Status Report on Power Reactors facilities as of February 25, 2020			
Presentation by CNSC Staff			